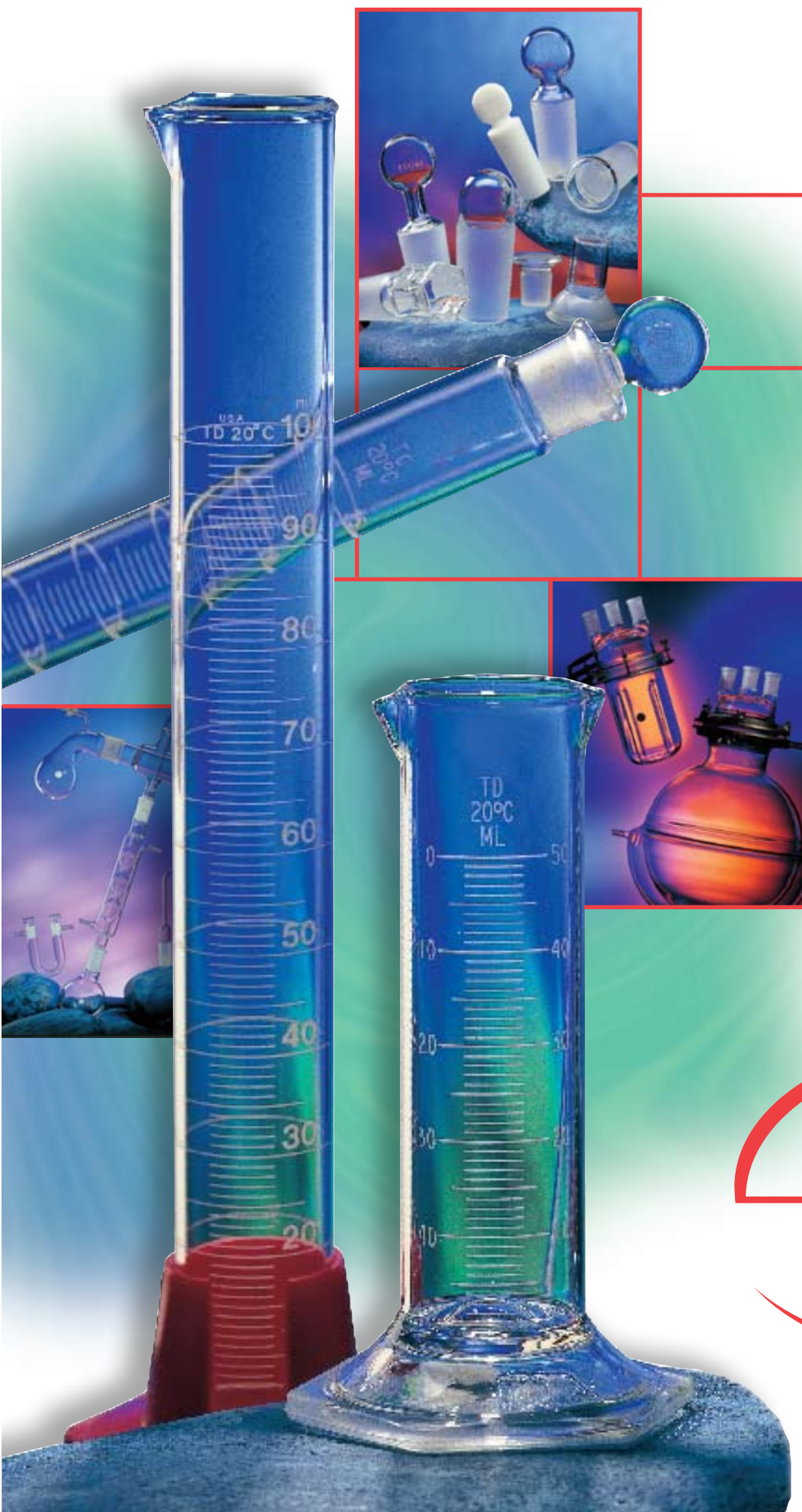




Wilmad  
LabGlass

# Custom Glass Fabrication and Repair



## **If you need something special we can produce it... If it's broken we can fix it.**

- Over 70 years experience supplying and servicing the scientific community.
- State-of-the-art processing equipment
- Extensive custom glass capabilities
- Multi-site fabricating locations
- Express repair of existing glassware

In addition to the scientific glassware listed in this catalog, Wilmad-LabGlass can fabricate glassware to custom specifications. We have more than 70 years experience providing this service to a variety of industries including scientific research, environmental testing, pharmaceutical and petrochemical processing, electronics and semiconductors, and clinical diagnostics. We can custom produce items in prototype and production scale quantities and to extremely precise tolerances.

At Wilmad-LabGlass we understand the importance of meeting customer requirements with high quality solutions at competitive pricing and on time delivery. Our engineers and glass specialists will work with you to develop the best approach to ensure successful results.

## **Do not throw away your broken glassware!**

Any experimental laboratory chemist knows that nothing beats the successful repair of a critical piece of expensive glassware. Repairing scientific glassware can save money and is a good way to minimize waste. Let us evaluate and repair your glass piece to its original configuration for a fraction of the replacement cost. For added convenience we offer a complete repair service at multiple locations throughout the US. Our primary manufacturing facility is located in Vineland, NJ. We also have locations in Connecticut, Illinois, and Tennessee. Our multi-site manufacturing and repair facilities enable us to provide express service with exceptional quality. E-mail your inquiries to [glass.specialist@spindustries.com](mailto:glass.specialist@spindustries.com). All inquiries will be answered within 24 hours.

The foundation of our success is our expertise and timely service plus the personal service we provide to each and every customer. We appreciate your business.

## **Glass Fabrication Facilities:**

### **MID-LANTIC**

LabGlass  
1172 NW Blvd  
Vineland, NJ 08360  
Tel: 856.691.3200  
Fax: 856.691.6206

### **NORTH-EAST**

Design Glassworks  
90 Ingham Hill Road, Unit 4A  
Old Saybrook, CT 06475  
Tel: 860.395.1997  
Fax: 860.395.1994

### **MID-WEST**

Reliance Glass  
1455 Elmhurst Road  
Elk Grove Village, IL 60007  
Tel: 847.228.2851  
Fax: 847.439.7746

### **SOUTH-EAST**

LabGlass c/o Eastman  
100 N. Eastman Road  
Recg Bldg 177  
Glasshop, B-167  
Kingsport, TN 37663  
Tel: 423.224.7123  
Fax: 423.224.9221



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# ORDERING INFORMATION

## Wilmad-LabGlass

P.O.Box 688, Buena, New Jersey 08310

tel: 800-220-5171 (US/Canada only)

856-697-3000

fax: 800-220-1081 (US/Canada only)

856-697-0536

e-mail: [cs@wilmad-labglass.com](mailto:cs@wilmad-labglass.com) • web: [www.wilmad-labglass.com](http://www.wilmad-labglass.com)

### WHERE TO ORDER

The choice is yours. Orders may be placed either with one of our authorized distributors or directly with Wilmad-LabGlass, via fax, email, phone or visit our website.

### PRICES

Prices shown are in US dollars and are current at the time of publication. Prices are subject to change without notice. Current pricing can be requested by contacting our customer service department.

### DISCOUNTS

Catalog items are subject to discount schedule listed below.

| DOLLAR VALUE      | DISCOUNT |
|-------------------|----------|
| Up to \$199.99    | NET      |
| \$200.00-\$599.99 | 10%      |
| \$600.00 and over | 15%      |

Minimum order \$50.00. Orders less than \$50.00 are subject to a handling fee, unless purchased with Visa, MasterCard or American Express. Terms are net 30 days, F.O.B. plant of manufacture, unless otherwise stated in quotation. Applicable sales tax will be added unless a tax-exempt certificate is received.

### WARRANTY

Wilmad-LabGlass will replace any product found to be defective or not in conformance with published specifications. Wilmad-LabGlass makes no warranty, expressed or implied, as to the suitability of any merchandise for any specific use and shall not be held liable for any direct or indirect loss resulting from the use of this merchandise nor for consequential damages.

### DAMAGE OR BREAKAGE

**UPS Shipment:** Keep all packaging material and carton with damaged ware. Call our Customer Service Dept. with your purchase order number or our package ID number. Air Freight, Truck and Air Parcel Post: Contact our Customer Service Dept. first for instructions to be followed according to their specific claim policy. Again, save all packaging material and carton; should the carrier require an inspection.

**Note:** On all damages we reserve the right to have a claim filed with the carrier so that a decision can be made as to the responsibilities for these damages.

### SHORTAGE

Inspect all packaging material closely as small items may have been overlooked or item(s) may be on backorder. If an item is missing, notify customer service immediately.

### RETURNS

We cannot accept shipments unless we have been notified and we have issued a Return Material Authorization number. This number must appear on the outside of the carton and all correspondence.

### RESTOCKING CHARGE

Catalog items returned due to an error in ordering are subject to a 25% restocking fee.

### SHIPMENTS

If for any reason an order cannot be filled completely, a partial shipment will be made and the balance will be sent as soon as possible. If the complete order must be shipped at one time, please specify at time of order. Shipment will be made by best available means unless you instruct us otherwise.

### REPRESENTATIONS

Representations in this catalog are based on current product listings. Wilmad-LabGlass is committed to providing customers with the most advanced and highest quality products available. We therefore reserve the right to improve or modify product specifications when such a change is warranted.

### SPECIAL GLASSWARE

We would be glad to quote you on any requirements you may have. Please send in any sketch or prints to better assist us in pricing. We reserve the right to over or under run by 10% on orders. Specials are non-refundable.



Wilmad-LabGlass accepts VISA, MASTERCARD & AMERICAN EXPRESS



# TECHNICAL INFORMATION

## CAPABILITIES

With over 70 years of manufacturing experience, Wilmad-LabGlass is capable of meeting the unique needs of the researcher and scientist. The Wilmad-LabGlass engineering/design staff is available to help customers solve a wide variety of problems through custom design and modification of glassware items. The advantage of our knowledge and experience allows Wilmad-LabGlass to quote all of your laboratory glassware needs!

| Annealing  | Decorating        | Glass Forming          | Grinding, Polishing, Drilling | Machine Shop           | Miscellaneous Operations | Precision Bore     |
|------------|-------------------|------------------------|-------------------------------|------------------------|--------------------------|--------------------|
| Batch      | Silk Screening    | Lathe                  | Concentric                    | Machine Design         | Custom/Technical         | Circular Shapes    |
|            | Decaling          | Off Hand               | Centerless                    | Tooling, Fixturing and | Assembly                 | Various GlassTypes |
|            | Silvering         | Tooling                | Surface                       | Mandrels Mold Design   | Graduation               | Specialty          |
| Amberizing | Custom Containers | Taper Grinding         | Fly Cutting                   | Testing                | Capillary                |                    |
|            | Engraving         | and Vials              | Hand Grinding/Polishing       | Reaming                | Lining                   |                    |
|            | Safety Coating    | Special Tubing Vials   | Precision Lapping             | Bore Drilling          | Numbering                |                    |
|            |                   | Syringe Barrels        | Diamond Reaming               | Tapping                | Acid Etching             |                    |
|            |                   | Syringe Plungers       | Drilling                      | Drilling               |                          |                    |
|            |                   | Flasks                 |                               | Machining of Metals    |                          |                    |
|            |                   | Special Packages       |                               | Machining of Plastics  |                          |                    |
|            |                   | Glass to Metal Sealing |                               |                        |                          |                    |
|            |                   | Micro Vials            |                               |                        |                          |                    |

## INDEX OF REGISTERED TRADEMARKS USED IN THIS CATALOG

|                                          |                          |
|------------------------------------------|--------------------------|
| Air-Tite, Chromware, Filterware, Tornado | Wilmad-LabGlass          |
| Chemraz                                  | Green, Tweed & Co., Inc. |
| Duran                                    | Schott Glassworks        |
| PYREX, Pyroceram, Corning                | Corning Glassworks       |
| Enviro-Safe                              | H-B Instruments          |
| Filter Seal                              | VirTis                   |
| Kalrez                                   | E. I. DuPont             |
| Kel-F                                    | 3M Company               |
| Krytox                                   | E. I. DuPont             |
| LabJack                                  | Boekel Inc.              |
| Mantle-Minder                            | Glas-Col                 |
| Rodaviss                                 | S. A. V. France          |
| Safe-Lab                                 | Bel-Art Products         |
| Spin Bar                                 | Bel-Art Products         |
| Stronghold                               | Harvard Apparatus        |
| Suprasil                                 | Heraeus                  |
| Swagelok                                 | Crawford Fittings Inc.   |
| Teflon                                   | E. I. DuPont             |
| Viton                                    | E. I. DuPont             |

## OTHER MANUFACTURERS

In addition to the Wilmad-LabGlass manufactured products listed in this catalog, we are pleased to offer products from the following manufacturers:

|                          |                           |
|--------------------------|---------------------------|
| Arrow Engineering        | Humboldt Co.              |
| Bel-Art Products         | ICL Calibration           |
| Cannon Instruments Co.   | Kessler Instruments       |
| Cole-Parmer              | Master Appliance          |
| Corning Science Products | Miller & Weber, Inc.      |
| Cowie Technology         | Pope Scientific           |
| Crawford Fittings        | Quartz Scientific         |
| DBR Industries           | Scientific Machine        |
| FTS Systems              | Terris Consolidated       |
| Glas-Col Apparatus       | Thomas Scientific         |
| Greene, Tweed & Co. Inc. | Upchurch Scientific       |
| Griffin Group            | VirTis                    |
| G.M. Associates          | Wheaton Science Products  |
| H-B Instruments          | Yamato Scientific America |
| Henry Troemner Inc.      |                           |

# TECHNICAL INFORMATION

## CONVERSION FACTORS

### Length

|                   |                     |
|-------------------|---------------------|
| 1 millimeter (mm) | 0.1 centimeter (cm) |
| 1 centimeter      | 0.01 meter (M)      |
| 1 centimeter      | 0.394 inch          |
| 1 inch            | 2.540 centimeters   |
| 1 meter           | 3.2808 feet         |
| 1 foot            | 0.305 meter         |

### Inches

|       |         |
|-------|---------|
| 1/16  | 1.5875  |
| 1/8   | 3.1750  |
| 3/16  | 4.7625  |
| 1/4   | 6.3500  |
| 5/16  | 7.9375  |
| 7/16  | 11.1125 |
| 1/2   | 12.7000 |
| 9/16  | 14.2875 |
| 5/8   | 15.8750 |
| 11/16 | 17.4625 |
| 3/4   | 19.0500 |
| 13/16 | 20.6375 |
| 7/8   | 22.2250 |
| 15/16 | 23.8125 |

### Millimeters

### Volume

|                         |                           |
|-------------------------|---------------------------|
| 1 cubic centimeter (cc) | 0.001 liter (L)           |
| 1 cubic centimeter      | 0.0610 cubic inch         |
| 1 cubic inch            | 16.3872 cubic centimeters |
| 1 cubic meter (M)       | 35.314 cubic feet         |
| 1 cubic foot            | 0.02832 cubic meter       |

### Capacity

|                        |                              |
|------------------------|------------------------------|
| 1 millileter (mL)      | 0.03382 ounce (U.S. Liquid)  |
| 1 ounce (U.S. Liquid)  | 29.573 milliliters           |
| 1 liter (L)            | 1.05671 quarts (U.S. Liquid) |
| 1 quart (U.S. Liquid)  | 0.94633 liter                |
| 1 liter (L)            | 0.26418 gallon (U.S. Liquid) |
| 1 gallon (U.S. Liquid) | 3.78533 liters               |

### Mass

|                       |                              |
|-----------------------|------------------------------|
| 1 gram                | 0.03527 ounce (Avoirdupois)  |
| 1 ounce (Avoirdupois) | 28.3495 grams                |
| 1 kilogram            | 2.20462 pounds (Avoirdupois) |
| 1 pound (Avoirdupois) | 0.45359 kilogram             |

### Temperature

$$^{\circ}\text{C} = (\text{F} - 32) \frac{5}{9} \quad ^{\circ}\text{F} = \frac{9}{5}\text{C} + 32$$

## INFORMATION ON THERMOMETERS

Thermometers are calibrated for use as total or partial immersion instruments. Total immersion thermometers are designed with scales calibrated to indicate actual temperature when immersed totally in the liquid being measured. The stem above the fluid portion of the thermometer does not need to be immersed. In practice, a short length of the thermometer is allowed above the liquid to permit better reading of the meniscus.

Partial immersion thermometers are designed with scales calibrated to show the actual temperature when a specified portion of its stem is subject to a measured temperature. Used in standardized tests when uniformity of use is the important factor. Specific immersion depths are marked on the back of each thermometer for this procedure.

Stem correction is necessary when using a total immersion thermometer. When portions of the thermometer fluid are subject to different temperatures, this emergent stem correction can be as high as 20°C.

$$T_c = T_o + K \times n \quad (T_o - T_m) \text{ where}$$

$T_c$  = corrected temperature

$T_o$  = observed temperature

$T_m$  = average temperature of fluid column of  $n$  degrees

$n$  = number of degrees above the surface of the medium

$K$  = differential expansion coefficient in the thermometer

(The value of  $K$  for mercury filled thermometers is 0.00016 for Celsius scales and 0.00009 for Fahrenheit scales.  $T_m$  may be estimated by a second thermometer.)

# TECHNICAL INFORMATION

## TEMPERATURE CONVERSION TABLE

This temperature table can be used to convert Centigrade to Fahrenheit or Fahrenheit to Centigrade. The temperature listed in the middle is the known temperature °C or °F. To convert °C use the temperature listed on the left; To convert the °F use the temperature on the right.

## TO CONVERT - CENTIGRADE TO FAHRENHEIT:

Multiply by 1.8 and add 32 degrees to the result.

## TO CONVERT - FAHRENHEIT TO CENTIGRADE:

Subtract 32 degrees and divide the remainder by 1.8.

| °C Temp °F |      |      | °C Temp °F |    |       | °C Temp °F |     |       | °C Temp °F |      |      |
|------------|------|------|------------|----|-------|------------|-----|-------|------------|------|------|
| -95.5      | -140 | -220 | 3.3        | 38 | 100.4 | 2.2        | 90  | 194   | 266        | 510  | 950  |
| -90        | -130 | -202 | 3.9        | 39 | 102.2 | 32.8       | 91  | 195.8 | 271        | 520  | 968  |
| -84.4      | -120 | -184 | 4.4        | 40 | 104   | 33.3       | 92  | 197.6 | 277        | 530  | 986  |
| -78.9      | -110 | -166 | 5          | 41 | 105.8 | 33.9       | 93  | 199.4 | 282        | 540  | 1004 |
| -73.3      | -100 | -148 | 5.6        | 42 | 107.6 | 34.4       | 94  | 201.2 | 288        | 550  | 1022 |
| -67.6      | -90  | -130 | 6.1        | 43 | 109.4 | 35         | 95  | 203   | 293        | 560  | 1040 |
| -62.2      | -80  | -112 | 6.7        | 44 | 111.2 | 35.6       | 96  | 204.8 | 299        | 570  | 1058 |
| -56.6      | -70  | -94  | 7.2        | 45 | 113   | 36.1       | 97  | 206.6 | 304        | 580  | 1076 |
| -51.1      | -60  | -76  | 7.8        | 46 | 114.8 | 36.7       | 98  | 208.4 | 310        | 590  | 1094 |
| -45.5      | -50  | -58  | 8.3        | 47 | 116.6 | 37.2       | 99  | 210.2 | 316        | 600  | 1112 |
| -40        | -40  | -40  | 8.9        | 48 | 118.4 | 37.8       | 100 | 212   | 321        | 610  | 1130 |
| -34.4      | -30  | -22  | 9.4        | 49 | 120.2 | 43         | 110 | 230   | 327        | 620  | 1148 |
| -28.9      | -20  | -4   | 10         | 50 | 122   | 49         | 120 | 238   | 332        | 630  | 1166 |
| -23.3      | -10  | 14   | 10.6       | 51 | 123.8 | 54         | 130 | 266   | 338        | 640  | 1184 |
| -17.8      | 0    | 32   | 11.1       | 52 | 125.6 | 60         | 140 | 284   | 343        | 650  | 1202 |
| -17.2      | 1    | 33.8 | 11.7       | 53 | 127.4 | 66         | 150 | 302   | 349        | 660  | 1220 |
| -16.7      | 2    | 35.6 | 12.2       | 54 | 129.2 | 71         | 160 | 320   | 354        | 670  | 1238 |
| -16.1      | 3    | 37.4 | 12.8       | 55 | 131   | 77         | 170 | 338   | 360        | 680  | 1256 |
| -15.6      | 4    | 39.2 | 13.3       | 56 | 132.8 | 82         | 180 | 256   | 366        | 690  | 1274 |
| -15        | 5    | 41   | 13.9       | 57 | 134.6 | 88         | 190 | 374   | 371        | 700  | 1292 |
| -14.4      | 6    | 42.8 | 14.4       | 58 | 136.4 | 93         | 200 | 392   | 377        | 710  | 1310 |
| 13.9       | 7    | 44.6 | 15         | 59 | 138.2 | 99         | 210 | 410   | 382        | 720  | 1328 |
| -13.3      | 8    | 46.4 | 15.6       | 60 | 140   | 100        | 212 | 414   | 388        | 730  | 1346 |
| -12.8      | 9    | 48.2 | 16.1       | 61 | 141.8 | 104        | 220 | 428   | 393        | 740  | 1364 |
| -12.2      | 10   | 50   | 16.7       | 62 | 143.6 | 110        | 230 | 446   | 399        | 750  | 1382 |
| -11.7      | 11   | 51.8 | 17.2       | 63 | 145.4 | 116        | 240 | 464   | 404        | 760  | 1400 |
| -11.1      | 12   | 53.6 | 17.8       | 64 | 147.2 | 121        | 250 | 482   | 410        | 770  | 1418 |
| -10.6      | 13   | 55.4 | 18.3       | 65 | 149   | 127        | 260 | 500   | 416        | 780  | 1436 |
| -10        | 14   | 57.2 | 18.9       | 66 | 150.8 | 132        | 270 | 518   | 421        | 790  | 1454 |
| -9.4       | 15   | 59   | 19.4       | 67 | 152.6 | 138        | 280 | 536   | 427        | 800  | 1472 |
| -8.9       | 16   | 60.8 | 20         | 68 | 154.4 | 143        | 290 | 554   | 432        | 810  | 1490 |
| -8.3       | 17   | 62.6 | 20.6       | 69 | 156.2 | 149        | 300 | 572   | 438        | 820  | 1508 |
| -7.8       | 18   | 64.4 | 21.1       | 70 | 158   | 154        | 310 | 590   | 443        | 830  | 1526 |
| -7.2       | 19   | 66.2 | 21.7       | 71 | 159.8 | 160        | 320 | 608   | 449        | 840  | 1544 |
| -6.7       | 20   | 68   | 22.2       | 72 | 161.6 | 166        | 330 | 626   | 454        | 850  | 1562 |
| -6.1       | 21   | 69.8 | 22.8       | 73 | 163.4 | 171        | 340 | 644   | 460        | 860  | 1580 |
| -5.6       | 22   | 71.6 | 23.3       | 74 | 165.2 | 177        | 350 | 662   | 466        | 870  | 1598 |
| -5         | 23   | 73.2 | 23.9       | 75 | 167   | 182        | 360 | 680   | 471        | 880  | 1616 |
| -4.4       | 24   | 75.2 | 24.4       | 76 | 168.8 | 188        | 370 | 698   | 477        | 890  | 1634 |
| -3.9       | 25   | 77   | 25         | 77 | 170.6 | 193        | 380 | 716   | 482        | 900  | 1652 |
| -3.3       | 26   | 78.8 | 25.6       | 78 | 172.4 | 199        | 390 | 734   | 488        | 910  | 1670 |
| -2.8       | 27   | 80.6 | 26.1       | 79 | 174.2 | 204        | 400 | 752   | 493        | 920  | 1688 |
| -2.2       | 28   | 82.4 | 26.7       | 80 | 176   | 210        | 410 | 770   | 499        | 930  | 1706 |
| -1.7       | 29   | 84.2 | 27.2       | 81 | 177.8 | 216        | 420 | 806   | 504        | 940  | 1724 |
| -1.1       | 30   | 86   | 27.8       | 82 | 179.6 | 221        | 430 | 806   | 510        | 950  | 1742 |
| -0.6       | 31   | 87.8 | 28.3       | 83 | 181.4 | 227        | 440 | 824   | 516        | 960  | 1760 |
| 0          | 32   | 89.6 | 28.9       | 84 | 183.2 | 232        | 450 | 842   | 521        | 970  | 1778 |
| 0.6        | 33   | 91.4 | 29.4       | 85 | 185   | 238        | 460 | 860   | 527        | 980  | 1796 |
| 1.1        | 34   | 93.2 | 30         | 86 | 186.8 | 243        | 470 | 878   | 532        | 990  | 1814 |
| 1.7        | 35   | 95   | 30.6       | 87 | 188.6 | 249        | 480 | 896   | 538        | 1000 | 1832 |
| 2.2        | 36   | 96.8 | 31.1       | 88 | 190.4 | 254        | 490 | 914   | 543        | 1010 | 1850 |
| 2.8        | 37   | 98.6 | 31.7       | 89 | 192.2 | 260        | 500 | 932   | 549        | 1020 | 1868 |



# TECHNICAL INFORMATION

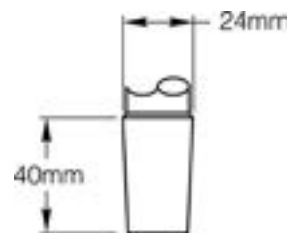
## TAPER GROUND JOINTS

Wilmad-LabGlass taper-ground joints are manufactured according to ASTM E676 specifications. Final grindings for diameter and taper tolerances are fractional as compared to those permitted by Commercial Standard CS-21 of the former National Bureau of Standards.  $\text{§}$  is the symbol used to designate interchangeable taper-ground joints, stoppers, and stopcocks. All mating components are finished to a 1:10 taper.



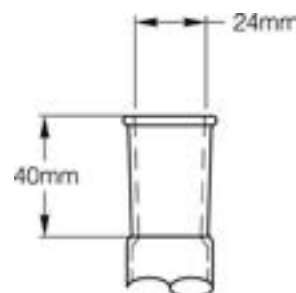
### STANDARD DIMENSIONS FOR FULL LENGTH INTERCHANGEABLE TAPER-GROUND JOINTS

| Joint Size Number<br>( $\text{§}$ Designation) | Approximate Diameter at Small End (mm) | Approximate Length of Ground Zone (mm) | Diameter at Large End of Ground Zone (gauging point) mm |
|------------------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------------------------|
| 7/25                                           | 5                                      | 25                                     | 7.5                                                     |
| 10/30                                          | 7                                      | 30                                     | 10.0                                                    |
| 12/30                                          | 9.5                                    | 30                                     | 12.5                                                    |
| 14/35                                          | 11                                     | 35                                     | 14.5                                                    |
| 19/38                                          | 15                                     | 38                                     | 18.8                                                    |
| 24/40                                          | 20                                     | 40                                     | 24.0                                                    |
| 29/42                                          | 25                                     | 42                                     | 29.2                                                    |
| 34/45                                          | 30                                     | 45                                     | 34.5                                                    |
| 40/50                                          | 35                                     | 50                                     | 40.0                                                    |
| 45/50                                          | 40                                     | 50                                     | 45.0                                                    |
| 50/50                                          | 45                                     | 50                                     | 50.0                                                    |
| 55/50                                          | 50                                     | 50                                     | 55.0                                                    |
| 60/50                                          | 55                                     | 50                                     | 60.0                                                    |
| 71/60                                          | 65                                     | 60                                     | 71.0                                                    |
| 103/60                                         | 97                                     | 60                                     | 103.0                                                   |



### STANDARD DIMENSIONS FOR MEDIUM LENGTH INTERCHANGEABLE TAPER-GROUND JOINTS

| Joint Size Number<br>( $\text{§}$ Designation) | Approximate Diameter at Small End (mm) | Approximate Length of Ground Zone (mm) | Diameter at Large End of Ground Zone (gauging point) mm |
|------------------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------------------------|
| 5/12                                           | 3.8                                    | 12                                     | 5.0                                                     |
| 7/15                                           | 6.0                                    | 15                                     | 7.5                                                     |
| 10/18                                          | 8.2                                    | 18                                     | 10.0                                                    |
| 12/18                                          | 10.7                                   | 18                                     | 12.5                                                    |
| 14/20                                          | 12.5                                   | 20                                     | 14.5                                                    |
| 19/22                                          | 16.6                                   | 22                                     | 18.8                                                    |
| 24/25                                          | 21.5                                   | 25                                     | 24.0                                                    |
| 29/26                                          | 26.6                                   | 26                                     | 29.2                                                    |
| 34/28                                          | 31.7                                   | 28                                     | 34.5                                                    |
| 40/35                                          | 36.5                                   | 35                                     | 40.0                                                    |



### STANDARD DIMENSIONS FOR SHORT LENGTH INTERCHANGEABLE TAPER-GROUND JOINTS

| Joint Size Number<br>( $\text{§}$ Designation) | Approximate Diameter at Small End (mm) | Approximate Length of Ground Zone (mm) | Diameter at Large End of Ground Zone (gauging point) mm |
|------------------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------------------------|
| 5/8                                            | 4.2                                    | 8                                      | 5.0                                                     |
| 7/10                                           | 6.3                                    | 10                                     | 7.0                                                     |
| 10/7                                           | 9.3                                    | 7                                      | 10.0                                                    |
| 10/10                                          | 9.0                                    | 10                                     | 10.0                                                    |
| 12/10                                          | 11.5                                   | 10                                     | 12.5                                                    |
| 14/10                                          | 13.5                                   | 10                                     | 14.5                                                    |
| 19/10                                          | 17.8                                   | 10                                     | 18.8                                                    |
| 24/12                                          | 22.8                                   | 12                                     | 24.0                                                    |
| 29/12                                          | 28.0                                   | 12                                     | 29.2                                                    |
| 34/12                                          | 33.3                                   | 12                                     | 34.5                                                    |
| 40/12                                          | 38.8                                   | 12                                     | 40.0                                                    |
| 45/12                                          | 43.8                                   | 12                                     | 45.0                                                    |
| 50/12                                          | 48.8                                   | 12                                     | 50.0                                                    |
| 55/12                                          | 53.8                                   | 12                                     | 55.0                                                    |
| 60/12                                          | 58.8                                   | 12                                     | 60.0                                                    |
| 71/15                                          | 69.5                                   | 15                                     | 71.0                                                    |

# TECHNICAL INFORMATION

## TAPER GROUND FLASK STOPPERS

### STANDARD DIMENSIONS FOR INTERCHANGEABLE TAPER-GROUND FLASK STOPPERS

| Joint Size Number<br>( $\text{㏄}$ Designation) | Approximate Diameter at Small End (mm) | Approximate Length of Ground Zone (mm) | Diameter at Large End of Ground Zone (gauging point) mm |
|------------------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------------------------|
| 8                                              | 7.25                                   | 10.0 ± 1.0                             | 8.25                                                    |
| 9                                              | 8                                      | 14.0 ± 1.0                             | 9.40                                                    |
| 13                                             | 12                                     | 14.0 ± 1.0                             | 13.40                                                   |
| 16                                             | 15                                     | 15.0 ± 1.0                             | 16.50                                                   |
| 19                                             | 18                                     | 17.0 ± 1.0                             | 19.70                                                   |
| 22                                             | 20                                     | 20.5 ± 1.5                             | 22.05                                                   |
| 27                                             | 25                                     | 21.5 ± 1.5                             | 27.15                                                   |
| 32                                             | 30                                     | 21.5 ± 1.5                             | 32.15                                                   |
| 38                                             | 35                                     | 30.0 ± 2.0                             | 38.0                                                    |

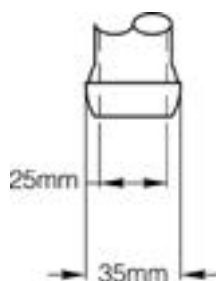
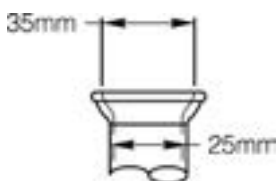


## SPHERICAL GROUND JOINTS

This type of joint provides for variation in joint alignment while maintaining a seal. The symbol for this joint is  $\text{㏄}$  and referenced in ASTM E677. For example, a 35/25 joint measures 35mm at the hemisphere and 25mm on the tube inside diameter.

### STANDARD DIMENSIONS FOR INTERCHANGEABLE SPHERICAL GROUND JOINTS

| Joint Size Number<br>( $\text{㏄}$ Designation) | Nominal Diameter of Ball (mm) | Nominal Tube Inside Diameter (mm) |
|------------------------------------------------|-------------------------------|-----------------------------------|
| 7/1                                            | 7                             | 1                                 |
| 12/1                                           | 12                            | 1                                 |
| 12/1.5                                         | 12                            | 1.5                               |
| 12/2                                           | 12                            | 2                                 |
| 12/3                                           | 12                            | 3                                 |
| 12/5                                           | 12                            | 5                                 |
| 18/7                                           | 18                            | 7                                 |
| 18/9                                           | 18                            | 9                                 |
| 28/12                                          | 28                            | 12                                |
| 28/15                                          | 28                            | 15                                |
| 35/20                                          | 35                            | 20                                |
| 35/25                                          | 35                            | 25                                |
| 40/25                                          | 40                            | 25                                |
| 50/30                                          | 50                            | 30                                |
| 65/40                                          | 65                            | 40                                |
| 75/50                                          | 75                            | 50                                |
| 102/75                                         | 102                           | 75                                |



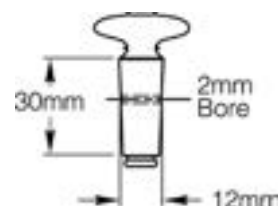
# TECHNICAL INFORMATION

## GLASS STOPPERS

Wilmad-LabGlass stopcocks are produced in accordance with ASTM E675 specifications. The  $\text{S}$  size is the diameter of the plug bore in mm. Glass stopcocks are ground to a 1:10 taper.

### SINGLE STRAIGHT BORE STOPCOCKS

| Stopcock Size<br>( $\text{S}$ Designation and Bore<br>of Hole in Plug, mm) | Diameter of Plug<br>at Centerline of<br>Bore, mm | Length of Shell<br>$\pm 0.5$ mm |
|----------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|
| 1 M (1 mm)                                                                 | 7                                                | 20                              |
| 1                                                                          | 12                                               | 30                              |
| 1 1/2                                                                      | 12                                               | 30                              |
| 2                                                                          | 12                                               | 30                              |
| 3                                                                          | 17                                               | 40                              |
| 4                                                                          | 17                                               | 40                              |
| 5                                                                          | 20                                               | 44                              |
| 6                                                                          | 20                                               | 44                              |
| 8                                                                          | 25                                               | 52                              |
| 10                                                                         | 35                                               | 56                              |

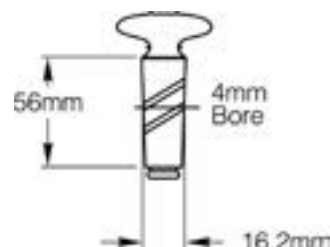


### SINGLE OBLIQUE BORE STOPCOCKS

| Stopcock Size<br>( $\text{S}$ Designation and<br>Bore of Hole<br>in Plug, mm) | Approximate<br>Diameter of Plug<br>at Opening nearest Large<br>End, mm (gauging point) | Distance of<br>Gauging Point<br>from Large End, mm | Length of<br>Shell<br>$\pm 0.5$ mm |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------|
| 1                                                                             | 12.60                                                                                  | 14.0                                               | 40                                 |
| 1 1/2                                                                         | 12.60                                                                                  | 14.0                                               | 40                                 |
| 2                                                                             | 12.60                                                                                  | 14.0                                               | 40                                 |
| 3                                                                             | 17.35                                                                                  | 16.5                                               | 50                                 |
| 4                                                                             | 17.35                                                                                  | 16.5                                               | 50                                 |

### DOUBLE OBLIQUE BORE STOPCOCKS

| Stopcock Size<br>( $\text{S}$ Designation and<br>Bore of Hole<br>in Plug, mm) | Approximate<br>Diameter of Plug<br>at Opening nearest Large<br>End, mm (gauging point) | Distance of<br>Gauging Point<br>from Large End, mm | Length of<br>Shell<br>$\pm 0.5$ mm |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------|
| 1                                                                             | 14.5                                                                                   | 12.5                                               | 50                                 |
| 1 1/2                                                                         | 14.5                                                                                   | 12.5                                               | 50                                 |
| 2                                                                             | 14.5                                                                                   | 12.5                                               | 50                                 |
| 3                                                                             | 16.2                                                                                   | 14.0                                               | 56                                 |
| 4                                                                             | 16.2                                                                                   | 14.0                                               | 56                                 |



### T-BORE & 120° STOPCOCKS

| Stopcock Size<br>( $\text{S}$ Designation and Bore<br>of Hole in Plug, mm) | Diameter of Plug<br>at Centerline of<br>Bore, mm | Length of Shell<br>$\pm 0.5$ mm |
|----------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|
| 1                                                                          | 17                                               | 40                              |
| 1 1/2                                                                      | 17                                               | 40                              |
| 2                                                                          | 17                                               | 40                              |
| 3                                                                          | 20                                               | 44                              |
| 4                                                                          | 20                                               | 44                              |



# TECHNICAL INFORMATION



## PTFE STOPCOCKS

Wilmad-LabGlass stopcocks with PTFE plugs are produced according ASTM E911 specifications. Plugs are 1:5 taper and have a threaded nut and washer. ( \$ Designation is the symbol for these products and the number following it denotes the bore of the plug.

### SINGLE STRAIGHT BORE STOPCOCKS

| Stopcock Size<br>( \$ Designation and Bore<br>of Hole in Plug, mm) | Diameter of Plug<br>at Centerline of<br>Bore, mm | Length of Shell<br>± 0.5 mm |
|--------------------------------------------------------------------|--------------------------------------------------|-----------------------------|
| 1                                                                  | 11                                               | 25                          |
| 2                                                                  | 11                                               | 25                          |
| 3                                                                  | 15.2                                             | 30                          |
| 4                                                                  | 15.2                                             | 30                          |
| 5                                                                  | 16                                               | 35                          |

### SINGLE OBLIQUE BORE STOPCOCKS

| Stopcock Size<br>( \$ Designation and<br>Bore of Hole<br>in Plug, mm) | Approximate<br>Diameter of Plug<br>at Opening nearest<br>Large End, mm | Distance of<br>Gauging Point<br>from Large End, mm | Length of<br>Shell<br>± 0.5 mm |
|-----------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------|--------------------------------|
| 2                                                                     | 15.9                                                                   | 11.5                                               | 30                             |

### DOUBLE OBLIQUE BORE STOPCOCKS

| Stopcock Size<br>( \$ Designation and<br>Bore of Hole<br>in Plug, mm) | Approximate<br>Diameter of Plug<br>at Opening in middle<br>of Plug, mm | Distance of<br>Gauging Point<br>from Centerline of Hole<br>nearest Large End, mm | Length of<br>Shell<br>± 0.5 mm |
|-----------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------|
| 1                                                                     | 12.9                                                                   | 9.4                                                                              | 44                             |
| 2                                                                     | 12.9                                                                   | 9.4                                                                              | 44                             |
| 3                                                                     | 14.4                                                                   | 10.4                                                                             | 44                             |
| 4                                                                     | 14.4                                                                   | 10.4                                                                             | 44                             |

### T-BORE & 120° STOPCOCKS

| Stopcock Size<br>( \$ Designation and Bore<br>of Hole in Plug, mm) | Diameter of Plug<br>at Centerline of<br>Bore, mm | Length of<br>Shell<br>± 0.5 mm |
|--------------------------------------------------------------------|--------------------------------------------------|--------------------------------|
| 1                                                                  | 15.2                                             | 30                             |
| 2                                                                  | 15.2                                             | 30                             |
| 4                                                                  | 16                                               | 35                             |

## ROUND BOTTOM FLASK DIAMETERS

| Capacity (mL) | Diameter (mm) | Capacity (mL) | Diameter (mm) |
|---------------|---------------|---------------|---------------|
| 5             | 26            | 250           | 85            |
| 10            | 31            | 300           | 87            |
| 15            | 36            | 500           | 105           |
| 20            | 39            | 1000          | 131           |
| 25            | 41            | 2000          | 166           |
| 35            | 46            | 3000          | 185           |
| 50            | 49            | 5000          | 223           |
| 65            | 55            | 12000         | 295           |
| 100           | 62            | 22000         | 345           |
| 125           | 69            | 50000         | 460           |
| 200           | 76            | 72000         | 520           |

# TECHNICAL INFORMATION

## FRITTED WARE

Wilmaad-LabGlass offers four different porosities that provide filtration speed with good retention. Porosity is controlled during manufacture and each lot is tested. The extra coarse and coarse porosities are nearer the maximum pore size listed. Medium and fine porosities are near the minimum listed pore diameter. The porosity for the pore diameter within the filter is determined by ASTM E128 "Maximum Pore Diameter and Permeability of Rigid Porous Filters for Laboratory Use"

### Handling Suggestions

- Clean new filters by suction using hot hydrochloric acid, followed by a water rinse.
- Do not subject discs to differential pressures exceeding 15 psi.
- Observe caution when heating or cooling. Avoid rapid temperature changes and direct exposure to a flame.

### Cleaning of Used Filters

In many cases, precipitates can be removed by rinsing with water from the underside, with the pressure not exceeding 15 psi.

| Porosity     | Catalog Abbreviation | Nominal Maximum Pore Size (microns) | Principal Uses                                                                                                         |
|--------------|----------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Extra Coarse | EC                   | 170-220                             | Filtration of very coarse materials. Gas dispersion, gas washing, extractor beds. Support of other filter materials.   |
| Coarse       | C                    | 40-60                               | Filtration of coarse materials. Gas dispersion, gas washing, gas absorption. Mercury filtration. Extraction apparatus. |
| Medium       | M                    | 10-15                               | Filtration of Crystalline Precipitates. Extraction apparatus. Removal of "floaters" from distilled water.              |
| Fine         | F                    | 4-5.5                               | Filtration of fine precipitates. Mercury valve. Extraction apparatus.                                                  |

### Special Apparatus with Fritted Glass Discs

We can manufacture specialized glassware that include fritted glass discs. Quotations promptly furnished on receipt of sketch with dimensions and porosities needed. Please contact Customer Service for additional details.

# TECHNICAL INFORMATION

## VOLUMETRIC GLASSWARE

### Burets & Graduated Cylinders

Calibration standards ASTM E542 and ASTM E694 are followed in the manufacture of Wilmad-LabGlass burets and graduated cylinders. Only precision grade ware is labeled Class A. Laboratory grade volumetric graduated cylinders and burets have tolerances approximately twice that of Class A glassware.

| Capacity mL<br>Less than and<br>including | Burets<br>Class A<br>Tolerance $\pm$ mL | Graduated Cylinders<br>Class A Tolerance $\pm$ mL<br>To Contain (TC) | Graduated Cylinders<br>Class A Tolerance $\pm$ mL<br>To Deliver (TD) | Graduated Cylinders<br>Class B<br>Tolerance $\pm$ mL |
|-------------------------------------------|-----------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------|
| 5                                         | 0.01                                    | 0.05                                                                 | 0.05                                                                 | 0.10                                                 |
| 10                                        | 0.02                                    | 0.10                                                                 | 0.10                                                                 | 0.20                                                 |
| 25                                        | 0.03                                    | 0.17                                                                 | 0.17                                                                 | 0.34                                                 |
| 50                                        | 0.05                                    | 0.25                                                                 | 0.25                                                                 | 0.50                                                 |
| 100                                       | 0.10                                    | 0.50                                                                 | 0.50                                                                 | 1.00                                                 |
| 250                                       |                                         | 1.00                                                                 | 1.00                                                                 | 2.00                                                 |
| 500                                       |                                         | 2.00                                                                 | 2.00                                                                 | 4.00                                                 |
| 1000                                      |                                         | 3.00                                                                 | 3.00                                                                 | 6.00                                                 |
| 2000                                      |                                         | 6.00                                                                 | 6.00                                                                 | 12.00                                                |
| 4000                                      |                                         | 14.50                                                                | 14.50                                                                | 29.00                                                |

Note: Tolerances are based on capacity and are independent of subdivisions.

Ref: ASTM E287 Standard Specification for Burets  
 ASTM E1272 Standard Specifications for Graduated Cylinders

### Pipets & Volumetric Flasks

Calibration standards ASTM E542 and ASTM E694 are followed in the manufacture of Wilmad/LabGlass pipets and volumetric flasks. Class A volumetrics are clearly labeled to distinguish from Laboratory Grade which have tolerances twice as large as Class A.

| Capacity mL<br>Less than and<br>including | Measuring Pipets<br>Class A<br>Tolerance $\pm$ mL | Serological Pipets<br>Class B<br>Tolerance $\pm$ mL | Transfer Pipets<br>Class A<br>Tolerance $\pm$ mL | Volumetric Flasks<br>Class A Tolerance $\pm$ mL<br>To Contain (TC) | Volumetric Flasks<br>Class B Tolerance $\pm$ mL<br>To Contain (TC) |
|-------------------------------------------|---------------------------------------------------|-----------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|
| 0.1                                       |                                                   | 0.005                                               |                                                  |                                                                    |                                                                    |
| 0.2                                       |                                                   | 0.008                                               |                                                  |                                                                    |                                                                    |
| 1                                         | 0.01                                              | 0.02                                                | 0.006                                            | 0.01*                                                              |                                                                    |
| 2                                         | 0.01                                              | 0.02                                                | 0.006                                            | 0.015*                                                             |                                                                    |
| 3                                         |                                                   |                                                     | 0.01                                             | 0.015*                                                             |                                                                    |
| 4                                         |                                                   |                                                     | 0.01                                             | 0.02*                                                              |                                                                    |
| 5                                         | 0.02                                              | 0.04                                                | 0.01                                             | 0.02                                                               | 0.04                                                               |
| 10                                        | 0.03                                              | 0.06                                                | 0.02                                             | 0.02                                                               | 0.04                                                               |
| 15                                        |                                                   |                                                     | 0.03                                             |                                                                    |                                                                    |
| 20                                        |                                                   |                                                     | 0.03                                             |                                                                    |                                                                    |
| 25                                        | 0.05                                              | 0.10                                                | 0.03                                             | 0.03                                                               | 0.06                                                               |
| 50                                        |                                                   |                                                     | 0.05                                             | 0.05                                                               | 0.10                                                               |
| 100                                       |                                                   |                                                     | 0.08                                             | 0.08                                                               | 0.16                                                               |
| 200                                       |                                                   |                                                     |                                                  | 0.10                                                               | 0.20                                                               |
| 250                                       |                                                   |                                                     |                                                  | 0.12                                                               | 0.24                                                               |
| 500                                       |                                                   |                                                     |                                                  | 0.20                                                               | 0.40                                                               |
| 1000                                      |                                                   |                                                     |                                                  | 0.30                                                               | 0.60                                                               |
| 2000                                      |                                                   |                                                     |                                                  | 0.50                                                               | 1.00                                                               |

Note: Tolerances are based on capacity and are independent of subdivisions.

Ref: ASTM E288 Standard Specifications for Volumetric Flasks  
 ASTM E969 Standard Specifications for Volumetric (Transfer) Pipets  
 ASTM E1293 Standard Specifications for Glass Measuring Pipets (Mohr)  
 ASTM E237 Standard Specification for Laboratory Glass Microvolumetric Vessels (Volumetric Flasks and Centrifuge Tubes)  
 ASTM E1044 Standard Specifications for Glass Serological Pipets (General Purpose and Kahn)

# TECHNICAL INFORMATION

## GLASS SPECIFICATIONS

Unless specified, all Wilmad-LabGlass technical glassware meets ASTM specification E438, Type 1, Class A borosilicate glass. Glassware is manufactured from PYREX Glass Code 7740 or equivalent.

| Major Physical Characteristics                                            | TYPE 1, Class A | PYREX |
|---------------------------------------------------------------------------|-----------------|-------|
| Annealing Point °C                                                        | 560 +10         | 560   |
| Softening Point °C                                                        | 815-820 +10     | 821   |
| Density, annealed, g/cm <sup>3</sup>                                      | 2.23 2.24 +0.02 | 2.23  |
| Linear Coefficient of Expansion<br>(0-300°C), cm/cm.°C x 10 <sup>-7</sup> | 32-33 +1.5      | 32.5  |

| Major Chemical Constituents<br>(Typical Concentration – Weight Percent) | TYPE 1, Class A | PYREX |
|-------------------------------------------------------------------------|-----------------|-------|
| Silicon Oxide-Silica SiO <sub>2</sub>                                   | 81              | 81    |
| Boron Oxide-B <sub>2</sub> O <sub>3</sub>                               | 13              | 13(a) |
| Sodium Oxide-Na <sub>2</sub> O                                          | 4               | 4     |
| Aluminum Oxide-Alumina Al <sub>2</sub> O <sub>3</sub>                   | 2               | 2     |

(a) F, Cl, SO<sub>4</sub>, Al, Sb may be present in trace amounts ranging from 0.05 to 0.5% GLASS SPECIFICATIONS

## PLASTICS TECHNICAL DATA

### POLYTETRAFLUOROETHYLENE (PTFE)

Also known as Teflon® (DuPont), this is an opaque, white material that has the lowest coefficient of friction of any solid.

### FLUORINATED ETHYLENE PROPYLENE (FEP)

This is a translucent, flexible material with a high density. It can be sterilized by all known chemical and thermal methods.

### ETHYLENE TETRAFLUORETHYLENE (ETFE)

Also known as Tefzel® (DuPont), it has greater mechanical strength and impact resistance than PTFE or FEP.

### PERFLUOROALKOXY (PFA)

This has the widest temperature range of the fluoropolymers (-270°C to 250°C) with superior chemical resistance throughout this range.

### CHLOROTRIFLUOROETHYLENE (CTFE)

Also known as KEL-F® (3M Company), this material provides zero moisture absorption. It has excellent dimensional stability and can be machined to close tolerances.

### ETHYLENE CHLOROFLUOROETHYLENE (ECTFE)

A copolymer, also known as Halar® (Allied Chemical), is easy to process, non burning and radiation resistant.

### POLYOLEFINS

Polyethylenes are relatively inert over a wide range of temperatures and provide a good moisture barrier. Organic solvents may cause swelling and oxidizing agents will cause brittleness.

### LOW DENSITY POLYETHYLENE (LDPE)

Widely used as a packaging material in the pharmaceutical industry and for foods. Uses in the laboratory include wash bottles, droppers, and centrifuge tubes. Not recommended for autoclaving.

### HIGH DENSITY POLYETHYLENE (HDPE)

Structured for superior toughness, stiffer than LDPE, and better resistance to permeation. Widely used in the laboratory as a material of choice in centrifuge tubes, containers, and closures. HDPE has a natural milky color and is more opaque than LDPE.

### POLYPROPYLENE (PP)

Solvent resistant at room temperature. Labware made of PP is autoclavable and generally equivalent to HDPE. Becomes brittle at 0°C.



# TECHNICAL INFORMATION

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## LABORATORY SAFETY

- Safety glasses should be worn at all times in the laboratory.
- Do not wear contact lenses.
- Do not work in the laboratory alone.
- Know the location of safety equipment and perform no unauthorized experiments.
- Use care in handling organic solvents. Avoid inhalation.
- Flames should be avoided in the laboratory. Replace Bunsen burners with appropriate electrical heating devices.
- Always review MATERIAL SAFETY DATA SHEETS (MSDS) before conducting experiments.
- Wastes generated in the laboratory must be properly handled and disposed of.

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## GLASSWARE SAFETY

- Do not use laboratory vessels for food or drink.
- Do not use glassware when working with hydrofluoric acid, hot phosphoric, or strong hot alkalis.
- Do not use excessive force to tighten glassware to racks or ring stands. Use only coated clamps.
- Avoid direct metal to glass contact. Scratching the glass surface weakens it and failure can occur. Replace worn brushes and check dishwashers for exposed metal spindles.
- Use related safety equipment in the laboratory. Never grasp a beaker by the rim and use beaker tongs to remove same from hotplates or ovens.
- Identify and properly store reaction products and synthesized materials.
- Support round bottom flasks with cork rings and stopper openings whenever possible.
- Store glassware properly when not in use. Replace caps or stoppers on reagent bottles and cover open vessels, especially when working with volatile solvents.
- Avoid glass to glass contact when storing in laboratory bench drawers. Provide adequate space or cushion the glassware with appropriate material.
- When using pressure or vacuum check gauges first and provide a safety shield. WILMAD-LABGLASS does not guarantee any glassware when used under these conditions.
- Do not heat thick walled glassware such as filter flasks, cylinders, or battery jars on hot plates.

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## CLEANING GLASSWARE

### New Glassware

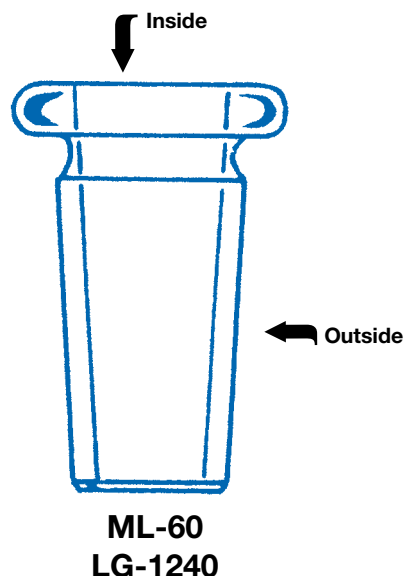
Newly manufactured glass is slightly alkaline and should be soaked in a 1% hydrochloric or nitric acid aqueous solution for several hours prior to use. This step should be followed for trace or analytical procedures.

### General Cleaning Methods

Clean glassware is hydrophilic and will have a uniformly wetted surface when distilled water is used as a final rinse. Contaminants such as detergent residues or grease will cause the water to bead and the cleaning procedure should be repeated. Reagents, reactants, and reaction products should be removed from the glassware and then soaked for three hours in a hot (80°C) non-alkaline detergent bath. Do not use abrasives, strong alkalis or steel wool in the cleaning process. Concentrations of detergent should be between 5 and 20% depending on the residue.

### Rinsing & Drying

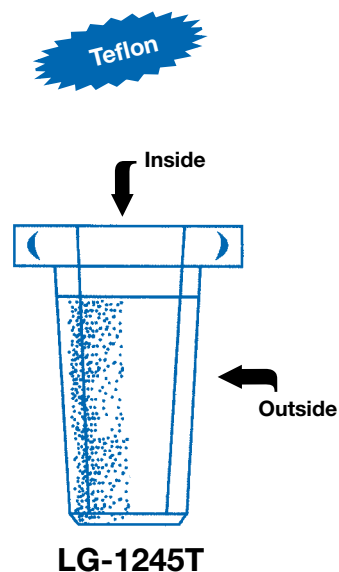
After removal of residues, glassware can be rinsed initially with deionized water followed by a final rinse using distilled water. Pegboard drying is not recommended since airborne contaminants in the laboratory will be deposited on the “clean” glassware. Oven drying is suggested at temperatures ranging from 110-140°C. Open-ended glassware such as beakers should be covered with foil and stored in a dust-free cabinet.



### Adapter, Reducing, Bushing Style

Provides compact assemblies. The larger size is on the outside of bushing while the smaller dimension is within the bore of bushing.

| Outside<br>\$ Joint | Inside<br>\$ Joint | Part<br>Number | Each<br>Price |
|---------------------|--------------------|----------------|---------------|
| 10/18               | 7/12               | ML-60-698      | \$21.69       |
| 14/20               | 7/12               | ML-60-700      | 21.69         |
| 14/20               | 10/18              | ML-60-702      | 21.28         |
| 14/20               | 10/30              | ML-60-704      | 21.28         |
| 19/22               | 7/12               | ML-60-706      | 22.70         |
| 19/22               | 10/18              | ML-60-710      | 26.18         |
| 19/22               | 10/30              | ML-60-712      | 26.18         |
| 19/22               | 14/20              | ML-60-714      | 21.69         |
| 24/40               | 10/30              | LG-1240-106    | 28.85         |
| 24/40               | 14/35              | LG-1240-108    | 27.18         |
| 24/40               | 19/38              | LG-1240-110    | 25.30         |
| 29/42               | 10/30              | LG-1240-112    | 31.82         |
| 29/42               | 14/35              | LG-1240-114    | 32.77         |
| 29/42               | 19/38              | LG-1240-116    | 30.37         |
| 29/42               | 24/40              | LG-1240-118    | 29.88         |
| 34/45               | 24/40              | LG-1240-120    | 37.95         |
| 34/45               | 29/42              | LG-1240-122    | 47.73         |
| 45/50               | 24/40              | LG-1240-126    | 66.32         |
| 45/50               | 29/42              | LG-1240-128    | 61.49         |
| 45/50               | 34/45              | LG-1240-130    | 60.99         |
| 55/50               | 29/42              | LG-1240-133    | 77.50         |
| 55/50               | 24/40              | LG-1240-135    | 77.50         |
| 55/50               | 45/50              | LG-1240-136    | 76.66         |



### Adapter, Reducing, Bushing Style, PTFE

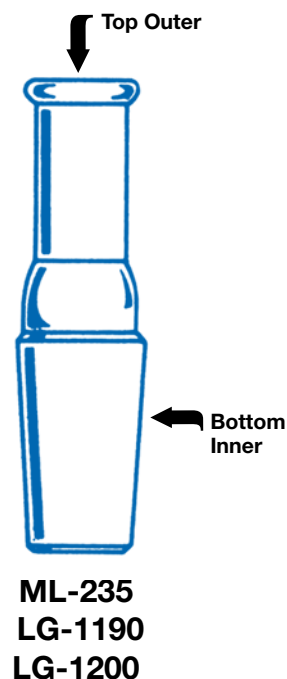
Machined from PTFE and used where lubricant should be avoided.

| Outside<br>\$ Joint | Inside<br>\$ Joint | Part<br>Number | Each<br>Price |
|---------------------|--------------------|----------------|---------------|
| 24/40               | 19/38              | LG-1245T-100   | \$28.30       |
| 29/42               | 24/40              | LG-1245T-102   | 28.30         |
| 34/45               | 29/42              | LG-1245T-104   | 38.40         |
| 45/50               | 34/45              | LG-1245T-106   | 57.44         |

## Adapter, Reducing and Enlarging

To allow connection of dissimilar joints. Outer joint is at the top and inner joint is at the bottom.

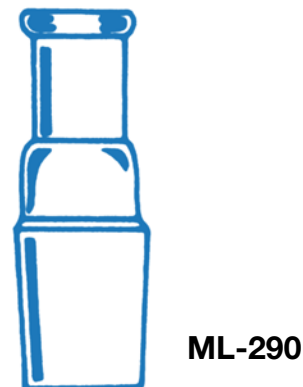
| Top Outer<br>\$ Joint | Bottom Inner<br>\$ Joint | Part<br>Number | Each<br>Price |
|-----------------------|--------------------------|----------------|---------------|
| 10/30                 | 24/40                    | LG-1190-114    | \$24.71       |
| 10/30                 | 29/42                    | LG-1190-116    | 26.63         |
| 14/20                 | 19/22                    | ML-235-706     | 20.45         |
| 14/20                 | 24/40                    | ML-235-712     | 23.72         |
| 19/22                 | 14/20                    | ML-235-720     | 22.81         |
| 19/22                 | 24/40                    | ML-235-726     | 24.59         |
| 19/22                 | 29/42                    | ML-235-730     | 28.37         |
| 19/38                 | 24/40                    | LG-1190-162    | 26.13         |
| 19/38                 | 10/30                    | LG-1200-100    | 24.62         |
| 19/38                 | 14/35                    | LG-1200-104    | 24.70         |
| 24/40                 | 10/30                    | LG-1200-106    | 24.23         |
| 24/40                 | 14/20                    | ML-235-744     | 24.23         |
| 24/40                 | 14/35                    | LG-1200-110    | 24.84         |
| 24/40                 | 19/22                    | ML-235-746     | 24.71         |
| 24/40                 | 19/38                    | LG-1200-112    | 25.99         |
| 24/40                 | 24/40                    | LG-1190-178    | 30.43         |
| 24/40                 | 29/42                    | LG-1190-180    | 27.89         |
| 24/40                 | 34/45                    | LG-1190-182    | 31.33         |
| 24/40                 | 40/50                    | LG-1190-184    | 44.23         |
| 24/40                 | 45/50                    | LG-1190-186    | 43.63         |
| 24/40                 | 55/50                    | LG-1190-190    | 57.34         |
| 29/26                 | 19/22                    | ML-235-750     | 29.18         |
| 29/42                 | 14/35                    | LG-1200-116    | 26.50         |
| 29/42                 | 19/38                    | LG-1200-118    | 28.92         |
| 29/42                 | 24/40                    | LG-1200-120    | 29.65         |
| 29/42                 | 29/42                    | LG-1190-196    | 39.64         |
| 29/42                 | 34/45                    | LG-1190-198    | 41.57         |
| 29/42                 | 45/50                    | LG-1190-202    | 49.77         |
| 29/42                 | 55/50                    | LG-1190-206    | 59.55         |
| 34/45                 | 45/50                    | LG-1190-214    | 61.46         |
| 45/50                 | 55/60                    | LG-1190-224    | 80.16         |
| 34/45                 | 24/40                    | LG-1200-124    | 33.34         |
| 34/45                 | 29/42                    | LG-1200-126    | 35.32         |
| 45/50                 | 24/40                    | LG-1200-136    | 57.61         |
| 55/50                 | 24/40                    | LG-1200-140    | 65.57         |



## Adapter, Thermometer, Straight

With inner joint at the bottom and outer joint at the top. When used with a thermometer calibrated for 75mm immersion, the bulb will extend 40mm below bottom of adapter.

| Top Outer<br>\$ Joint | Bottom Inner<br>\$ Joint | Part<br>Number | Each<br>Price |
|-----------------------|--------------------------|----------------|---------------|
| 7/12                  | 14/20                    | ML-290-700     | \$27.69       |
| 10/18                 | 14/20                    | ML-290-702     | 29.27         |
| 7/12                  | 19/22                    | ML-290-704     | 28.14         |
| 10/18                 | 19/22                    | ML-290-706     | 29.71         |





**ML-245**  
**LG-1290**



**LG-6877**



← Adapter

← Connector

← Vial

**LG-6879**

### Adapter, Straight, Connecting

With an outer joint at one end and the same size inner joint at the other end.

| Joint | Length<br>between<br>Joints mm | Part<br>Number     | Each<br>Price |
|-------|--------------------------------|--------------------|---------------|
| 14/20 | 50                             | <b>ML-245-700</b>  | \$20.12       |
| 19/22 | 45                             | <b>ML-245-702</b>  | 26.87         |
| 24/40 | 30                             | <b>LG-1290-100</b> | 26.87         |
| 24/40 | 75                             | <b>LG-1290-102</b> | 27.59         |
| 24/40 | 120                            | <b>LG-1290-104</b> | 30.84         |
| 24/40 | 170                            | <b>LG-1290-106</b> | 32.17         |
| 29/42 | 30                             | <b>LG-1290-110</b> | 29.65         |
| 29/42 | 75                             | <b>LG-1290-112</b> | 31.82         |
| 29/42 | 120                            | <b>LG-1290-114</b> | 33.26         |

### Adapter, Evaporator Trap, Bump

With frit sealed between the upper joint and the lower joint. This adapter prevents the contents in the flask from entering into the condenser when “bumping” occurs. All traps have a 24/40 top outer joint.

| Lower<br>Joint | Frit<br>Porosity | Part<br>Number     | Each<br>Price |
|----------------|------------------|--------------------|---------------|
| 14/20          | Extra Coarse     | <b>LG-6877-100</b> | \$62.61       |
| 24/40          | Extra Coarse     | <b>LG-6877-102</b> | 64.96         |
| 29/42          | Extra Coarse     | <b>LG-6877-106</b> | 67.33         |
| 14/20          | Medium           | <b>LG-6877-200</b> | 62.61         |
| 24/40          | Medium           | <b>LG-6877-202</b> | 64.96         |
| 29/42          | Medium           | <b>LG-6877-206</b> | 67.33         |

### Adapter, Rotary Evaporator, Vial

Adapter has a top outer joint of the listed size and a 20-400 G.P.I. thread on the bottom. A PTFE lined, polypropylene double threaded connector attaches a standard laboratory vial to the adapter.

Note: The glass adapter and double threaded connections must be ordered separately.

| Description        | To Fit Vials<br>With G.P.I.<br>Thread Size | Joint | Part<br>Number     | Each<br>Price |
|--------------------|--------------------------------------------|-------|--------------------|---------------|
| Glass Adapter Only |                                            | 24/40 | <b>LG 6879-120</b> | \$32.26       |
| Glass Adapter Only |                                            | 29/26 | <b>LG-6879-122</b> | 47.44         |
| Glass Adapter Only |                                            | 29/42 | <b>LG-6879-126</b> | 36.00         |
| Connector          | 13-425-20-400                              |       | <b>LG-6879-110</b> | 10.35         |
| Connector          | 15-425-20-400                              |       | <b>LG-6879-111</b> | 11.30         |
| Connector          | 18-425-20-400                              |       | <b>LG-6879-113</b> | 12.20         |
| Connector          | 20-400-20-400                              |       | <b>LG-6879-112</b> | 12.64         |
| Connector          | 22-400-20-400                              |       | <b>LG-6879-114</b> | 13.00         |
| Connector          | 24-400-20-400                              |       | <b>LG-6879-116</b> | 17.09         |

## Adapter, Joint, Flexible, PTFE

Flexible connector which allows for movement of glass joint connection. Relieves stress and allows for mis-alignment. Top and bottom connection are the same.

| Joint | Height<br>mm | Part<br>Number | Each<br>Price |
|-------|--------------|----------------|---------------|
| 14/20 | 115          | LG-1014T-200   | \$50.00       |
| 19/22 | 90           | LG-1014T-202   | 55.00         |
| 19/38 | 120          | LG-1014T-204   | 57.00         |
| 24/40 | 130          | LG-1014T-206   | 64.00         |
| 29/42 | 140          | LG-1014T-208   | 68.00         |
| 34/45 | 145          | LG-1014T-210   | 71.00         |
| 45/50 | 155          | LG-1014T-212   | 80.00         |



**LG-1014T**

## Adapter, Straight

With inner member at each end. Both joints are the same size.

| Joint | Length<br>Between<br>Joints mm | Part<br>Number | Each<br>Price |
|-------|--------------------------------|----------------|---------------|
| 24/40 | 30                             | LG-1651-100    | \$32.40       |
| 24/40 | 75                             | LG-1651-102    | 32.40         |
| 24/40 | 120                            | LG-1651-104    | 32.40         |
| 24/40 | 170                            | LG-1651-106    | 33.00         |
| 29/42 | 30                             | LG-1651-200    | 34.00         |
| 29/42 | 75                             | LG-1651-202    | 34.00         |
| 29/42 | 120                            | LG-1651-204    | 34.00         |
| 29/42 | 170                            | LG-1651-206    | 34.80         |



**LG-1651**

## Adapter, Straight

Both inner joints are the same size. Funnel shaped interior minimizes surface contact.

| Joint | Part<br>Number | Each<br>Price |
|-------|----------------|---------------|
| 14/20 | ML-260-700     | \$50.33       |
| 19/22 | ML-260-702     | 51.53         |



**ML-260**

## Adapter, 105° Bend

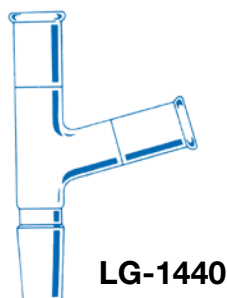
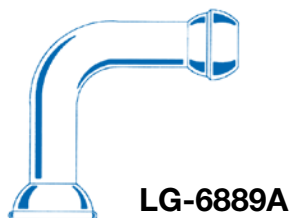
With outer member at one end and small tube at other end which is angled to form a drip tip. Bend in tube gives an included angle of 105°.

| Joint | Part<br>Number | Each<br>Price |
|-------|----------------|---------------|
| 14/20 | ML-10-700      | \$18.96       |
| 19/22 | ML-10-702      | 19.55         |
| 24/40 | LG-1350-100    | 22.05         |
| 29/42 | LG-1350-102    | 23.45         |



**ML-10  
LG-1350**





### Adapter, 105° Bend

Similar to *LG-1350* except each end is provided with a joint, outer on one end and inner on the other end. Both joints are the same size.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 14/20      | <b>ML-35-700</b>   | \$27.47    |
| 19/22      | <b>ML-35-702</b>   | 30.84      |
| 24/40      | <b>LG-1370-100</b> | 29.56      |
| 29/42      | <b>LG-1370-102</b> | 32.77      |

### Adapter, 75° Bend

With an inner joint at each end. Both joints are the same size.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 14/20      | <b>ML-20-700</b>   | \$18.79    |
| 19/22      | <b>ML-20-702</b>   | 19.03      |
| 24/40      | <b>LG-1390-100</b> | 28.26      |
| 29/42      | <b>LG-1390-102</b> | 31.21      |

### Adapter, Impinger, 90° Angle

With socket joint at one end, ball joint at other end. Both joints are the same size.

| Size Joint | Part Number         | Each Price |
|------------|---------------------|------------|
| 12/5       | <b>LG-6889A-100</b> | \$29.84    |
| 18/9       | <b>LG-6889A-102</b> | 31.66      |
| 28/15      | <b>LG-6889A-104</b> | 34.98      |

### Adapter, Off-Set

With outer joint on one end and inner joint on other end. Both joints are the same size.

| Size Joint | Offset Center to Center | Part Number        | Each Price |
|------------|-------------------------|--------------------|------------|
| 24/40      | 22mm                    | <b>LG-1580-100</b> | \$29.41    |
| 29/42      | 28mm                    | <b>LG-1580-102</b> | 32.77      |
| 45/50      | 32mm                    | <b>LG-1580-104</b> | 41.00      |

### Adapter, Three-Way

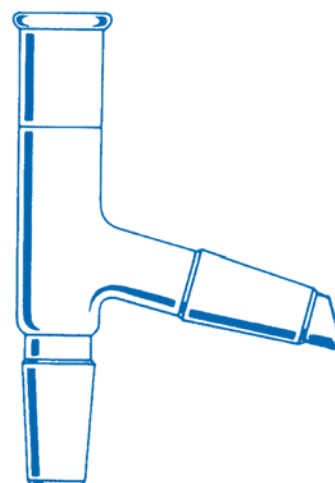
With sidearm at angle of 105° from lower tube. Sidearm and upper tube have outer joints; lower tube inner joint. All three joints are the same size.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 14/20      | <b>LG-1440-096</b> | \$42.12    |
| 24/40      | <b>LG-1440-100</b> | 44.59      |
| 29/42      | <b>LG-1440-102</b> | 45.80      |

### Adapter, Distilling

With sidearm at angle of 75° from lower part of main tube. Sidearm and lower tube have inner joints; upper tube outer joint. All three joints are the same size.

| ⌘ Joint | Part Number        | Each Price |
|---------|--------------------|------------|
| 14/10   | <b>ML-320-600</b>  | \$33.84    |
| 14/20   | <b>ML-320-700</b>  | 33.82      |
| 19/22   | <b>ML-320-702</b>  | 36.30      |
| 24/40   | <b>LG-1470-100</b> | 43.26      |
| 29/42   | <b>LG-1470-102</b> | 46.76      |

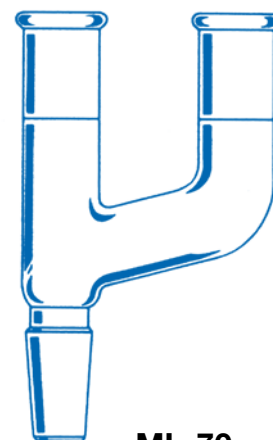


**ML-320**  
**LG-1470**

### Adapter, Three-Way Claisen

Allows an additional entry into single or multiple neck flasks. Useful for reflux with addition reactions. Outer joints and lower inner joint are the same size.

| ⌘ Joint | Offset Center to Center | Part Number        | Each Price |
|---------|-------------------------|--------------------|------------|
| 14/10   | 50mm                    | <b>ML-70-600</b>   | \$34.53    |
| 14/20   | 50mm                    | <b>ML-70-700</b>   | 37.49      |
| 19/22   | 50mm                    | <b>ML-70-702</b>   | 44.11      |
| 24/40   | 100mm                   | <b>LG-1550-100</b> | 50.01      |
| 29/42   | 100mm                   | <b>LG-1550-102</b> | 55.10      |
| 29/26   | 100mm                   | <b>LG-1550-104</b> | 59.29      |
| 24/40   | 65mm                    | <b>LG-1550-200</b> | 55.52      |
| 29/42   | 65mm                    | <b>LG-1550-202</b> | 59.29      |

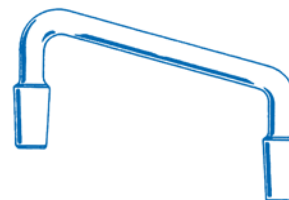


**ML-70**  
**LG-1550**

### Adapter, Connecting

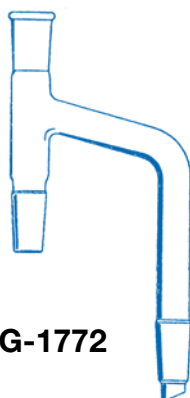
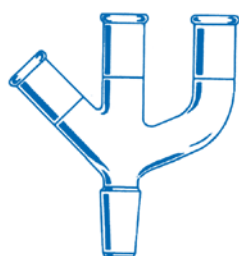
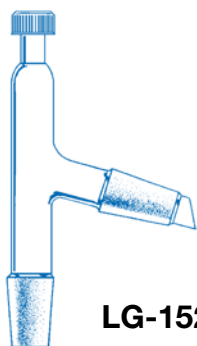
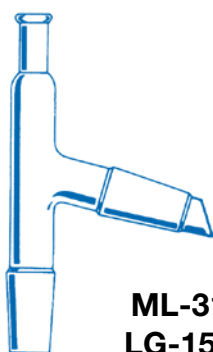
Tube with two parallel inner joints and with the connection at an angle of 75° to the upper joint.

| ⌘ Joint | Offset Center to Center | Part Number        | Each Price |
|---------|-------------------------|--------------------|------------|
| 24/40   | 170mm                   | <b>LG-1760-100</b> | \$40.73    |
| 29/42   | 200mm                   | <b>LG-1760-102</b> | 50.20      |



**LG-1760**

NEW


**LG-1772**

**LG-1812**

**LG-1521**

**ML-310**  
**LG-1530**

### Adapter, Moisture Test

Adapter used to construct a simple moisture trap. Add a condenser to the top outer joint and a graduated funnel to the lower inner joint. Adapters with larger center to center spacing can be used with process reactors and larger flasks up to 50L.

| Joint | Center to Center (mm) | Part Number        | Each Price |
|-------|-----------------------|--------------------|------------|
| 14/20 | 100                   | <b>LG-1772-100</b> | \$60.10    |
| 19/22 | 100                   | <b>LG-1772-102</b> | 61.63      |
| 29/26 | 100                   | <b>LG-1772-104</b> | 62.18      |
| 24/40 | 100                   | <b>LG-1772-106</b> | 62.07      |
| 24/40 | 200                   | <b>LG-1772-108</b> | 63.79      |
| 29/42 | 100                   | <b>LG-1772-110</b> | 63.48      |
| 29/42 | 200                   | <b>LG-1772-112</b> | 65.58      |
| 45/50 | 200                   | <b>LG-1772-114</b> | 102.34     |
| 45/50 | 250                   | <b>LG-1772-116</b> | 106.56     |

### Adapter, Claisen Type

With one vertical sidearm and one at 45° angle to the main stem. All joints are the same size.

| Joint | Offset Center to Center | Part Number        | Each Price |
|-------|-------------------------|--------------------|------------|
| 24/40 | 100mm                   | <b>LG-1812-100</b> | \$84.13    |
| 29/42 | 100mm                   | <b>LG-1812-102</b> | 86.77      |

### Adapter, Three-Way, Thermometer

With 7mm threaded fitting at top for inert and greaseless thermometer connection which also provides for easy adjustment of thermometer position. The side joint is at a 75° angle. Both side and bottom joints are the same size. Supplied with cap and O-ring.

| Joint | Accom. Range mm | Approx. HxW mm | Part Number        | Each Price |
|-------|-----------------|----------------|--------------------|------------|
| 19/22 | 5-8             | 110 x 55       | <b>LG-1521-098</b> | \$45.06    |
| 24/40 | 5-8             | 155 x 100      | <b>LG-1521-100</b> | 45.80      |
| 29/42 | 5-8             | 165 x 110      | <b>LG-1521-102</b> | 47.01      |

### Adapter, Distilling

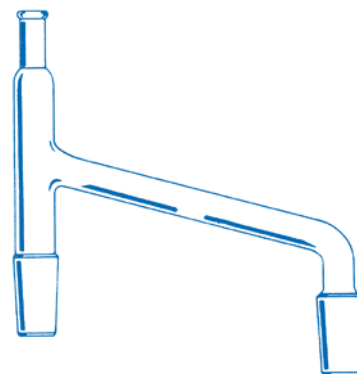
Sidearm angle is 75°. Upper tube has a outer joint to accommodate a thermometer.

| Joint | Thermometer Joint | Immersion Length mm | Part Number        | Each Price |
|-------|-------------------|---------------------|--------------------|------------|
| 14/20 | 10/18             | 25                  | <b>ML-310-700</b>  | \$36.04    |
| 19/22 | 10/18             | 25                  | <b>ML-310-702</b>  | 38.19      |
| 24/40 | 10/30             | 75                  | <b>LG-1530-100</b> | 43.14      |
| 29/42 | 10/30             | 75                  | <b>LG-1530-102</b> | 46.64      |

## Adapter, Distilling

With sidearm at angle of 75° to lower end of main tube. End of sidearm is bent straight down and has an inner joint. The lower end of main tube has an inner joint of the same size, while the top of this tube has an outer joint to accept a thermometer.

| Joint | Thermometer Joint | Offset Center to Center | Immersion Length mm | Part Number | Each Price |
|-------|-------------------|-------------------------|---------------------|-------------|------------|
| 24/40 | 10/30             | 160mm                   | 75                  | LG-1740-100 | \$50.00    |
| 29/42 | 10/30             | 175mm                   | 75                  | LG-1740-102 | 53.39      |

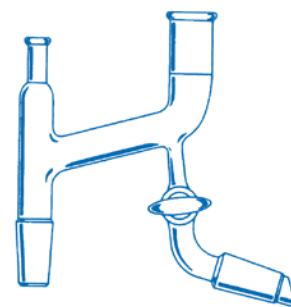


LG-1740

## Adapter, Distilling Head

Top of main tube has an outer joint to accommodate thermometers. Lower inner joint and top outer (above take off tube) are the same size. The take-off section has a glass 4mm stopcock terminating at a 24/40 inner with drip tip angled at 75°. LG-1781T is supplied with a 4mm PTFE stopcock.

| Joint | Thermometer Joint | Immersion Length mm | Offset Center to Center | Part Number  | Each Price |
|-------|-------------------|---------------------|-------------------------|--------------|------------|
| 24/40 | 10/30             | 75                  | 100mm                   | LG-1780-100  | \$153.64   |
| 24/40 | 10/30             | 75                  | 100mm                   | LG-1781T-100 | 153.06     |



LG-1780  
LG-1781T

## Adapter, Thermometer, Offset

With inner joint at one end and a 10/30 outer joint at other end. The outer joint is set on an approximately 10° angle to the inner joint, so that thermometer bulb position within an apparatus may be changed by rotation of adapters.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 24/40 | LG-1983-102 | \$32.77    |
| 29/42 | LG-1983-104 | 35.43      |



LG-1983

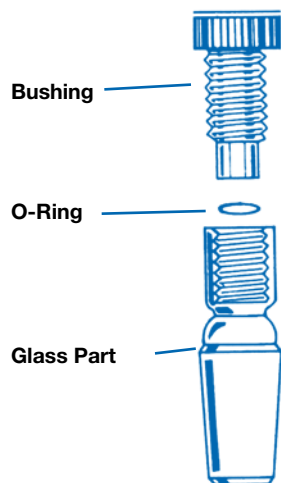
## Adapter, Thermometer, Straight

With inner member at one end and plain tubulature at opposite end for attachment of a thermometer, gas inlet, bleed tube or stirrer. A rubber fitment, LG-1988, is supplied to connect these pieces to the adapter.

| Joint          | Part Number | Each Price |
|----------------|-------------|------------|
| 24/40          | LG-1985-102 | \$21.28    |
| 29/26          | LG-1985-103 | 23.27      |
| 29/42          | LG-1985-104 | 23.25      |
| Rubber Fitment | LG-1988-100 | 1.95       |



LG-1985



**LG-1986  
LG-1991  
ML-282**

### Adapter, Threaded

With inner joint at bottom. Top is threaded to take *LG-1991* threaded nylon bushing. Bushing makes an O-ring compression seal with thermometers, bleed tubes, etc. when screwed into the adapter. Adapter accommodates thermometers of 7mm O.D. Can be used for vacuum work. Complete includes glass adapter, nylon bushing and Viton® O-ring (*LG-1022-502*). Also available with solid bushing (*LG-1991-102*).

| Supplied        | Size Joint | Part Number        | Each Price |
|-----------------|------------|--------------------|------------|
| Complete        | 14/20      | <b>ML-282-800</b>  | \$32.75    |
| Complete        | 19/22      | <b>ML-282-802</b>  | 33.44      |
| Complete        | 24/40      | <b>LG-1986-200</b> | 21.08      |
| Complete        | 29/42      | <b>LG-1986-202</b> | 24.23      |
| Glass Part Only | 14/20      | <b>ML-282-700</b>  | 22.55      |
| Glass Part Only | 19/22      | <b>ML-282-702</b>  | 23.35      |
| Glass Part Only | 24/40      | <b>LG-1986-100</b> | 25.72      |
| Glass Part Only | 29/42      | <b>LG-1986-102</b> | 26.93      |
| Bushing w/Hole  |            | <b>LG-1991-100</b> | 5.57       |
| Solid Bushing   |            | <b>LG-1991-102</b> | 6.39       |
| Viton® O-Ring   |            | <b>LG-1022-502</b> | 0.84       |

### Adapter, Inlet, Universal

Adapter is capable of sealing thermometers, syringes, pipets, etc. Inserted probes can be positioned within the apparatus by loosening the screw cap and tightening to create a seal. Supplied as a complete assembly with a screw cap and Viton® O-ring.



**LG-1451**

| Size Joint | Accom. Range mm | Part Number        | Each Price |
|------------|-----------------|--------------------|------------|
| 14/10      | 5-5.7           | <b>LG-1451-090</b> | \$19.51    |
| 14/10      | 2-5             | <b>LG-1451-100</b> | 23.76      |
| 14/10      | 5.5-6.5         | <b>LG-1451-102</b> | 21.63      |
| 14/20      | 2-5             | <b>LG-1451-104</b> | 23.52      |
| 14/20      | 5-8             | <b>LG-1451-108</b> | 25.15      |
| 19/22      | 2-5             | <b>LG-1451-200</b> | 24.21      |
| 19/22      | 5-8             | <b>LG-1451-204</b> | 25.70      |
| 19/22      | 8-11            | <b>LG-1451-206</b> | 30.56      |
| 24/40      | 2-5             | <b>LG-1451-300</b> | 25.15      |
| 24/40      | 5-8             | <b>LG-1451-304</b> | 26.61      |
| 24/40      | 8-11            | <b>LG-1451-306</b> | 31.11      |
| 24/40      | 11-14           | <b>LG-1451-308</b> | 33.40      |
| 29/42      | 2-5             | <b>LG-1451-400</b> | 25.15      |
| 29/42      | 5-8             | <b>LG-1451-404</b> | 26.61      |
| 29/42      | 8-11            | <b>LG-1451-406</b> | 35.16      |

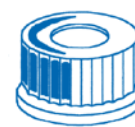
### Adapter, Thermometer, Threaded Seal

Straight adapter with ground joint at bottom and GL-14 threaded fitting at top for use with thermometers, bleed tubes, inlet tubes, etc. The PTFE faced silicone sealing ring provides an inert, greaseless PTFE/glass seal that is also suitable for vacuum work.

| Joint         | Part Number  | Each Price |
|---------------|--------------|------------|
| 14/20         | LG-1456-096  | \$20.77    |
| 24/40         | LG-1456-100  | 22.00      |
| 29/42         | LG-1456-104  | 24.27      |
| Cap, Open Top | LG-10818-110 | .40        |
| Sealing Ring  | LG-14038-100 | 2.51       |



LG-1456



LG-10818



LG-14038

### Adapter, Thermometer, PTFE

Inner joint adapter with compression cap and saddle O-ring for use with plain stem thermometers and inlet tubes. Comes with four saddle O-Rings which accepts O.D's from 3.8 to 6.3mm.

| Joint | May be used in Outer Members | Part Number | Each Price |
|-------|------------------------------|-------------|------------|
| 10/18 | 10/18, 10/30                 | LG-1453-100 | \$14.10    |
| 14/20 | 14/20, 14/35                 | LG-1453-102 | 15.00      |
| 19/22 | 19/22, 19/38                 | LG-1453-104 | 18.00      |
| 24/25 | 24/25, 24/40                 | LG-1453-106 | 20.00      |
| 29/26 | 29/26, 29/42                 | LG-1453-108 | 22.00      |
| 34/28 | 34/28, 34/45                 | LG-1453-110 | 35.00      |



LG-1453

### Adapter, Inlet with Hose Connection, Universal

Adapter is supplied with a hose connection for attachment to vacuum/gas source. Diameter accommodation range of 2 to 11mm O.D. (Compression cap seals inlet tubes, thermometers, gas dispersion tubes, pH probes) using a Viton® O-ring. Top opening can be sealed using a PTFE faced silicone septum instead of the O-ring.

| Joint | Accom. Range mm | LG-1022 O-Ring Code | Part Number | Each Price |
|-------|-----------------|---------------------|-------------|------------|
| 24/40 | 2-5             | -527                | LG-1452-300 | \$29.33    |
| 24/40 | 5-8             | -519                | LG-1452-304 | 29.33      |
| 24/40 | 8-11            | -522                | LG-1452-306 | 44.62      |



LG-1452

### Adapter, Straight, Ball Joint with Hose Connection

With ball member at one end and 5/16" hose connection at other end.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 12/5  | LG-1462-098 | \$17.60    |
| 18/9  | LG-1462-100 | 17.60      |
| 28/15 | LG-1462-102 | 19.59      |
| 35/20 | LG-1462-104 | 22.59      |
| 35/25 | LG-1462-106 | 22.59      |

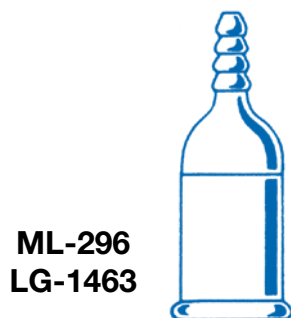


LG-1462




**LG-1464**

**LG-1691**

**LG-1701**

**ML-296  
LG-1463**
**Adapter, Straight, Socket Joint with Hose Connection**

With socket member at one end and 5/16" hose connection at other end.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 12/5       | <b>LG-1464-098</b> | \$19.18    |
| 18/9       | <b>LG-1464-100</b> | 20.40      |
| 28/15      | <b>LG-1464-102</b> | 20.77      |
| 35/20      | <b>LG-1464-103</b> | 24.50      |
| 35/25      | <b>LG-1464-104</b> | 25.11      |

**Adapter, 90° Bend Ball with Hose Connection**

Supplied with 5/16" hose connection on top and an ball joint at other end.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 18/9       | <b>LG-1691-098</b> | \$17.56    |
| 28/15      | <b>LG-1691-100</b> | 18.78      |
| 35/20      | <b>LG-1691-102</b> | 20.30      |
| 35/25      | <b>LG-1691-104</b> | 20.83      |

**Adapter, 90° Bend, Socket with Hose Connection**

Similar to *LG-1691*, except with socket. Supplied with 5/16" hose connection.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 18/9       | <b>LG-1701-100</b> | \$25.83    |
| 28/15      | <b>LG-1701-102</b> | 27.79      |
| 35/20      | <b>LG-1701-103</b> | 30.60      |
| 35/25      | <b>LG-1701-104</b> | 31.60      |

**Adapter, Straight with Hose Connection**

With a outer joint at one end and hose connection at other end.

| Size Joint | Hose Connection O.D. Inches | Part Number        | Each Price |
|------------|-----------------------------|--------------------|------------|
| 14/20      | 5/16                        | <b>ML-296-700</b>  | \$19.63    |
| 24/20      | 3/8                         | <b>LG-1463-100</b> | 20.00      |

### Adapter, Straight with Hose Connection

With a inner joint at one end and hose connection at other end.

| Joint | Hose Connection<br>O.D. Inches | Part<br>Number     | Each<br>Price |
|-------|--------------------------------|--------------------|---------------|
| 14/10 | 5/16                           | <b>ML-295-600</b>  | \$12.32       |
| 14/20 | 5/16                           | <b>ML-295-700</b>  | 15.55         |
| 19/22 | 5/16                           | <b>ML-295-702</b>  | 16.27         |
| 24/40 | 3/8                            | <b>LG-1461-102</b> | 16.90         |
| 29/42 | 3/8                            | <b>LG-1461-104</b> | 18.44         |



**ML-295**  
**LG-1461**

### Adapter, Fritted, with Hose Connection

Adapter designed to prevent solids from being introduced into a reaction mixture through placement of extra coarse disc between hose connection and bottom inner joint.

| Joint | Hose Connection<br>O.D. Inches | Part<br>Number     | Each<br>Price |
|-------|--------------------------------|--------------------|---------------|
| 14/20 | 5/16                           | <b>LG-7152-100</b> | \$27.26       |
| 19/22 | 5/16                           | <b>LG-7152-102</b> | 28.12         |
| 24/40 | 3/8                            | <b>LG-7152-104</b> | 28.37         |
| 29/42 | 3/8                            | <b>LG-7152-108</b> | 29.43         |



**LG-7152**

### Adapter, 90° Bend, Gas Inlet

With a inner joint having a long stem sealed to its small end. A 90° bent 3/8" hose connection is at top end.

| Joint | Length Below<br>Joint mm | Part<br>Number     | Each<br>Price |
|-------|--------------------------|--------------------|---------------|
| 24/40 | 200                      | <b>LG-1970-102</b> | \$27.12       |
| 29/42 | 250                      | <b>LG-1970-104</b> | 27.59         |

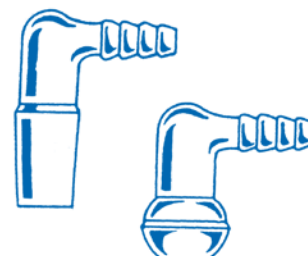


**LG-1970**

### Adapter, 90° Bend, with Hose Connection

With inner or ball joint at bottom and hose connection at top.

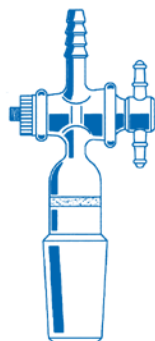
| Joint | Hose Connection<br>O.D. Inches | Part<br>Number     | Each<br>Price |
|-------|--------------------------------|--------------------|---------------|
| 14/20 | 5/16                           | <b>ML-195-700</b>  | \$15.48       |
| 19/22 | 5/16                           | <b>ML-195-702</b>  | 15.96         |
| 24/40 | 3/8                            | <b>LG-1702-102</b> | 16.67         |
| 29/42 | 3/8                            | <b>LG-1702-104</b> | 17.02         |
| 28/15 | 3/8                            | <b>LG-1702-106</b> | 26.38         |
| 35/25 | 3/8                            | <b>LG-1702-108</b> | 31.60         |



**ML-195**  
**LG-1702**


**LG-1980**

**LG-1465**

**LG-1711  
LG-1711T**

**LG-7151T**

**ML-210  
ML-211T  
LG-1710  
LG-1710T**

### Adapter, 90° Bend, Inlet

Similar to *LG-1702*, except with a short drip tip below a inner joint, supplied with 3/8" hose connection.

| Joint | Part Number        | Each Price |
|-------|--------------------|------------|
| 24/40 | <b>LG-1980-100</b> | \$27.34    |

### Adapter, Inert, Gas

Similar to *LG-1702*, but the addition of a second hose connection to allow inert gas flow over apparatus to maintain an oxygen free system.

| Joint | Hose Connection O.D. Inches | Part Number        | Each Price |
|-------|-----------------------------|--------------------|------------|
| 24/40 | 3/8                         | <b>LG-1465-100</b> | \$21.57    |

### Adapter, Straight, with Hose Connection

*LG-1711* has a 2mm glass plug. *LG-1711T* has a 2mm PTFE plug. All hose connections are 5/16" O.D.

| Joint | Part Number         | Each Price |
|-------|---------------------|------------|
| 24/40 | <b>LG-1711-102</b>  | \$46.52    |
| 24/40 | <b>LG-1711T-202</b> | 56.16      |

### Adapter, Fritted, with PTFE Stopcock Plug

Same as *1711T* except with extra coarse frit sealed between lower joint and stopcock.

| Joint | Part Number         | Each Price |
|-------|---------------------|------------|
| 24/40 | <b>LG-7151T-104</b> | \$71.00    |

*Adapters available in any joint configuration.*

### Adapter, 90° Bend, with Hose Connection and Stopcock

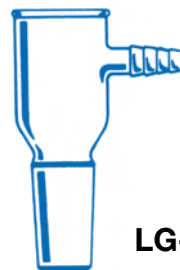
To control gas/liquid addition in reaction systems. *ML-210* and *LG-1710* have 2mm glass plugs. *ML-211T* and *LG-1710T* have 2mm PTFE plugs. All hose connections are 5/16" O.D.

| Joint | Plug Type | Part Number         | Each Price |
|-------|-----------|---------------------|------------|
| 14/20 | Glass     | <b>ML-210-700</b>   | \$41.27    |
| 19/22 | Glass     | <b>ML-210-702</b>   | 42.32      |
| 24/40 | Glass     | <b>LG-1710-102</b>  | 44.93      |
| 29/42 | Glass     | <b>LG-1710-104</b>  | 48.48      |
| 14/20 | PTFE      | <b>ML-211T-700</b>  | 53.79      |
| 19/22 | PTFE      | <b>ML-211T-702</b>  | 55.56      |
| 24/40 | PTFE      | <b>LG-1710T-202</b> | 60.30      |
| 29/42 | PTFE      | <b>LG-1710T-204</b> | 62.67      |

### Adapter, Straight, Vacuum, Accommodates Stopper

For vacuum filtration into vessels.  $\frac{3}{8}$ " hose connection is provided for attachment to vacuum line. Top opening accommodates a #6 rubber or pluro stopper.

| Inner<br>\$ Joint | Part<br>Number     | Each<br>Price |
|-------------------|--------------------|---------------|
| 24/40             | <b>LG-1272-100</b> | \$47.97       |
| 29/26             | <b>LG-1272-101</b> | 49.18         |
| 29/42             | <b>LG-1272-102</b> | 49.18         |

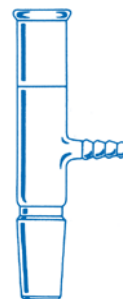


**LG-1272**

### Adapter, Straight, Vacuum

With an outer joint at one end and inner joint at the other end. Hose connection for use as connection to vacuum source.

| Top<br>Outer<br>\$ Joint | Bottom<br>Inner<br>\$ Joint | Hose<br>Connection<br>O.D. Inches | Part<br>Number     | Each<br>Price |
|--------------------------|-----------------------------|-----------------------------------|--------------------|---------------|
| 24/40                    | 24/40                       | $\frac{3}{8}$                     | <b>LG-1330-100</b> | \$34.34       |
| 29/42                    | 29/42                       | $\frac{3}{8}$                     | <b>LG-1330-102</b> | 38.56         |

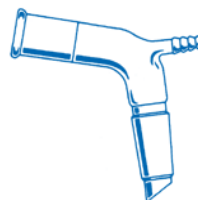


**LG-1330**

### Adapter, 105° Bend, Vacuum Type

Adapter with a drip tip and a  $\frac{3}{8}$ " hose connection. Both joints are the same size.

| \$ Joint | Part<br>Number     | Each<br>Price |
|----------|--------------------|---------------|
| 24/40    | <b>LG-1371-100</b> | \$59.98       |

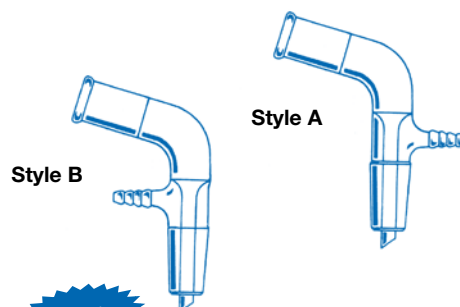


**LG-1371**

### Adapter, 105° Bend, Vacuum Type

Delivery tube extends below lower inner joint with drip tip. Hose connection provides connection to vacuum source. Both joints are same size.

| \$ Joint                | Part<br>Number     | Each<br>Price |
|-------------------------|--------------------|---------------|
| Hose connection Style A |                    |               |
| 14/10                   | <b>ML-390-600</b>  | \$36.66       |
| 14/20                   | <b>ML-390-700</b>  | 36.66         |
| 19/22                   | <b>ML-390-702</b>  | 37.72         |
| 24/40                   | <b>LG-1860-102</b> | 42.57         |
| 29/42                   | <b>LG-1860-104</b> | 45.80         |
| Hose connection Style B |                    |               |
| 14/20                   | <b>ML-390-800</b>  | 36.66         |
| 19/22                   | <b>ML-390-802</b>  | 37.72         |
| 24/40                   | <b>LG-1860-202</b> | 42.57         |
| 29/42                   | <b>LG-1860-204</b> | 45.80         |



Style A

Style B

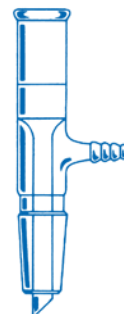
**NEW**

**ML-390  
LG-1860**

### Adapter, Straight, Vacuum

With a outer joint at top and a inner joint of the same size at bottom, and with  $\frac{3}{8}$ " side hose connection and sealed delivery tube.

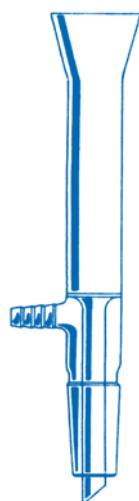
| \$ Joint | Part<br>Number     | Each<br>Price |
|----------|--------------------|---------------|
| 14/20    | <b>ML-375-700</b>  | \$33.57       |
| 19/22    | <b>ML-375-702</b>  | 34.28         |
| 24/40    | <b>LG-1840-100</b> | 44.45         |
| 29/42    | <b>LG-1840-102</b> | 47.19         |



**ML-375  
LG-1840**



ML-380  
LG-1842



ML-265  
LG-1275



LG-1275C



LG-2050

### Adapter, Straight, Vacuum

Sealed-in delivery tube extends 90mm below lower inner joint. Upper and lower joints are the same. Supplied with 5/16" hose connection.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 14/20 | ML-380-700  | \$35.18    |
| 19/22 | ML-380-702  | 38.48      |
| 24/40 | LG-1842-100 | 46.15      |
| 29/42 | LG-1842-102 | 47.80      |

### Adapter, Filtration, Vacuum

Adapter for reduced pressure filtration using plain stem Buchner funnels. Top is tooled to accept special neoprene collar for funnels up to 3000mL capacity. Funnel sets in collar for vacuum seal and is easy to remove. See LG-1275C for collars.

| Joint | Hose Connection O.D. Inches | Maximum Funnel Size | Part Number | Each Price |
|-------|-----------------------------|---------------------|-------------|------------|
| 14/20 | 5/16                        | 15mL                | ML-265-700  | \$46.40    |
| 19/22 | 5/16                        | 60mL                | ML-265-702  | 48.20      |
| 24/40 | 3/8                         | 600mL               | LG-1275-100 | 56.65      |
| 29/42 | 3/8                         | 3000mL              | LG-1275-102 | 64.47      |

### Adapter, Collar for Filtration

Collar for use with LG-1275 and ML-265 filtration adapters.

| Fits Funnel Size | Part Number  | Each Price |
|------------------|--------------|------------|
| 15 and 60mL      | LG-1275C-100 | \$2.98     |
| 600mL            | LG-1275C-102 | 3.46       |
| 3000mL           | LG-1275C-104 | 3.74       |

### Adapter, 90° Bend, Gas Inlet, Vacuum

Provided with a inner joint and delivery tube extending 250mm below lower joint. 3/8" hose connections allow attachment of flexible tubing.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 24/40 | LG-2050-102 | \$31.99    |
| 29/42 | LG-2050-104 | 33.81      |

### Adapter, Anti-Splash

When adapter is inserted into the neck of a flask this splash guard prevents splash up from flask. Overall height is minimized to provide best operation, especially during distillation.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 14/20 | LG-1242-098 | \$39.50    |
| 24/25 | LG-1242-100 | 43.47      |
| 24/40 | LG-1242-102 | 43.76      |



LG-1242

### Adapter, Anti-Splash, with Frit

Similar to LG-1242, except with coarse frit.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 14/20 | LG-1243-098 | \$49.60    |
| 24/25 | LG-1243-100 | 53.40      |
| 24/40 | LG-1243-102 | 53.80      |



LG-1243

### Adapter, Pouring

Avoids liquid contact with ground zone area of vessels having outer joints. Designed for easier transfer.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 24/40 | LG-1352-100 | \$24.84    |



LG-1352

### Adapter, Pouring

Avoids liquid contact with ground zone area of vessels having outer joints. Designed for easier transfer.

| Joint | Part Number | Each Price |
|-------|-------------|------------|
| 24/40 | LG-1353-100 | \$19.32    |

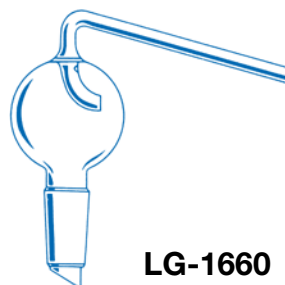


LG-1353

### Adapter, Kjeldahl

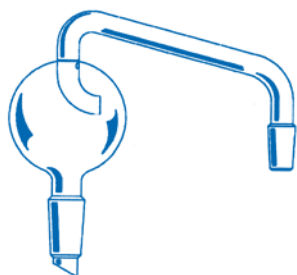
With inner member at one end just below the round trap and with thick-walled delivery tube, 150mm long, at other end. The angle included between the two ends is 75°.

| Joint | Tubing O.D. mm | Part Number | Each Price |
|-------|----------------|-------------|------------|
| 24/40 | 8              | LG-1660-100 | \$39.90    |
| 29/42 | 8              | LG-1660-102 | 41.10      |



LG-1660




**LG-1662**
**Adapter, Trap, Kjeldahl**

With parallel inner joints approximately 200mm center-to-center. Connecting tube is at 75° angle from the joint on the trap. Both joints are same size.

| Top<br>\$ Joint | Part<br>Number     | Each<br>Price |
|-----------------|--------------------|---------------|
| 24/40           | <b>LG-1662-100</b> | \$94.08       |
| 29/26           | <b>LG-1662-102</b> | 95.66         |
| 29/42           | <b>LG-1662-104</b> | 95.66         |


**LG-1910**
**Adapter, Straight, Kjeldahl Trap**

Approximate bulb capacity is 125mL.

| Top<br>\$ Joint | Bottom<br>\$ Joint | Part<br>Number     | Each<br>Price |
|-----------------|--------------------|--------------------|---------------|
| 24/40           | 24/40              | <b>LG-1910-100</b> | \$46.12       |
| 29/42           | 29/42              | <b>LG-1910-102</b> | 50.63         |
| 24/40           | 14/20              | <b>LG-1910-104</b> | 45.60         |
| 24/40           | 19/22              | <b>LG-1910-106</b> | 47.05         |
| 29/42           | 14/20              | <b>LG-1910-108</b> | 46.25         |
| 29/42           | 19/22              | <b>LG-1910-110</b> | 47.60         |

**Air-Tite Glassware, Adapter, with Pressure/Vacuum Stopcock, & Inner Joint**

For evacuation and addition of inert gases. Same construction as *IG-10* except it has an inner joint. Supplied with  $\frac{5}{16}$ " hose connection.

| Joint | Part Number      | Each Price |
|-------|------------------|------------|
| 14/20 | <b>IG-20-100</b> | \$50.78    |
| 24/40 | <b>IG-20-104</b> | 52.51      |



**IG-20**

**Air-Tite Glassware, Adapter with Pressure/Vacuum Stopcock, & Outer Joint**

For evacuation and addition of inert gases. Consists of a outer joint, 2mm glass stopcock and  $\frac{5}{16}$ " hose connection.

| Joint | Part Number      | Each Price |
|-------|------------------|------------|
| 14/20 | <b>IG-10-100</b> | \$52.43    |
| 24/40 | <b>IG-10-104</b> | 53.64      |



**IG-10**

**Air-Tite Glassware, 90°, Pressure/Vacuum Stopcock, & Inner Joint**

Consists of a inner joint, 2mm glass stopcock and  $\frac{5}{16}$ " hose connection.

| Joint | Part Number      | Each Price |
|-------|------------------|------------|
| 14/20 | <b>IG-90-100</b> | \$52.35    |
| 24/40 | <b>IG-90-104</b> | 58.63      |

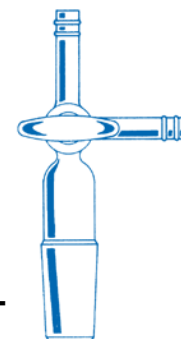


**IG-90**

**Air-Tite Glassware, Adapter, Balloon, Glass/PTFE Plugs**

Designed with T-bore stopcock for addition or venting inert atmospheres provided by attaching a balloon to one of the stems.

| Joint | Plug Type | Part Number       | Each Price |
|-------|-----------|-------------------|------------|
| 14/20 | 4mm Glass | <b>IG-22-100</b>  | \$82.33    |
| 24/20 | 4mm Glass | <b>IG-22-104</b>  | 89.82      |
| 14/20 | 4mm PTFE  | <b>IG-23T-100</b> | 85.73      |
| 24/20 | 4mm PTFE  | <b>IG-23T-104</b> | 90.40      |

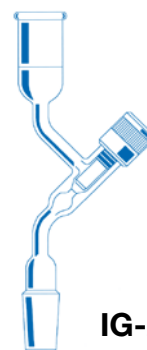


**IG-22  
IG-23T**

**Air-Tite Glassware, Adapter, Vacuum Valve**

Adapter with vacuum valve for closing joints yet allowing for reconnection to other equipment with minimum exposure to air and vapors. PTFE valve minimizes contamination and maintains a vacuum in the micron region.

| Joint | Part Number       | Each Price |
|-------|-------------------|------------|
| 14/20 | <b>IG-202-100</b> | \$103.21   |
| 19/22 | <b>IG-202-102</b> | 104.74     |
| 24/40 | <b>IG-202-104</b> | 106.28     |



**IG-202**



**IG-150**

**Air-Tite Glassware, Tube, Reaction & Storage, Pressure/Vacuum Stopcock, Outer Joint**

Schlenk type tube used for reactions and storage of same under an inert atmosphere. Supplied with a 2mm glass pressure/vacuum stopcock and outer joint.

| Volume<br>mL | Joint | Part<br>Number    | Each<br>Price |
|--------------|-------|-------------------|---------------|
| 25           | 14/20 | <b>IG-150-100</b> | \$68.21       |
| 25           | 24/40 | <b>IG-150-104</b> | 68.35         |
| 50           | 14/20 | <b>IG-150-108</b> | 68.46         |
| 50           | 24/40 | <b>IG-150-112</b> | 71.96         |
| 100          | 24/40 | <b>IG-150-116</b> | 72.92         |

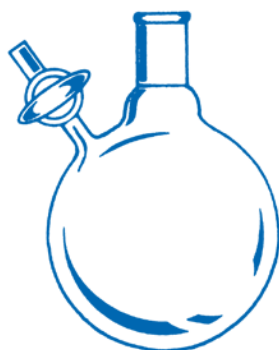


**IG-170**

**Air-Tite Glassware, Flask, Reaction & Storage, Kjeldahl Style, Pressure/Vacuum Stopcock, Outer Joint**

Consists of outer joint and a 2mm pressure/vacuum stopcock on Kjeldahl style flask.

| Volume<br>mL | Joint | Part<br>Number    | Each<br>Price |
|--------------|-------|-------------------|---------------|
| 50           | 14/20 | <b>IG-170-098</b> | \$59.98       |
| 100          | 14/20 | <b>IG-170-100</b> | 64.12         |
| 100          | 24/40 | <b>IG-170-104</b> | 70.38         |
| 300          | 24/40 | <b>IG-170-108</b> | 74.29         |
| 500          | 24/40 | <b>IG-170-112</b> | 78.47         |



**IG-180**

**Air-Tite Glassware, Flask, Reaction & Storage, Round Bottom, Single, Neck, Pressure/Vacuum Stopcock**

Consists of outer joint and a 2mm pressure/vacuum stopcock on round bottom flask.

| Volume<br>mL | Joint | Part<br>Number    | Each<br>Price |
|--------------|-------|-------------------|---------------|
| 50           | 14/20 | <b>IG-180-100</b> | \$82.56       |
| 50           | 24/40 | <b>IG-180-102</b> | 83.97         |
| 100          | 14/20 | <b>IG-180-104</b> | 83.05         |
| 100          | 24/40 | <b>IG-180-106</b> | 84.24         |
| 250          | 14/20 | <b>IG-180-108</b> | 84.73         |
| 250          | 24/40 | <b>IG-180-110</b> | 89.91         |
| 500          | 24/40 | <b>IG-180-112</b> | 93.04         |
| 1000         | 24/40 | <b>IG-180-114</b> | 95.45         |

**Air-Tite Glassware, Flask, Reaction & Storage, Round Bottom, Two-Neck, Pressure/Vacuum Stopcock**

Consists of outer joint and a 2mm pressure/vacuum stopcock on round bottom flask.

| Volume mL | Center<br>§ Joint | Side<br>§ Joint | Part<br>Number    | Each<br>Price |
|-----------|-------------------|-----------------|-------------------|---------------|
| 100       | 24/40             | 14/20           | <b>IG-190-108</b> | \$91.67       |
| 100       | 24/40             | 24/40           | <b>IG-190-110</b> | 90.87         |
| 250       | 24/40             | 24/40           | <b>IG-190-116</b> | 99.32         |
| 500       | 24/20             | 24/40           | <b>IG-190-122</b> | 102.08        |



**IG-190**

**Air-Tite Glassware, Stopper, Evacuation & Storage, Inner Joint**

Stopper type for sealing flasks or reaction tubes having a outer joint.

| § Joint | Part<br>Number   | Each<br>Price |
|---------|------------------|---------------|
| 14/20   | <b>IG-40-100</b> | \$15.59       |
| 24/40   | <b>IG-40-104</b> | 21.59         |



**IG-40**

**Air-Tite Glassware, Cover, Evacuation & Storage, Outer Joint**

Cap style used to seal apparatus having an inner joint. Useful in storing reaction products.

| § Joint | Part<br>Number   | Each<br>Price |
|---------|------------------|---------------|
| 14/20   | <b>IG-30-100</b> | \$14.45       |
| 24/40   | <b>IG-30-104</b> | 19.28         |

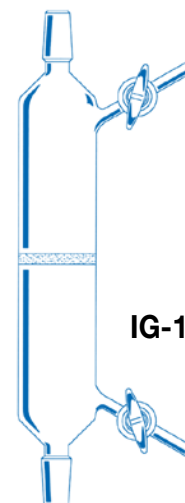


**IG-30**

**Air-Tite Glassware, Tube Filter, Double Ended, Pressure/Vacuum Stopcocks, Inner Joints**

A double ended filter tube, having two side stopcocks, which allows filtration followed by crystallization and collection of crystals on opposite side of frit. The inner joints allow connection to standard round bottom flasks and flasks having outer joints.

| Capacity mL | Frit Diameter mm | Frit Porosity | Overall Height mm | § Joint | Part Number       | Each Price |
|-------------|------------------|---------------|-------------------|---------|-------------------|------------|
| 150         | 40               | Medium        | 240               | 24/40   | <b>IG-174-104</b> | \$199.58   |
| 150         | 40               | Coarse        | 240               | 24/40   | <b>IG-174-106</b> | 199.58     |



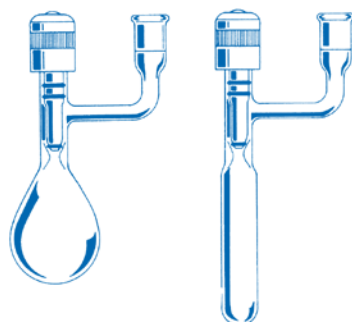
**IG-174**

**LG-10800**

**Air-Tite Glassware, Tube, Sample, Vacuum, Schlenk**

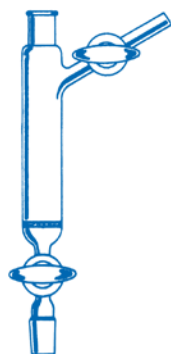
Tube incorporates a grease-free high vacuum 0-4mm valve and is suited for pressure/vacuum applications. Ideal for reaction and storage of air-sensitive compounds. Sidearm can be connected to inert atmosphere/vacuum source or a manifold.

| Capacity<br>mL | Part<br>Number      | Each<br>Price |
|----------------|---------------------|---------------|
| 5              | <b>LG-10800-100</b> | \$107.94      |
| 25             | <b>LG-10800-102</b> | 117.55        |


**10801**
**Air-Tite Glassware, Tube, Sample, Vacuum, Schlenk**

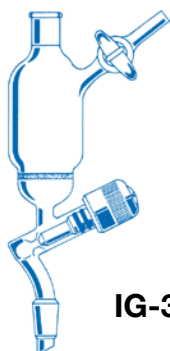
Similar to *LG-10800*, except with 14/20 sidearm.

| Capacity<br>mL | Joint | Part<br>Number      | Each<br>Price |
|----------------|-------|---------------------|---------------|
| 5              | 14/20 | <b>LG-10801-100</b> | \$131.94      |
| 25             | 14/20 | <b>LG-10801-102</b> | 143.93        |

**IG-300**

**Air-Tite Glassware, Tube, Filter, Pressure Stopcocks**

Consists of a tube having a outer joint at the top plus a side arm with a 2mm pressure/vacuum glass stopcock. The bottom has a inner joint of the same size. There is a fritted disc sealed into the tube and a 2mm pressure vacuum glass stopcock sealed in between the fritted disc and the inner joint.

| Joint | Diameter<br>x Length<br>mm | Porosity | Part<br>Number    | Each<br>Price |
|-------|----------------------------|----------|-------------------|---------------|
| 14/20 | 20 x 140                   | Coarse   | <b>IG-300-100</b> | \$166.86      |
| 14/20 | 20 x 140                   | Medium   | <b>IG-300-102</b> | 166.86        |
| 24/40 | 30 x 190                   | Coarse   | <b>IG-300-104</b> | 176.84        |
| 24/40 | 30 x 190                   | Medium   | <b>IG-300-106</b> | 176.84        |


**IG-302**
**Air-Tite Glassware, Funnel, Filter**

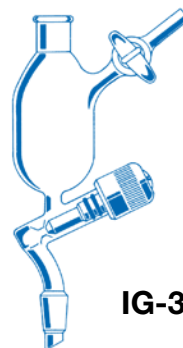
Consists of funnel with outer joint plus sidearm with 2mm pressure/vacuum glass stopcock. Bottom has a inner joint of same size with sealed-in fritted disc. Bottom has 0-4mm high vacuum PTFE valve sealed between fritted disc and a inner drip joint.

| Disc | Joint | Capacity<br>mL | Part<br>Number    | Each<br>Price |
|------|-------|----------------|-------------------|---------------|
| 30M  | 14/20 | 60             | <b>IG-302-100</b> | \$185.62      |
| 30C  | 14/20 | 60             | <b>IG-302-102</b> | 185.62        |
| 40M  | 24/40 | 200            | <b>IG-302-104</b> | 190.45        |
| 40C  | 24/40 | 200            | <b>IG-302-106</b> | 190.45        |

#### Air-Tite Glassware, Funnel, Addition

Funnel has 0-4mm PTFE valve to avoid contamination. Upper sidearm is a 2mm pressure/vacuum glass stopcock. Outer & inner joints are same size.

| Capacity<br>mL | Joint | Part<br>Number    | Each<br>Price |
|----------------|-------|-------------------|---------------|
| 100            | 14/20 | <b>IG-304-100</b> | \$153.06      |
| 250            | 24/40 | <b>IG-304-102</b> | 161.51        |



**IG-304**

#### Air-Tite Glassware, Bubbler, Mineral Oil

Used with mineral oil to observe gaseous addition to reactions. May be used to vent a reaction mixture to the atmosphere. Tubing connections are 8mm O.D.

| Part<br>Number    | Each<br>Price |
|-------------------|---------------|
| <b>IG-145-100</b> | \$32.46       |

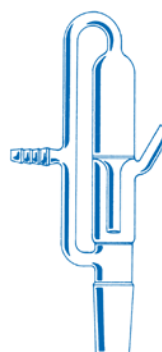


**IG-145**

#### Air-Tite Glassware, Bubbler, Nitrogen, Improved

Used with reaction systems having a 24/40 outer joint. An approximate volume of 10mL of mineral oil is used to seal the lower inner tube. Suitable for distillations or reactions where an inert atmosphere is required.

| Part<br>Number    | Each<br>Price |
|-------------------|---------------|
| <b>IG-146-100</b> | \$142.50      |

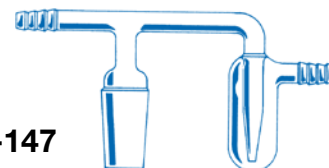


**IG-146**

#### Air-Tite Glassware, Bubbler, Horizontal

For monitoring gas flow to organic reactions. Inert gases such as nitrogen or argon can be used. Gaseous reagents can be introduced into reaction systems. Supplied with  $\frac{3}{8}$ " hose connections.

| Joint | Part<br>Number    | Each<br>Price |
|-------|-------------------|---------------|
| 14/20 | <b>IG-147-100</b> | \$116.92      |
| 24/40 | <b>IG-147-102</b> | 122.92        |

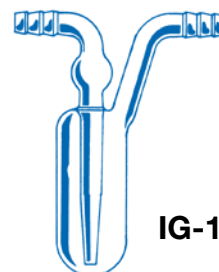


**IG-147**

#### Air-Tite Glassware, Bubbler, Gas

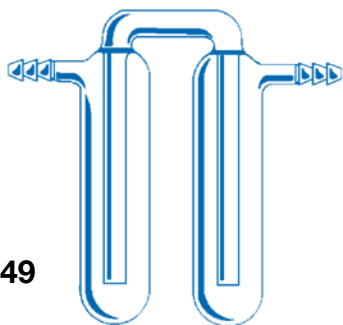
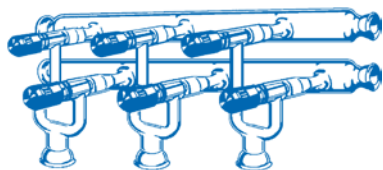
Supplied with  $\frac{5}{16}$ " hose connections. Trap is designed for bubble counting.

| Part<br>Number    | Each<br>Price |
|-------------------|---------------|
| <b>IG-148-100</b> | \$60.03       |



**IG-148**




**IG-149**

**LG-11072**

**LG-11073**

**LG-11074**
**Air-Tite Glassware, Bubbler, Gas, Double**

Similar to *IG-148*, except with double trap design. Overall height is 7 inches and each bubbler chamber is 25mm O.D. Supplied with  $\frac{5}{16}$ " hose connections.

| Part Number       | Each Price |
|-------------------|------------|
| <b>IG-149-100</b> | \$51.78    |

**Air-Tite Glassware, Manifold, Vacuum, Double**

Design allows use at low/high vacuum simultaneously or vacuum/inert atmosphere techniques. 0-8mm PTFE valves face forward for ease of operation. Apparatus can easily be assembled within a hood to extend user options. Related adapters, valves, and flasks can easily be connected utilizing the size 15 O-Ring joint. Viton® O-Rings are used to complete component seals. See *LG-1022-530* for O-Rings.

| Number of Places | Approx. Overall L x H x D mm | Part Number         | Each Price |
|------------------|------------------------------|---------------------|------------|
| 3                | 325 x 160 x 140              | <b>LG-11072-100</b> | \$621.79   |
| 4                | 425 x 160 x 140              | <b>LG-11072-102</b> | 870.50     |
| 5                | 525 x 160 x 140              | <b>LG-11072-104</b> | 1089.87    |

**Air-Tite Glassware, Adapter, Hose Connection, with O-Ring**

Adapter is supplied as a connection to *LG-11072* manifolds. Offered with size 15 O-Ring joint connector to heavy wall rubber tubing used with vacuum pumps and traps. Supplied with a *LG-1022-530* Viton® O-Ring.

| O-Ring Joint Size | Approx. Overall Height mm | Hose Connection | Part Number         | Each Price |
|-------------------|---------------------------|-----------------|---------------------|------------|
| 15                | 50                        | 3/8"            | <b>LG-11073-100</b> | \$16.88    |

**Air-Tite Glassware, Adapter, Inner Joint Connection, with O-Ring**

Design allows connection of vessels having a outer joint to a vacuum manifold having a size 15 O-Ring joint. Adapter is supplied with *LG-1022-530* Viton® O-Ring.

| Inner Joint | Approx. Overall Height mm | Part Number         | Each Price |
|-------------|---------------------------|---------------------|------------|
| 14/20       | 60                        | <b>LG-11074-100</b> | \$26.75    |
| 24/40       | 90                        | <b>LG-11074-102</b> | 26.75      |

**Air-Tite Glassware, Adapter, Outer Joint Connection, with O-Ring**

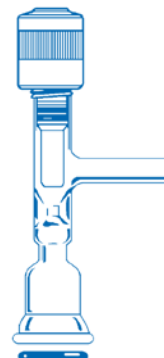
For connection of a inner joint apparatus to manifolds having a size 15 O-Ring joint. Component extends overall utility. Supplied with one *LG-1022-530* Viton® O-Ring.

| Outer<br>\$ Joint | Approx.<br>Overall Height<br>mm | Part<br>Number      | Each<br>Price |
|-------------------|---------------------------------|---------------------|---------------|
| 14/20             | 60                              | <b>LG-11075-100</b> | \$27.47       |
| 24/40             | 90                              | <b>LG-11075-102</b> | 28.32         |


**LG-11075**
**Air-Tite Glassware, Adapter, Connecting/Inlet, with Vacuum Valve**

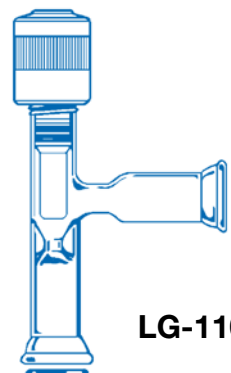
Right angle configuration with a size 15 O-Ring joint sealed below the valve stem. Easily connected to vacuum manifolds and supplied with a *LG-1022-530* Viton® O-Ring.

| Valve<br>Size | Approx.<br>Sidearm<br>Outside<br>Dia. mm | Approx.<br>Overall<br>H x W mm | Part<br>Number      | Each<br>Price |
|---------------|------------------------------------------|--------------------------------|---------------------|---------------|
| 0-4mm         | 9                                        | 100 x 58                       | <b>LG-11078-100</b> | \$74.13       |


**LG-11078**
**Air-Tite Glassware, Adapter, Connecting with Vacuum Valve**

Similar to *LG-11078-100* but fabricated with two size 15 O-Ring joints. Two *LG-1022-530* Viton® O-Rings are included for completing a seal to the manifold or related apparatus.

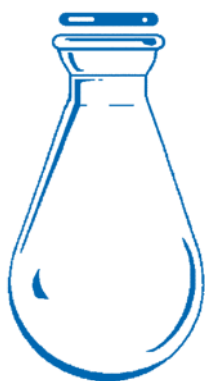
| Valve<br>Size | Approx.<br>Overall<br>H x W mm | Part<br>Number      | Each<br>Price |
|---------------|--------------------------------|---------------------|---------------|
| 0-4mm         | 100 x 60                       | <b>LG-11079-100</b> | \$63.89       |


**LG-11079**
**Air-Tite Glassware, Adapter, Filter, In-Line**

User has a choice of having a sealed-in coarse (C) or medium (M) porosity disc sealed between two size 15 O-Ring joints. Filter can be attached to the manifold, flask, or Schlenk tube. Supplied with *LG-1022-530* Viton® O-Rings.

| Disc<br>Porosity | Approx.<br>Overall<br>H x W mm | Part<br>Number      | Each<br>Price |
|------------------|--------------------------------|---------------------|---------------|
| Coarse           | 100 x 25                       | <b>LG-11080-100</b> | \$56.65       |
| Medium           | 100 x 25                       | <b>LG-11080-102</b> | 56.65         |

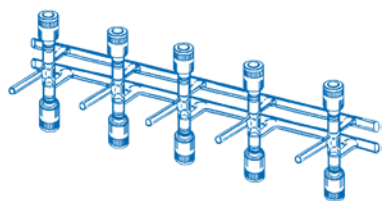

**LG-11080**



**LG-11081**



**LG-11082**



**LG-11083**

### Air-Tite Glassware, Flask, O-Ring Connection

Recovery style flask has a size 15 O-Ring joint sealed on the opening. A *LG-1022-530* Viton® O-Ring is furnished with the flask.

| Capacity<br>mL | Part<br>Number      | Each<br>Price |
|----------------|---------------------|---------------|
| 10             | <b>LG-11081-100</b> | \$23.62       |
| 25             | <b>LG-11081-102</b> | 23.62         |
| 50             | <b>LG-11081-104</b> | 23.62         |
| 100            | <b>LG-11081-106</b> | 25.30         |

### Air-Tite Glassware, Stopper, O-Ring

Size 15 O-Ring joint is closed and provides a seal for open parts on the manifold. Stopper can be used as a closure on the in-line filter or similar opening flasks. Supplied with one *LG-1022-530* Viton® O-Ring.

| O-Ring<br>Size | Approx.<br>Overall Height<br>mm | Part<br>Number      | Each<br>Price |
|----------------|---------------------------------|---------------------|---------------|
| 15             | 25                              | <b>LG-11082-100</b> | \$14.69       |

### Air-Tite Glassware, Manifold, with PTFE Vacuum Valves

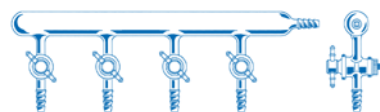
Manifold utilizes grease-free PTFE high vacuum valves with two lines coming into the valve assembly. User has the option of using one line for low vacuum; the other for high vacuum applications. Another option can utilize an inert gas with another connected to a vacuum source. Contact surface is borosilicate glass and PTFE. Valves are 0-4mm PTFE. Outlets are 9mm O.D. and distance between them is 100mm.

| No. of<br>Places | Approx. Overall<br>L x H x D<br>mm | Part<br>Number      | Each<br>Price |
|------------------|------------------------------------|---------------------|---------------|
| 3                | 300 x 150 x 85                     | <b>LG-11083-100</b> | \$489.62      |
| 5                | 500 x 150 x 85                     | <b>LG-11083-102</b> | 663.60        |

### Air-Tite Glassware, Manifold, Vacuum, PTFE Plugs

A general purpose vacuum manifold having 4 or 6 ports each with a 4mm PTFE bore plug stopcock with serrated hose connections. Main tube is 1" O.D. with a serrated hose connection on either side for vacuum connection. Spacing between stopcocks is approximately 75mm.

| No. of Ports | Approx. Overall Length | Stopcock Bore mm | Connection Side | Part Number       | Each Price |
|--------------|------------------------|------------------|-----------------|-------------------|------------|
| 4            | 310                    | 4                | Right           | <b>IG-36T-100</b> | \$314.68   |
| 6            | 460                    | 4                | Right           | <b>IG-36T-104</b> | 454.99     |
| 4            | 310                    | 4                | Left            | <b>IG-36T-110</b> | 314.68     |
| 6            | 460                    | 4                | Left            | <b>IG-36T-114</b> | 454.99     |

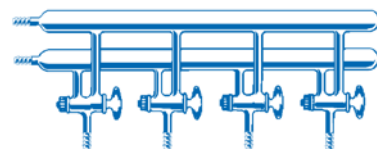


**IG-36T**

### Air-Tite Glassware, Manifold, Vacuum, Double, 4-Place

Designed with 4mm pressure/vacuum stopcocks which simplify evacuation or pressurization with an inert atmosphere. Manifold is 1" O.D.

| Part Number       | Each Price |
|-------------------|------------|
| <b>IG-357-100</b> | \$798.38   |

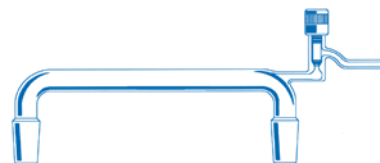


**IG-357**

### Air-Tite Glassware, Manifold, Transfer

Used for purification and transfer of solvents under air tight conditions. The manifold allows the transfer at room temperature under the solvents from a boiling flask with a valve directly into an evacuated storage flask. Solvent is then cooled to a low temperature with dry ice or liquid nitrogen.

| Joint | Approx. Overall L x H mm | Part Number       | Each Price |
|-------|--------------------------|-------------------|------------|
| 24/40 | 380 x 140                | <b>IG-204-100</b> | \$122.92   |

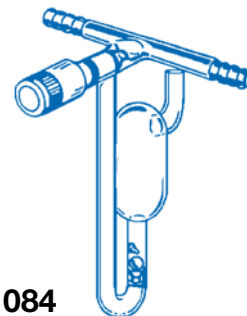


**IG-204**

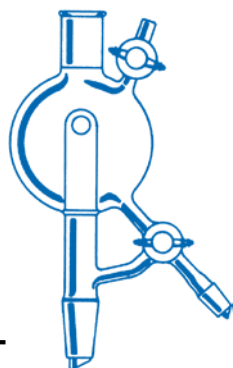
### Air-Tite Glassware, Valve-Pressure Release

Valve incorporates 0-4mm high vacuum valve and is suited for grease-free operation. Suggested for use between gas source and manifold or related apparatus. PTFE valve is connected to a low pressure gas source and then connected to the apparatus. Approximately 3mL of silicone oil is added to the bubbler which is retained by the ball check valve. The check valve prevents oil or air from entering the apparatus.

| Approx. Overall H x W x D mm | Hose Connections | Part Number         | Each Price |
|------------------------------|------------------|---------------------|------------|
| 130 x 80 x 100               | 3/8"             | <b>LG-11084-100</b> | \$147.60   |



**LG-11084**

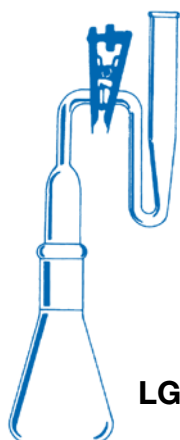


**IG-345T  
LG-6330T**

#### Air-Tite Glassware, Head, Solvent Still

Component of apparatus used to prepare dry, deoxygenated solvents. Flask provides storage and access by syringe. Drainage or return to the boiling flask is accomplished with a 2mm T-Bore PTFE stopcock. All joints on *IG-345T* are 14/20 while the joints on *LG-6330T* are 24/40 and the takeoff arm is a 14/20.

| Flask Size mL | Storage Capacity mL | Joint | Part Number         | Each Price |
|---------------|---------------------|-------|---------------------|------------|
| 250           | 125                 | 14/20 | <b>IG-345T-100</b>  | \$334.71   |
| 500           | 250                 | 24/40 | <b>LG-6330T-100</b> | 310.98     |
| 1000          | 500                 | 24/40 | <b>LG-6330T-102</b> | 336.99     |

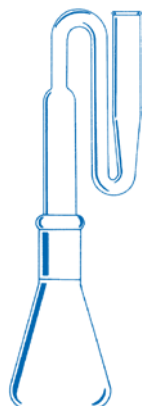


**LG-6960**

#### Air-Tite Glassware, Arsine Generator

Designed for multiple arsenic determinations. A sample containing arsenic is placed within the flask and converted to arsine gas. Hydrogen sulfide is removed from the sample as the gas is generated. This is accomplished by packing the scrubber cavity with lead impregnated glass wool. The absorber tube, containing the diethyldithiocarbamate reagent, absorbs the arsine gas and forms a red complex. The product is transformed to a cuvet which is read on a colorimeter or spectrometer. Complete is supplied with clamps.

| Supplied                       | Part Number        | Each Price |
|--------------------------------|--------------------|------------|
| Complete                       | <b>LG-6960-100</b> | \$91.73    |
| Scrubber, 24/40, 12/2          | <b>LG-6960-102</b> | 35.30      |
| Absorber Tube, 12/2            | <b>LG-6960-104</b> | 35.30      |
| Erlenmeyer Flask, 125mL, 24/40 | <b>LG-7750-122</b> | 20.70      |
| Plastic Clamp Sz. 12           | <b>LG-4600-100</b> | 3.18       |
| Plastic Clamp Sz. 24           | <b>LG-1004-108</b> | 2.58       |



**LG-6962**

#### Air-Tite Glassware, Arsine Generator, Improved

For Arsine analysis using the diethyldithiocarbamate colorimetric method. Design of apparatus requires less space and is easier to clean than standard ball and socket design. Meets ACS/USP and EPA specifications. Supplied complete with clamp. Glass beads, 4mm, *LG-6750-102* may be added to the absorber tube to enhance the gas mixing.

| Supplied                       | Part Number        | Each Price |
|--------------------------------|--------------------|------------|
| Complete                       | <b>LG-6962-100</b> | \$80.76    |
| Scrubber/Absorber, 24/40       | <b>LG-6962-102</b> | 66.27      |
| Erlenmeyer Flask, 125mL, 24/40 | <b>LG-7750-122</b> | 20.70      |
| Plastic Clamp Sz 24            | <b>LG-1004-108</b> | 2.58       |

### Beaker, Low Form

Graduated low form beakers with pour out.

| Capacity<br>mL | Dimensions<br>O.D. x Height mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------|--------------------|---------------|
| 5              | 22 x 30                        | <b>LG-3000-100</b> | \$5.08        |
| 5000           | 170 x 270                      | <b>LG-3000-102</b> | 61.89         |
| 10000          | 217 x 350                      | <b>LG-3000-104</b> | 173.49        |

Replaces LX3000

*Note: 10,000 mL is not graduated.*



**LG-3000**

### Beaker, Low Form, Heavy Duty

Ungraduated low form, heavy duty beakers with pour out.

| Capacity<br>mL | Dimensions<br>O.D. x Height mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------|--------------------|---------------|
| 5000           | 182 x 256                      | <b>LG-3002-100</b> | \$155.00      |
| 10000          | 225 x 340                      | <b>LG-3002-102</b> | 308.00        |
| 15000          | 260 x 390                      | <b>LG-3002-104</b> | 438.00        |
| 20000          | 285 x 430                      | <b>LG-3002-106</b> | 504.00        |

*Note: 5000 mL is graduated*

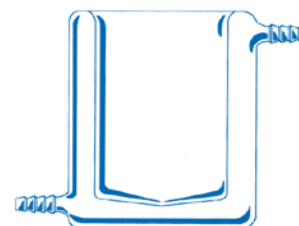


**LG-3002**

### Beaker, Jacketed

Fully jacketed to allow temperature control over a wide range.

| Capacity<br>mL | Approx.<br>I.D. x Height<br>mm | Hose<br>Connection | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------|--------------------|--------------------|---------------|
| 100            | 51 x 75                        | 10mm               | <b>LG-3300-100</b> | \$81.35       |
| 250            | 70 x 95                        | 10mm               | <b>LG-3300-102</b> | 96.17         |
| 400            | 75 x 120                       | 10mm               | <b>LG-3300-104</b> | 117.55        |
| 600            | 90 x 125                       | 10mm               | <b>LG-3300-106</b> | 145.14        |
| 1000           | 110 x 160                      | 1/2"               | <b>LG-3300-108</b> | 167.53        |
| 2000           | 130 x 195                      | 1/2"               | <b>LG-3300-110</b> | 285.29        |

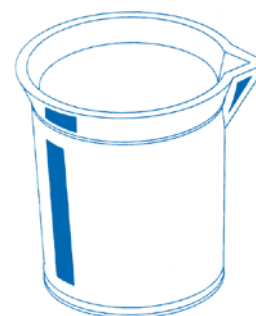


**LG-3300**

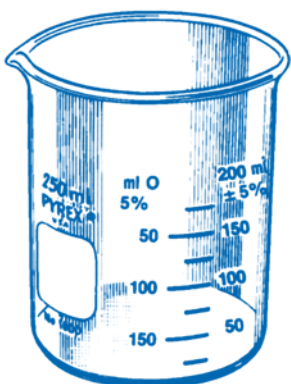
### Beaker, PTFE

Molded from PTFE with smooth internal finish. Base has been machined to assure flat contact surface and good heat transfer. Beaker has Griffin profile and is recommended for trace metal analysis.

| Capacity<br>mL | Height x<br>Diameter<br>mm | Part<br>Number     | Each<br>Price |
|----------------|----------------------------|--------------------|---------------|
| 25             | 47 x 32                    | <b>LG-3305-100</b> | \$12.00       |
| 50             | 60 x 43                    | <b>LG-3305-102</b> | 13.00         |
| 100            | 68 x 54                    | <b>LG-3305-104</b> | 17.00         |
| 150            | 69 x 59                    | <b>LG-3305-106</b> | 21.00         |
| 250            | 97 x 66                    | <b>LG-3305-108</b> | 25.00         |
| 400            | 106 x 80                   | <b>LG-3305-110</b> | 37.00         |
| 500            | 125 x 80                   | <b>LG-3305-112</b> | 40.00         |
| 600            | 125 x 90                   | <b>LG-3305-114</b> | 54.00         |
| 1000           | 155 x 100                  | <b>LG-3305-116</b> | 84.00         |
| 2000           | 210 x 125                  | <b>LG-3305-118</b> | 135.00        |
| 5000           | 280 x 170                  | <b>LG-3305-120</b> | 500.00        |



**LG-3305**



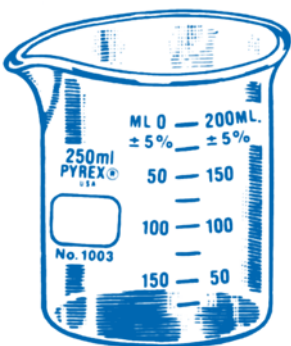
**C-1000**

**Beaker, PYREX® Brand, Griffin, Low Form, Double Scale, Graduated**

Beaker, with spout, manufactured with uniform wall thickness, offers optimum balance between thermal shock resistance and mechanical strength. For convenience, the 250 through 4000mL beakers have a double graduated metric scale to indicate approximate content. All sizes have an extra large marking spot. The 10mL size is not graduated.

*Reference: ASTM E-960*

| Capacity<br>mL | Grad.<br>Range<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Grad.<br>Interval<br>mL | Part<br>Number    | Each<br>Price |
|----------------|----------------------|-----------------------------------|-------------------------|-------------------|---------------|
| 10             | -                    | 25 x 32                           | -                       | <b>C-1000-10</b>  | \$3.52        |
| 20             | 5-15                 | 32 x 40                           | 5                       | <b>C-1000-20</b>  | 3.05          |
| 30             | 5-25                 | 35 x 53                           | 10                      | <b>C-1000-30</b>  | 3.02          |
| 50             | 10-40                | 42 x 56                           | 10                      | <b>C-1000-50</b>  | 3.02          |
| 100            | 20-80                | 50 x 72                           | 10                      | <b>C-1000-100</b> | 3.19          |
| 150            | 20-140               | 57 x 86                           | 10                      | <b>C-1000-150</b> | 3.05          |
| 250            | 25-200               | 68 x 90                           | 25                      | <b>C-1000-250</b> | 3.06          |
| 400            | 25-325               | 77 x 110                          | 25                      | <b>C-1000-400</b> | 3.59          |
| 600            | 50-500               | 90 x 124                          | 50                      | <b>C-1000-600</b> | 4.56          |
| 800            | 50-750               | 98 x 135                          | 50                      | <b>C-1000-800</b> | 6.30          |
| 1000           | 50-1000              | 108 x 158                         | 50                      | <b>C-1000-1L</b>  | 8.60          |
| 1500           | 200-1400             | 121 x 166                         | 100                     | <b>C-1000-1XL</b> | 10.42         |
| 2000           | 200-2000             | 131 x 193                         | 100                     | <b>C-1000-2L</b>  | 17.06         |
| 3000           | 250-2500             | 146 x 216                         | 125                     | <b>C-1000-3L</b>  | 29.32         |
| 4000           | 500-3500             | 160 x 250                         | 250                     | <b>C-1000-4L</b>  | 54.05         |



**C-1003**

**Beaker, Heavy Duty, PYREX® Brand, Griffin, Double Scale, Graduated**

Heavy duty beakers specifically designed to offer the best mechanical strength under harsh conditions, such as mechanized washing operations. For convenience, the 250 through 4000ml beakers have a double graduated metric scale to indicate their approximate content. All sizes have an extra large marking spot.

*Reference: ASTM E-960*

| Capacity<br>mL | Grad.<br>Range<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Grad.<br>Interval<br>mL | Part<br>Number    | Each<br>Price |
|----------------|----------------------|-----------------------------------|-------------------------|-------------------|---------------|
| 150            | 20-140               | 57 x 89                           | 20                      | <b>C-1003-150</b> | \$5.77        |
| 250            | 25-200               | 68 x 90                           | 25                      | <b>C-1003-250</b> | 5.70          |
| 400            | 25-325               | 77 x 110                          | 25                      | <b>C-1003-400</b> | 7.43          |
| 600            | 50-500               | 90 x 124                          | 50                      | <b>C-1003-600</b> | 8.65          |
| 1000           | 50-1000              | 108 x 156                         | 50                      | <b>C-1003-1L</b>  | 16.51         |
| 2000           | 200-1800             | 131 x 180                         | 200                     | <b>C-1003-2L</b>  | 33.75         |
| 4000           | 500-3500             | 160 x 250                         | 250                     | <b>C-1003-4L</b>  | 65.92         |

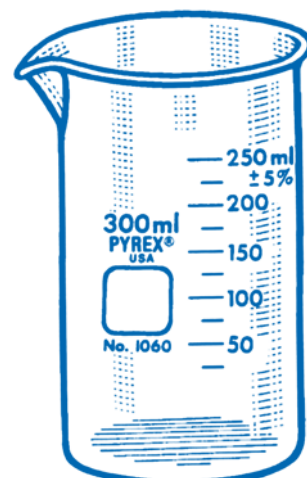


**Beaker, PYREX® Brand, Berzelius, Tall Form, with Spout, Graduated**

A tall beaker with spout to facilitate pouring. For convenience, these beakers are graduated to indicate their approximate content.

Reference: ASTM E-960

| Capacity<br>mL | Grad.<br>Range<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Grad.<br>Interval<br>mL | Part<br>Number    | Each<br>Price |
|----------------|----------------------|-----------------------------------|-------------------------|-------------------|---------------|
| 100            | 20-80                | 50 x 79                           | 10                      | <b>C-1060-100</b> | \$3.78        |
| 200            | 25-150               | 56 x 102                          | 25                      | <b>C-1060-200</b> | 3.99          |
| 300            | 25-250               | 64 x 118                          | 25                      | <b>C-1060-300</b> | 4.42          |
| 400            | 25-325               | 69 x 127                          | 25                      | <b>C-1060-400</b> | 4.80          |
| 500            | 50-450               | 75 x 136                          | 50                      | <b>C-1060-500</b> | 5.27          |
| 600            | 50-550               | 79 x 152                          | 50                      | <b>C-1060-600</b> | 6.83          |
| 1000           | 50-950               | 89 x 187                          | 50                      | <b>C-1060-1L</b>  | 9.16          |



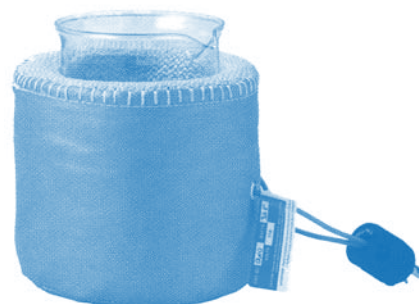
**C-1060**

**Heating Mantle, Beaker (Griffin)**

All fabric construction without an outside aluminum housing. All of the wattage figures given below are for 115 volt circuits.

| Beaker<br>Capacity<br>mL | Wattage | Part<br>Number     | Each<br>Price |
|--------------------------|---------|--------------------|---------------|
| 100                      | 100     | <b>LG-8862-102</b> | \$167.00      |
| 150                      | 100     | <b>LG-8862-104</b> | 171.00        |
| 250                      | 140     | <b>LG-8862-106</b> | 175.00        |
| 400                      | 240     | <b>LG-8862-108</b> | 182.00        |
| 600                      | 325     | <b>LG-8862-110</b> | 206.00        |
| 800                      | 350     | <b>LG-8862-112</b> | 226.00        |
| 1000                     | 430     | <b>LG-8862-114</b> | 238.00        |
| 2000                     | 550     | <b>LG-8862-116</b> | 249.00        |
| 3000                     | 630     | <b>LG-8862-118</b> | 261.00        |
| 4000                     | 710     | <b>LG-8862-120</b> | 278.00        |

*See our complete line of Heating Mantles and Controllers on pages 210 to 217.*



**LG-8862**



**C-6885**

#### Bell Jars, PYREX®, Bell, with Knob

PYREX® brand jars are made from specially selected mold-blown blanks. The bottom flange has a finely ground finish to assure tight sealing with ground glass plates. Rated 1-Atmosphere Vacuum. Do not use with heat or pressure applications.

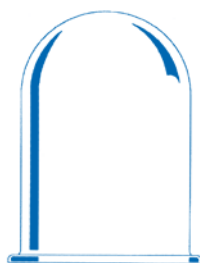
| Approx. O.D. x Height mm | Approx. I.D. mm | Part Number       | Each Price |
|--------------------------|-----------------|-------------------|------------|
| 140 x 265                | 130             | <b>C-6885-140</b> | \$322.89   |
| 165 x 315                | 156             | <b>C-6885-165</b> | 417.42     |
| 222 x 425                | 213             | <b>C-6885-222</b> | 511.94     |



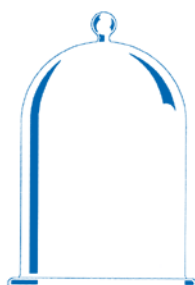
Plain Dome

**LG-3010-100**

Flange



**LG-3010-200**



Knob/  
Flange

**LG-3010-300**

#### Bell Jars

Domes with the rim ground flat for a tight seal.

| Supplied    | O.D. x Inside Height mm | Part Number        | Each Price |
|-------------|-------------------------|--------------------|------------|
| Plain Dome  | 315 x 300               | <b>LG-3010-100</b> | \$643.82   |
| Flange      | 315 x 300               | <b>LG-3010-200</b> | 719.96     |
| Knob/Flange | 315 x 300               | <b>LG-3010-300</b> | 809.74     |

Replaces LX3010, 3050 & 3060

*Other sizes available for fabrication upon request. Please contact our customer service department.*

### Bell Jars, PYREX®, Bell

These specially blown, sturdy, round bottom jars have a fine ground finish at the open end. The jar is supplied without a rim flange. The flat, ground, bearing surface has a contact area equal to the wall thickness at the open end of the jar. Do not use with heat, pressure or vacuum applications.

| Approx. O.D. x<br>Length mm | Min.<br>I.D. mm | Approx.<br>Capacity<br>Liters | Approx. O.D. x<br>Length Inches | Part<br>Number    | Each<br>Price |
|-----------------------------|-----------------|-------------------------------|---------------------------------|-------------------|---------------|
| 260 x 305                   | 235             | 9.5                           | 10 1/4 x 12                     | <b>C-6886-9L</b>  | \$777.89      |
| 318 x 305                   | 292             | 12.3                          | 12 1/2 x 12                     | <b>C-6886-12L</b> | 953.41        |
| 318 x 457                   | 292             | 22.7                          | 12 1/2 x 18                     | <b>C-6886-22L</b> | 1072.94       |
| 457 x 457                   | 429             | 49.2                          | 18 x 18                         | <b>C-6886-49L</b> | 1888.23       |
| 457 x 762                   | 429             | 87.0                          | 18 x 30                         | <b>C-6886-87L</b> | 2078.21       |



**C-6886**

### Bell Jars, PYREX®, Animal

Recommended for use as animal jars or for other purposes where resistance to hot air and steam sterilization is of importance. These jars are blown with walls approximately 4.5mm (<sup>3</sup>/<sub>16</sub>" ) thick. The open ends are finished with a fire-polished bead to increase mechanical strength. Do not use with heat, pressure or vacuum applications.

| Approx. O.D. x<br>Height mm | Approx. O.D. x<br>Height Inches | Approx.<br>Capacity Liters | Part<br>Number   | Each<br>Price |
|-----------------------------|---------------------------------|----------------------------|------------------|---------------|
| 152 x 203                   | 6 x 8                           | 2.8                        | <b>C-6941-3L</b> | \$149.19      |
| 210 x 203                   | 8 1/4 x 8                       | 4.7                        | <b>C-6941-5L</b> | 141.70        |

*Not intended for vacuum applications.*



**C-6941**

### Bell Jars, PYREX®, Cylindrical, Plain

These jars are mold-blown with substantial walls for mechanical strength. The open end of the 152mm diameter jars is fire-polished, while all other sizes have the open end ground. These jars can also be used as animal jars. Do not use with heat, pressure, or vacuum applications.

| Approx. O.D. x<br>Height mm | Approx. O.D. x<br>Height Inches | Capacity<br>Liters | Part<br>Number    | Each<br>Price |
|-----------------------------|---------------------------------|--------------------|-------------------|---------------|
| 222 x 254                   | 8 3/4 x 10                      | 7.5                | <b>C-6942-7L</b>  | \$235.13      |
| 257 x 254                   | 10                              | 9.5                | <b>C-6942-9L</b>  | 334.11        |
| 305 x 305                   | 12 x 12                         | 17.0               | <b>C-6942-17L</b> | 456.26        |
| 305 x 457                   | 12 x 18                         | 26.5               | <b>C-6942-27L</b> | 525.65        |
| 406 x 305                   | 16 x 12                         | 32.0               | <b>C-6942-32L</b> | 845.36        |



**C-6942**



**C-6943**

**Bell Jars, PYREX® Cylindrical, Handles**

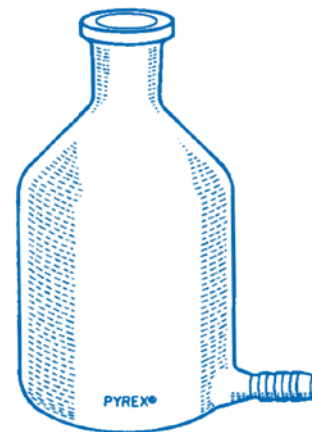
These jars are made with recessed finger grips for convenience in handling. Open ends are finely ground. Do not use with heat, pressure or vacuum applications.

| Approx. O.D. x<br>Height mm | Approx. O.D. x<br>Height Inches | Capacity<br>Liters | Part<br>Number    | Each<br>Price |
|-----------------------------|---------------------------------|--------------------|-------------------|---------------|
| 305 x 305                   | 12 x 12                         | 17.0               | <b>C-6943-17L</b> | \$601.13      |
| 305 x 457                   | 12 x 18                         | 26.5               | <b>C-6943-27L</b> | 908.72        |
| 305 x 610                   | 12 x 24                         | 36.0               | <b>C-6943-36L</b> | 1182.22       |

### Bottle, PYREX® Brand, Aspirator, Outlet for Tubing

A range of bottles featuring a tubular sidearm outlet to facilitate attachment of flexible tubing. Useful as a delivery/storage container for solutions.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Approx.<br>O.D. of<br>Outlet<br>mm | Approx.<br>Diam. x<br>Height<br>mm | Part<br>Number    | Each<br>Price |
|----------------|--------------------------|------------------------------------|------------------------------------|-------------------|---------------|
| 250            | 2                        | 10                                 | 70 x 132                           | <b>C-1220-250</b> | \$36.01       |
| 500            | 4                        | 10                                 | 86 x 164                           | <b>C-1220-500</b> | 56.14         |
| 1000           | 6                        | 10                                 | 107 x 200                          | <b>C-1220-1L</b>  | 60.77         |
| 2000           | 6                        | 15                                 | 133 x 250                          | <b>C-1220-2L</b>  | 79.16         |
| 4000           | 10                       | 15                                 | 165 x 298                          | <b>C-1220-4L</b>  | 125.19        |
| 9500           | 12                       | 15                                 | 187 x 476                          | <b>C-1220-2X</b>  | 271.79        |
| 13250          | 12                       | 15                                 | 238 x 445                          | <b>C-1220-3X</b>  | 324.33        |
| 19000          | 12                       | 15                                 | 292 x 508                          | <b>C-1220-5</b>   | 463.35        |



**C-1220**

### Bottle, PYREX® Brand, Media, Storage, Screw Cap

Heavy duty bottle which can be used for storage as well as mixing and sampling. Includes linerless, one-piece autoclavable polypropylene plug seal cap with drip free pouring rings. Optional red PBT caps and red ETFE pouring rings are available for dry heat sterilization (180°C). New glass bead indicates full capacity line on 100mL through 2 liter size. Bottles have permanent white enamel graduations and marking spots. Color-coded polypropylene caps in a choice of orange, green, purple, red and light gray are available.

Thread size: GL45. Thread size on 25mL: GL25. Thread size on 50mL: GL32. Neck I.D. on 25mL: 14.5. Neck I.D. on 50mL: 16.5. Neck I.D. on 100-10L: 29.

| Capacity<br>mL    | Approx.<br>Diam. x<br>Height<br>mm | Grad.<br>Range<br>mL | Grad.<br>Interval<br>mL | Part<br>Number       | Each<br>Price |
|-------------------|------------------------------------|----------------------|-------------------------|----------------------|---------------|
| 25                | 36.5 x 70                          | 10-25                | 5                       | <b>C-1395-25</b>     | \$7.79        |
| 50                | 46 x 88                            | 20-50                | 10                      | <b>C-1395-50</b>     | 7.74          |
| 100               | 56 x 100                           | 40-80                | 20                      | <b>C-1395-100</b>    | 7.96          |
| 250               | 70 x 138                           | 50-200               | 50                      | <b>C-1395-250</b>    | 8.85          |
| 500               | 86 x 176                           | 100-400              | 100                     | <b>C-1395-500</b>    | 10.57         |
| 1000              | 101 x 225                          | 100-900              | 100                     | <b>C-1395-1L</b>     | 12.97         |
| 2000              | 136 x 262                          | 400-1800             | 200                     | <b>C-1395-2L</b>     | 34.17         |
| 5000              | 186 x 335                          | 500-4500             | 500                     | <b>C-1395-5L</b>     | 119.21        |
| 10000             | 234 x 410                          | 2000-9000            | 1000                    | <b>C-1395-10L</b>    | 183.40        |
| Orange Caps       |                                    |                      |                         | <b>C-1395-45LTC</b>  | 2.50          |
| Clear Rings       |                                    |                      |                         | <b>C-1395-45LTR</b>  | .93           |
| Red Caps          |                                    |                      |                         | <b>C-1395-45HTC</b>  | 9.54          |
| Red Rings         |                                    |                      |                         | <b>C-1395-45HTR</b>  | 2.13          |
| Purple Caps       |                                    |                      |                         | <b>C-1395-45LTC1</b> | 2.59          |
| Light Gray Caps   |                                    |                      |                         | <b>C-1395-45LTC2</b> | 2.59          |
| Green Caps        |                                    |                      |                         | <b>C-1395-45LTC3</b> | 2.59          |
| Gray Membrane Cap |                                    |                      |                         | <b>C-1395-45LTM</b>  | 4.05          |



**C-1395**

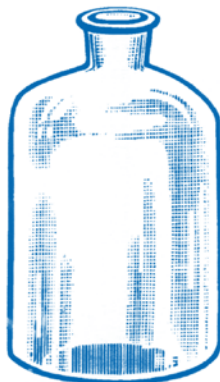
Caution: Bottles larger than 2L should NOT be used with bottle top filter units, or in other applications involving vacuum or pressure, as breakage may occur. DO NOT have caps tightened immediately after autoclaving as the vacuum resulting from cooling can cause breakage. Replacement caps and pouring rings are not available for 25mL and 50mL sizes. A pouring ring is not included on 25mL size. A vented cap is NOT recommended for use on the 5L and 10L 1395 bottle.



LG-3460



LG-3461



C-1585



C-1595

### Bottle, Single Neck

| Capacity<br>mL | Outer<br>\$ Joint | Approx.<br>O.D. x Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------------------|--------------------|---------------|
| 250            | 24/40             | 67 x 150                       | <b>LG-3460-100</b> | \$36.74       |
| 500            | 24/40             | 83 x 178                       | <b>LG-3460-102</b> | 42.18         |
| 1000           | 24/40             | 105 x 215                      | <b>LG-3460-104</b> | 45.31         |
| 2000           | 29/42             | 130 x 255                      | <b>LG-3460-106</b> | 86.18         |
| 4000           | 29/42             | 175 x 300                      | <b>LG-3460-108</b> | 155.48        |
| 9000           | 45/50             | 203 x 435                      | <b>LG-3460-110</b> | 203.71        |

### Bottle, Single Neck, Amber

Same configuration as *LG-3460*, but amberized to protect light-sensitive materials.

| Capacity<br>mL | Outer<br>\$ Joint | Approx.<br>O.D. x Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------------------|--------------------|---------------|
| 250            | 24/40             | 67 x 150                       | <b>LG-3461-098</b> | \$110.51      |
| 500            | 24/40             | 83 x 178                       | <b>LG-3461-100</b> | 117.08        |
| 1000           | 24/40             | 105 x 215                      | <b>LG-3461-102</b> | 134.34        |
| 2000           | 29/42             | 130 x 255                      | <b>LG-3461-104</b> | 165.53        |
| 4000           | 29/42             | 175 x 300                      | <b>LG-3461-106</b> | 221.91        |

### Bottle, PYREX® Brand, Serum

Designed especially for handling and storing sterile culture media and sera where stability of the glass is of prime importance. Also suitable for storing distilled water and standard solutions. Will withstand hot air (dry) or steam (wet) sterilization. Necks are tooled to increase mechanical strength and for uniform stopper fit.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Approx.<br>Diam. x<br>Height<br>mm | Part<br>Number   | Each<br>Price |
|----------------|--------------------------|------------------------------------|------------------|---------------|
| 4000           | 8                        | 165 x 287                          | <b>C-1585-4L</b> | \$93.42       |
| 9000           | 8                        | 203 x 408                          | <b>C-1585-9L</b> | 148.08        |

### Bottle, PYREX® Brand, Solution

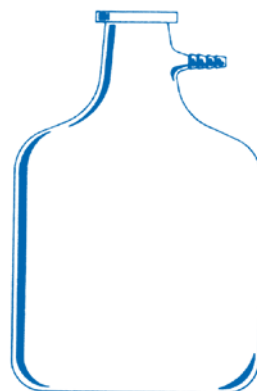
These bottles are designed for storage of solutions and are ideal for media preparation. The 9.5 liter (2½ gallon) and 13.25 liter (3½ gallon) sizes are in a conventional bottle shape. The 19 liter (5 gallon) and 45.5 liter (12 gallon) sizes are similar in design to a carboy. The 19 liter size is weight controlled to 15 lbs. maximum for ease of handling. The necks are tooled to increase mechanical strength and for uniform stopper fit.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Approx.<br>Diam. x<br>Height<br>mm | Part<br>Number   | Each<br>Price |
|----------------|--------------------------|------------------------------------|------------------|---------------|
| 9500           | 12                       | 187 x 470                          | <b>C-1595-2X</b> | \$147.41      |
| 13250          | 12                       | 238 x 445                          | <b>C-1595-3X</b> | 186.75        |
| 19000          | 12                       | 292 x 508                          | <b>C-1595-5</b>  | 273.36        |
| 45500          | 12                       | 406 x 584                          | <b>C-1595-12</b> | 590.35        |

## Bottle, Filter, Carboy

Large capacity bottle with hose connection sealed at neck. All sizes take a #12 stopper.

| Capacity<br>mL | Capacity<br>Gallons | Hose<br>Connection<br>Inches | Part<br>Number     | Each<br>Price |
|----------------|---------------------|------------------------------|--------------------|---------------|
| 9,500          | 2 1/2               | 3/8                          | <b>LG-3465-100</b> | \$225.51      |
| 13,250         | 3 1/2               | 3/8                          | <b>LG-3465-102</b> | 282.32        |
| 19,000         | 5                   | 3/8                          | <b>LG-3465-104</b> | 378.14        |
| 45,500         | 12                  | 1/2                          | <b>LG-3465-106</b> | 824.76        |



**LG-3465**

## Bottle, Pressure Reaction

Fabricated from selected heavy wall borosilicate glass. Used in pressure reaction studies. See LG-3922 for caps and gaskets.

| Approx.<br>Capacity<br>mL | Overall<br>Length<br>Inches | Outside<br>Diameter<br>Inches | Part<br>Number     | Each<br>Price |
|---------------------------|-----------------------------|-------------------------------|--------------------|---------------|
| 20                        | 4                           | 1                             | <b>LG-3921-100</b> | \$15.12       |
| 32                        | 6                           | 1                             | <b>LG-3921-102</b> | 16.21         |
| 42                        | 7 1/2                       | 1                             | <b>LG-3921-104</b> | 18.71         |
| 120                       | 8                           | 1 1/2                         | <b>LG-3921-106</b> | 26.38         |
| 175                       | 8                           | 1 3/4                         | <b>LG-3921-108</b> | 28.14         |
| 190                       | 6                           | 2 1/4                         | <b>LG-3921-110</b> | 32.60         |
| 250                       | 6                           | 2 1/2                         | <b>LG-3921-112</b> | 34.28         |
| 500                       | 7 5/8                       | 3 1/4                         | <b>LG-3921-114</b> | 92.87         |
| 1000                      | 11 1/4                      | 3 1/4                         | <b>LG-3921-116</b> | 117.04        |



**LG-3921**

## Bottle, Crown Cap and Gasket, Capper

For use with LG-3921 bottles. Apply with bottle capper LG-3925. Will reseal after puncturing with a syringe needle. Metal cap has four holes for a cannula or syringe needle.

| Supplied                | Part<br>Number     | Each<br>Price |
|-------------------------|--------------------|---------------|
| Complete (Cap & Gasket) | <b>LG-3922-100</b> | \$ 1.73       |
| Cap Only                | <b>LG-3922-110</b> | .43           |
| Gasket Only             | <b>LG-3922-120</b> | 1.41          |
| Bottle Capper           | <b>LG-3925-100</b> | 100.51        |



**LG-3922**



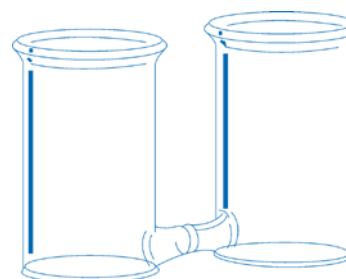
**LG-3925**

## Electrochemical Cell

Designed to measure the standard potential of energy released in any spontaneous redox reaction. Electron transfer is forced to take place through an external pathway rather than directly between reactants. Measured voltage is easily obtained with a digital voltmeter.

| Capacity<br>mL | Disc<br>Porosity | Approx.<br>Diam (WxHxD) | Part<br>Number     | Each<br>Price |
|----------------|------------------|-------------------------|--------------------|---------------|
| 60 x 2         | Coarse           | 120 x 75 x 42           | <b>LG-4330-100</b> | \$44.20       |

Additional sizes available upon request.



**LG-4330**





**LG-3301**



**LG-3530**



**LG-3540**



**LG-3541**

### Bottle, Roller

Provides higher cell yields. Fabricated from tubing selected for clarity and freedom from glass imperfections. Neck area is tapered for cell removal and ease of cleaning. Complete with 38mm autoclavable rubber lined screw cap.

| Approx.<br>O.D. x Height | Approx.<br>mL | Part<br>Number     | Each<br>Price |
|--------------------------|---------------|--------------------|---------------|
| 110 x 285                | 1500          | <b>LG-3301-100</b> | \$41.28       |
| 110 x 370                | 2000          | <b>LG-3301-102</b> | 49.53         |
| 110 x 480                | 3000          | <b>LG-3301-104</b> | 55.05         |
| 110 x 550                | 3500          | <b>LG-3301-106</b> | 57.79         |
| Replacement Cap only     |               | <b>LG-3301-108</b> | 1.58          |

### Bottle, Specific Gravity, Gay-Lussac, Unadjusted

Unadjusted. With capillary stopper.

| Approx.<br>Capacity<br>mL | § Joint | Part<br>Number     | Each<br>Price |
|---------------------------|---------|--------------------|---------------|
| 2                         | 7/15    | <b>LG-3530-100</b> | \$49.08       |
| 5                         | 7/15    | <b>LG-3530-102</b> | 49.08         |
| 10                        | 10/18   | <b>LG-3530-104</b> | 52.39         |
| 25                        | 10/18   | <b>LG-3530-106</b> | 54.60         |
| 50                        | 10/18   | <b>LG-3530-108</b> | 61.29         |
| 100                       | 10/18   | <b>LG-3530-110</b> | 64.18         |

### Bottle, Specific Gravity, Gay-Lussac, Adjusted

Accurately adjusted at 20°C. While the joints are to dimensions, the capillary stoppers are not interchangeable since the final adjustment for volume is made on the stopper. Each bottle and its stopper carry the same identifying number.

| Capacity<br>mL | Tol<br>± mL | § Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------|---------|--------------------|---------------|
| 2              | .03         | 7/15    | <b>LG-3540-100</b> | \$90.36       |
| 5              | .03         | 7/15    | <b>LG-3540-102</b> | 90.36         |
| 10             | .04         | 10/18   | <b>LG-3540-104</b> | 93.61         |
| 25             | .05         | 10/18   | <b>LG-3540-106</b> | 100.06        |
| 50             | .08         | 10/18   | <b>LG-3540-108</b> | 101.35        |
| 100            | .10         | 10/18   | <b>LG-3540-110</b> | 103.29        |

### Bottle, Specific Gravity, Hubbard

Used in standard test methods for specific gravity of asphalt cements, road tars, road oils, and soft tar pitches. The stopper has a hole approximately 1.6mm in diameter through the center to allow excess sample to escape.

*Reference: ASTM D 70, AASHTO Method T 43.*

| Capacity<br>mL | § Stopper | Approx. Diam.<br>x Height mm | Part<br>Number     | Each<br>Price |
|----------------|-----------|------------------------------|--------------------|---------------|
| 24             | 24/12     | 27 x 72                      | <b>LG-3541-100</b> | \$71.96       |

### Bottle, Specific Gravity, Hubbard-Carmick

For use with viscous fluids, semi-solid bitumens and emulsions.

Reference: AASHTO Method T 43, ASTM D 70, D 115 and D 234.

| Capacity<br>mL | Stopper | Approx. Diam.<br>x Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------|------------------------------|--------------------|---------------|
| 25             | 24/12   | 40 x 55                      | <b>LG-3542-100</b> | \$82.76       |



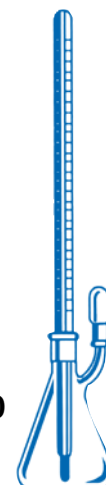
**LG-3542**

### Bottle, Specific Gravity, Pycnometer

With a conical flask body to give maximum stability. The thermometer used for 25mL size has a 10/18 joint, with a temperature range of +14°C to 37°C. The 2 larger sizes are used to obtain the specific gravity of pigments (A.S.T.M Method of Test D153). The cap has a 5/12 joint.

Reference: ASTM D 153.

| Supplied         | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|------------------|----------------|--------------------|---------------|
| Complete         | 25             | <b>LG-3550-102</b> | \$176.11      |
| Complete         | 50             | <b>LG-3550-104</b> | 181.20        |
| Complete         | 100            | <b>LG-3550-106</b> | 192.34        |
| Flask Only       | 25             | <b>LG-3550-202</b> | 111.41        |
| Flask Only       | 50             | <b>LG-3550-204</b> | 116.50        |
| Flask Only       | 100            | <b>LG-3550-206</b> | 122.54        |
| Thermometer Only | 25             | <b>LG-3550-310</b> | 54.95         |
| Thermometer Only | 50 & 100       | <b>LG-3550-312</b> | 54.95         |
| Cap Only         |                | <b>LG-3550-320</b> | 23.40         |



**LG-3550**

### Bottle, Specific Gravity, Chapman

Has a wide base and two bulbs for determining the percentage of voids and surface moisture in fine aggregate. Graduated at 200mL between the bulbs, and from 375mL to 450mL in 1 mL divisions in the neck. Used in ASTM C70, AASHTO T-142, ANS A37.21, and CRD-C111.

|                 | Part<br>Number     | Each<br>Price |
|-----------------|--------------------|---------------|
| Replaces LX6256 | <b>LG-3544-100</b> | \$142.36      |



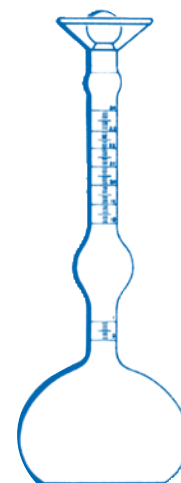
**LG-3544**

### Bottle, Specific Gravity, Le Chatelier, Class A

Used to determine the specific gravity of sand, cement and other fine materials. Developed from ASTM C 188 and ASTM E 694. The body holds approximately 250mL. The oval bulb in the neck holds 17mL. Volume below the bulb is graduated from 0 to 1.0mL in 0.1mL subdivisions, with an additional 0.1 subdivision below the 0 and above the 1.0mL mark. The neck is graduated from 18 to 24mL in 0.1mL subdivisions above the bulb with a 0.05mL tolerance. The stopper is #13.

Reference: ASTM C188, ASTM E694.

|  | Part<br>Number     | Each<br>Price |
|--|--------------------|---------------|
|  | <b>LG-3543-100</b> | \$100.75      |



**LG-3543**



**C-1396**

### Bottle, PYREX®, Square

Square bottles can be used for storage as well as mixing and sampling. With white enamel graduations and marking spot. A clear glass ridge indicates the full capacity. Includes linerless, one-piece, autoclavable, orange, polypropylene plug seal cap with drip-free pouring rings.

| Capacity<br>mL | Grad.<br>Int.<br>mL | Grad.<br>Range | Thread<br>Size | Approx.<br>Dimensions<br>O.D.<br>x<br>Height | Part<br>Number    | Each<br>Price |
|----------------|---------------------|----------------|----------------|----------------------------------------------|-------------------|---------------|
| 100            | 20                  | 40-80          | GL32           | 50 x 105                                     | <b>C-1396-100</b> | \$9.14        |
| 250            | 50                  | 50-200         | GL45           | 64 x 138                                     | <b>C-1396-250</b> | 10.24         |
| 500            | 100                 | 100-400        | GL45           | 78 x 176                                     | <b>C-1396-500</b> | 12.77         |
| 1000           | 100                 | 100-900        | GL45           | 94 x 217                                     | <b>C-1396-1L</b>  | 16.63         |



**C-1400**

### Bottle, PYREX®, Roller with 38mm Screw Cap

Manufactured from borosilicate glass for optical clarity and mechanical strength. Can withstand repeated wet or dry sterilization. Supplied with 38mm deep skirted rubber-lined phenolic screw cap.

| Description                 | Cell<br>Growth<br>Area cm <sup>2</sup> | Dimensions<br>O.D. x<br>Height | Part<br>Number    | Each<br>Price |
|-----------------------------|----------------------------------------|--------------------------------|-------------------|---------------|
| Roller Bottle               | 840                                    | 110 x 285                      | <b>C-1400-285</b> | \$57.31       |
| Roller Bottle               | 1170                                   | 110 x 440                      | <b>C-1400-440</b> | 72.87         |
| Roller Bottle               | 1330                                   | 110 x 490                      | <b>C-1400-490</b> | 69.79         |
| Roller Bottle               | 1585                                   | 110 x 570                      | <b>C-1400-570</b> | 64.79         |
| Cap. Phenolic G.P.I. 38-430 |                                        |                                | <b>C-1400-CAP</b> | 1.73          |

### Bottle, PYREX®, Roller with 45mm Screw Cap and Pour Ring

Manufactured from borosilicate glass for optical clarity and mechanical strength. Can withstand repeated wet or dry sterilization. Supplied with 45mm orange polypropylene screw cap and low temperature pour ring.

| Description   | Cell<br>Growth<br>Area cm <sup>2</sup> | Dimensions<br>O.D. x<br>Height | Part<br>Number    | Each<br>Price |
|---------------|----------------------------------------|--------------------------------|-------------------|---------------|
| Roller Bottle | 680                                    | 110 x 240                      | <b>C-1425-240</b> | \$53.54       |
| Roller Bottle | 840                                    | 110 x 285                      | <b>C-1425-285</b> | 54.16         |
| Roller Bottle | 1070                                   | 110 x 370                      | <b>C-1425-370</b> | 63.93         |
| Roller Bottle | 1585                                   | 110 x 570                      | <b>C-1425-570</b> | 72.21         |

**C-1425**



**C-1684**

### Bottle, PYREX®, Weighing, PARR

Joints designed for use in weighing small samples. The closure style cap fits over the externally ground body.

| Approx.<br>Capac. (mL) | Approx.<br>Weight (g) | Joint | Approx. O.D.<br>x Length (mm) | Part<br>Number     | Each<br>Price |
|------------------------|-----------------------|-------|-------------------------------|--------------------|---------------|
| 4                      | 12                    | 24/12 | 20 x 24                       | <b>C-1684-2024</b> | \$20.70       |

### Bottle, PYREX®, Weighing, Tall

Tall form bottle with opening that accepts a closed bottom, hollow Penny-head style stopper.

| Approx. Capac. (mL) | Approx. Weight (g) | Joint | Approx. O.D. x Length (mm) | Part Number        | Each Price |
|---------------------|--------------------|-------|----------------------------|--------------------|------------|
| 7                   | 9                  | 14/10 | 15 x 50                    | <b>C-1680-1550</b> | \$13.83    |
| 12                  | 13                 | 14/10 | 15 x 80                    | <b>C-1680-1580</b> | 13.40      |
| 12                  | 18                 | 24/12 | 25 x 40                    | <b>C-1680-2540</b> | 13.65      |
| 16                  | 21                 | 24/12 | 25 x 50                    | <b>C-1680-2550</b> | 14.87      |
| 30                  | 30                 | 29/12 | 30 x 60                    | <b>C-1680-3060</b> | 17.81      |
| 45                  | 52                 | 40/12 | 40 x 50                    | <b>C-1680-4050</b> | 24.62      |
| 70                  | 67                 | 40/12 | 40 x 80                    | <b>C-1680-4080</b> | 23.80      |
| 85                  | 78                 | 50/12 | 50 x 60                    | <b>C-1680-5060</b> | 33.29      |



**C-1680**

### Bottle, PYREX®, Weighing, Low Form

Low form bottle with opening that accepts a closed bottom hollow Penny-head style stopper.

| Approx. Capac. (mL) | Approx. Weight (g) | Joint | Approx. O.D. x Length (mm) | Part Number        | Each Price |
|---------------------|--------------------|-------|----------------------------|--------------------|------------|
| 35                  | 53                 | 50/12 | 50 x 30                    | <b>C-1682-5030</b> | \$31.90    |
| 50                  | 71                 | 60/12 | 60 x 30                    | <b>C-1682-6030</b> | 36.70      |
| 82                  | 111                | 71/15 | 70 x 35                    | <b>C-1682-7033</b> | 41.65      |



**C-1682**

### Bottle, PYREX®, Weighing, Regular

Standard form bottle with a closure that fits over the external ground body.

| Approx. Capac. (mL) | Approx. Weight (g) | Joint | Approx. O.D. x Length (mm) | Part Number         | Each Price |
|---------------------|--------------------|-------|----------------------------|---------------------|------------|
| 12                  | 20                 | 29/12 | 25 x 40                    | <b>C-1686-2540</b>  | \$17.97    |
| 16                  | 25                 | 29/12 | 25 x 50                    | <b>C-1686-2550</b>  | 17.97      |
| 30                  | 32                 | 34/12 | 30 x 60                    | <b>C-1686-3060</b>  | 20.26      |
| 45                  | 55                 | 45/12 | 40 x 50                    | <b>C-1686-4050</b>  | 26.56      |
| 70                  | 72                 | 45/12 | 40 x 60                    | <b>C-1686-4060</b>  | 28.89      |
| 92                  | 83                 | 45/12 | 40 x 100                   | <b>C-1686-40100</b> | 25.49      |



**C-1686**

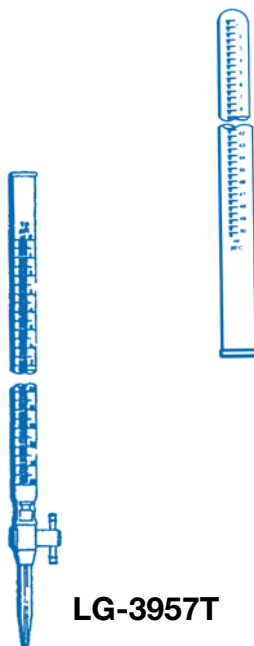
### Bottle, PYREX®, Weighing, Low Form

Low form bottle like the C-1682 bottles but with a closure that fits over the external ground body.

| Approx. Capac. (mL) | Approx. Weight (g) | Joint | Approx. O.D. x Length (mm) | Part Number        | Each Price |
|---------------------|--------------------|-------|----------------------------|--------------------|------------|
| 36                  | 68                 | 55/12 | 50 x 30                    | <b>C-1688-5030</b> | \$52.34    |
| 42                  | 73                 | 60/12 | 60 x 30                    | <b>C-1688-6030</b> | 55.11      |

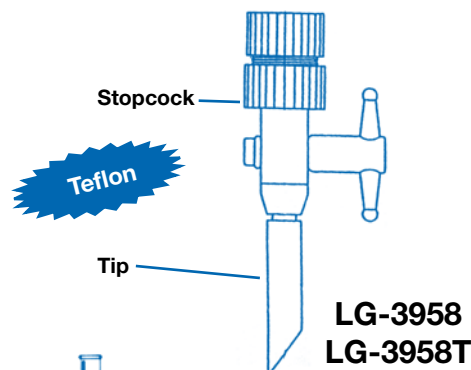


**C-1688**

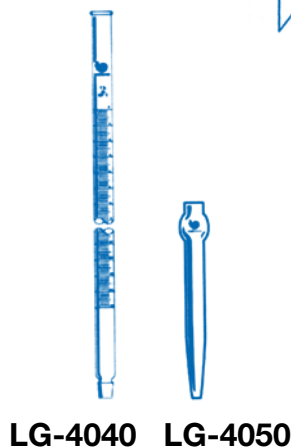


LG-4038

LG-3957T



LG-3958  
LG-3958T



LG-4040 LG-4050

LG-8525



### Buret, Gas Measuring, Bunsen

With durable colored scale. The zero is at the closed end of the buret.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 50             | 1/10              | .10               | <b>LG-4038-100</b> | \$50.63       |
| 100            | 2/10              | .20               | <b>LG-4038-102</b> | 58.70         |

Replaces DG-1290

### Buret, PTFE Stopcock, Economy Grade, Complete

Accurately calibrated for general educational use and many general laboratory procedures. With durable colored scale. Consists of three parts - buret, stopcock and glass tip, which can be purchased separately under LG-3958.

| Capacity<br>mL | Subdivision<br>mL | Part<br>Number      | Each<br>Price |
|----------------|-------------------|---------------------|---------------|
| 25             | 1/10              | <b>LG-3957T-100</b> | \$65.98       |
| 50             | 1/10              | <b>LG-3957T-102</b> | 69.56         |

### Buret, Replacement Parts for LG-3957T Burets

| Supplied          | Part<br>Number      | Each<br>Price |
|-------------------|---------------------|---------------|
| 25mL Buret only   | <b>LG-3958-100</b>  | \$31.19       |
| 50mL Buret only   | <b>LG-3958-102</b>  | 34.79         |
| 2mm PTFE stopcock | <b>LG-3958T-104</b> | 29.68         |
| Buret tip         | <b>LG-3958-106</b>  | 5.69          |

### Buret, Pinchcock, Laboratory Grade

With durable colored scale. Delivery end is formed to proper size for connection to a delivery tip with rubber tubing. Tip sold separately.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 25             | 1/10              | .06               | <b>LG-4040-100</b> | \$36.16       |
| 50             | 1/10              | .10               | <b>LG-4040-102</b> | 36.16         |
| 100            | 1/5               | .20               | <b>LG-4040-104</b> | 61.76         |
| Tip only       |                   |                   | <b>LG-4050-100</b> | 4.60          |

Replaces DG-1202

### Buret, Gas, Hempel

Graduated to 100mL in 2/10mL subdivisions. Buret tube has a straight stem at the top and one at the bottom bent at 90° angle to the buret tube.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 100            | 2/10              | 0.2               | <b>LG-8525-100</b> | \$132.33      |

### Buret, Precision Bore, Straight Stopcock, with PTFE Plug, Class A

Precision buret with 2mm PTFE stopcock. Calibration is in compliance with ASTM E694 specifications.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>±mL | Part<br>Number      | Each<br>Price |
|----------------|-------------------|------------------|---------------------|---------------|
| 10             | 1/20              | 0.02             | <b>LG-3956T-100</b> | \$114.91      |
| 25             | 1/10              | 0.03             | <b>LG-3956T-102</b> | 122.65        |
| 50             | 1/10              | 0.05             | <b>LG-3956T-104</b> | 126.54        |
| 100            | 1/5               | 0.10             | <b>LG-3956T-106</b> | 164.36        |



**Class A**

**LG-3956T**

### Buret, Precision Bore, Straight Stopcock, Class A

Complies with accuracy requirement ASTM Specification E287. With durable colored scale. The stopcock for all sizes is 2mm.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 10             | 1/20              | 0.02              | <b>LG-3950-100</b> | \$136.10      |
| 25             | 1/10              | 0.03              | <b>LG-3950-102</b> | 143.34        |
| 50             | 1/10              | 0.05              | <b>LG-3950-104</b> | 143.34        |
| 100            | 1/5               | 0.10              | <b>LG-3950-106</b> | 171.52        |

**Class A**

**LG-3950**



### Buret, Straight Stopcock with PTFE Plug, Laboratory Grade

Class B buret complies with accuracy and volumetric tolerances set forth by ASTM E694. PTFE stopcock supplied for all sizes is 2mm.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-------------------|---------------------|---------------|
| 10             | 1/20              | 0.04              | <b>LG-3954T-100</b> | \$95.53       |
| 25             | 1/10              | 0.06              | <b>LG-3954T-102</b> | 96.84         |
| 50             | 1/10              | 0.10              | <b>LG-3954T-104</b> | 98.15         |
| 100            | 1/5               | 0.20              | <b>LG-3954T-106</b> | 113.95        |



**LG-3954T**

### Buret, Straight Stopcock, Laboratory Grade

The stopcock for all sizes is 2mm with durable colored scale.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 10             | 1/20              | 0.04              | <b>LG-4070-100</b> | \$77.59       |
| 25             | 1/10              | 0.06              | <b>LG-4070-102</b> | 84.83         |
| 50             | 1/10              | 0.10              | <b>LG-4070-104</b> | 89.82         |
| 100            | 1/5               | 0.20              | <b>LG-4070-106</b> | 107.04        |



**LG-4070**

LG-4142T

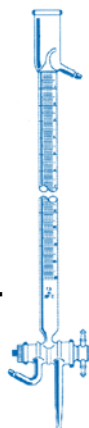


Class A

LG-4011T



LG-4122T



C-2128



### Buret, Dispensing, Straight Stopcock with PTFE Plug

Laboratory grade, Class B, useful for dispensing larger volumes without refilling. The stopcock has a PTFE plug.

| Capacity<br>mL | Subdivision<br>mL | Tol.<br>± mL | Stopcock<br>Size mm | Part<br>Number      | Each<br>Price |
|----------------|-------------------|--------------|---------------------|---------------------|---------------|
| 250            | 1                 | 2.0          | 4                   | <b>LG-4142T-100</b> | \$173.94      |
| 500            | 5                 | 2.5          | 4                   | <b>LG-4142T-102</b> | 194.32        |
| 1000           | 10                | 5            | 4                   | <b>LG-4142T-104</b> | 229.11        |
| 2000           | 20                | 10           | 6                   | <b>LG-4142T-106</b> | 295.07        |
| 4000           | 50                | 50           | 8                   | <b>LG-4142T-108</b> | 348.61        |

### Buret, Precision Bore, Straight Stopcock with PTFE Plug, Micro, Class A

With funnel top shaped so that a rubber stopper carrying a short length of glass tubing can be inserted, when it is desired to fill the buret from a delivery tip by suction. With durable colored scale. Both sizes have 2mm stopcock with PTFE plug.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-------------------|---------------------|---------------|
| 5              | 1/100             | 0.01              | <b>LG-4011T-100</b> | \$250.64      |
| 10             | 1/50              | 0.02              | <b>LG-4011T-102</b> | 250.64        |

### Buret, Automatic, Three-Way Stopcock with PTFE Plug, Laboratory Grade

With zero level at top of overflow tube. Graduations near the top are omitted since diameter in this area varies due to the sealing-on of the cup. With durable colored scale. The stopcock for all sizes is 2mm with a PTFE plug.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-------------------|---------------------|---------------|
| 25             | 1/10              | 0.06              | <b>LG-4122T-102</b> | \$153.20      |
| 50             | 1/10              | 0.10              | <b>LG-4122T-104</b> | 153.20        |

### Buret, Pyrex®, Micro, Precision Bore, Funnel Top, Class A, Straight Stopcock, White Enamel Markings

These burets are designed for precise analytical methods in microchemistry. Precision bore tubing throughout the body assures accuracy between any two points. Funnel top facilitates addition of reagents by pouring, or by suction from below, through a rubber-stoppered tube. Tips are tapered to assure smooth flow. Stopcocks turn freely, yet give positive control and are of 2mm bore.

The capacity tolerance on these burets is established by ASTM E11189 and are calibrated in accordance with ASTM E542.

| Capacity<br>mL | Grad.<br>Interval<br>mL | Tol.<br>± mL | Stopcock<br>Bore<br>mm | Approx.<br>O.D. x<br>Height<br>mm | Part<br>Number   | Each<br>Price |
|----------------|-------------------------|--------------|------------------------|-----------------------------------|------------------|---------------|
| 5              | .01                     | .01          | 2                      | 7 x 735                           | <b>C-2128-5</b>  | \$300.43      |
| 10             | .02                     | .02          | 2                      | 8 x 735                           | <b>C-2128-10</b> | 300.43        |



**Buret, PYREX® , Precision Bore, Class A, Straight Bore Stopcock, Colored Markings**

Precision bore tubing is used to assure accuracy between any two points. Durable colored graduations are sharply defined and easy to read. Carefully ground stopcock gives precise control. Each buret is supplied with a dust cover. All sizes furnished with a 2mm bore stopcock plug.

The capacity tolerance on these burets is established by ASTM E287 and they are calibrated in accordance with ASTM E542.

| Capacity<br>mL | Grad.<br>Interval<br>mL | Tol.<br>±<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Stopcock<br>Bore<br>mm | Part<br>Number    | Each<br>Price |
|----------------|-------------------------|-----------------|-----------------------------------|------------------------|-------------------|---------------|
| 10             | .05                     | .02             | 9 x 565                           | 2                      | <b>C-2130-10</b>  | 149.77        |
| 25             | .10                     | .03             | 12 x 565                          | 2                      | <b>C-2130-25</b>  | 165.29        |
| 50             | .10                     | .05             | 14 x 755                          | 2                      | <b>C-2130-50</b>  | 180.29        |
| 100            | .20                     | .10             | 18 x 755                          | 2                      | <b>C-2130-100</b> | 188.71        |



**Class A**

**C-2130**

**Buret, PYREX® , Colored Scale, Class A, PTFE Stopcock Plug**

The capacity tolerance on these burets is established by ASTM E287 and they are calibrated in accordance with ASTM E542. Tips are carefully drawn from accurate bore tubing to insure proper drainage rates. This buret has colored markings, fine, sharp lines and large easy-to-read numbers. The stopcock barrel has a smooth micro-finish to assure leak-resistant performance. Each buret is supplied with a dust cover. All sizes are furnished with a 2mm bore stopcock plug.

| Capacity<br>mL | Grad.<br>Interval<br>mL | Tol.<br>±<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Part<br>Number    | Each<br>Price |
|----------------|-------------------------|-----------------|-----------------------------------|-------------------|---------------|
| 10             | .05                     | .02             | 9 x 560                           | <b>C-2103-10</b>  | \$121.48      |
| 25             | .10                     | .03             | 12 x 560                          | <b>C-2103-25</b>  | 129.87        |
| 50             | .10                     | .05             | 14 x 750                          | <b>C-2103-50</b>  | 139.07        |
| 100            | .20                     | .10             | 18 x 752                          | <b>C-2103-100</b> | 176.08        |

**Class A**



**C-2103**

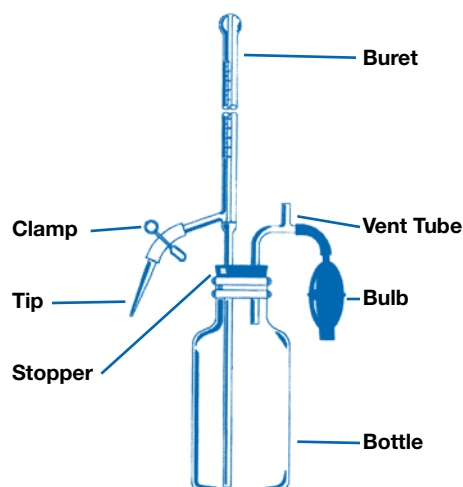
**Buret, PYREX® , Colored Scale, Straight Bore PTFE Stopcock**

Burets are suitable for use in school and institutional laboratories not requiring the accuracy of our Class A models. Supplied with a Teflon® stopcock plug.

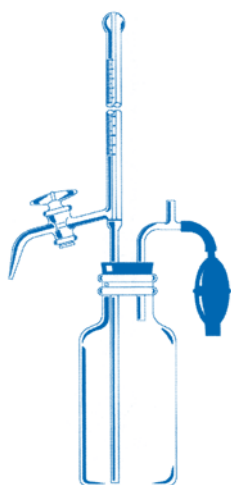
| Capacity<br>mL | Grad.<br>Interval<br>mL | Tol.<br>±<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Stopcock<br>Bore<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------------|-----------------|-----------------------------------|------------------------|--------------------|---------------|
| 10             | .05                     | .04             | 9 x 560                           | 2                      | <b>C-2122A-10</b>  | \$100.81      |
| 25             | .10                     | .06             | 12 x 560                          | 2                      | <b>C-2122A-25</b>  | 104.21        |
| 50             | .10                     | .10             | 14 x 750                          | 2                      | <b>C-2122A-50</b>  | 105.59        |
| 100            | .20                     | .20             | 18 x 752                          | 2                      | <b>C-2122A-100</b> | 127.37        |



**C-2122A**



**LG-4230**



**LG-4240**

### Buret, Automatic, Pinchcock, Laboratory Grade

An inexpensive portable titration outfit. The buret is filled by pressure through a tube extending from the bottle up inside the graduated tube. A small hole in the filling tube at the "O" line permits setting of the liquid level and return of the excess to the bottle. Furnished complete with buret, bottle, rubber hose, rubber stopper, pinchcock clamp, and bulb.

| Supplied                             | Capacity<br>mL | Sub-<br>divisions<br>mL | Bottle<br>Capacity<br>Ounces | Part<br>Number      | Each<br>Price |
|--------------------------------------|----------------|-------------------------|------------------------------|---------------------|---------------|
| Complete                             | 10             | 1/10                    | 16                           | <b>LG-4230-100</b>  | \$117.04      |
| Complete                             | 25             | 1/10                    | 32                           | <b>LG-4230-102</b>  | 137.45        |
| Complete                             | 50             | 1/10                    | 32                           | <b>LG-4230-104</b>  | 160.88        |
| Buret Only                           | 10             | 1/10                    |                              | <b>LG-4230-110</b>  | 93.34         |
| Buret Only                           | 25             | 1/10                    |                              | <b>LG-4230-112</b>  | 114.10        |
| Buret Only                           | 50             | 1/10                    |                              | <b>LG-4230-114</b>  | 131.06        |
| Bottle Only                          |                |                         | 16                           | <b>LG-4230-120</b>  | 15.41         |
| Bottle Only                          |                |                         | 32                           | <b>LG-4230-124</b>  | 17.81         |
| Vent Tube                            |                |                         |                              | <b>LG-4230-130</b>  | 4.16          |
| Rubber Bulb                          |                |                         |                              | <b>LG-4340-100</b>  | 13.96         |
| Pinchcock Clamp                      |                |                         |                              | <b>LG-4647-100</b>  | 1.81          |
| Buret Tip                            |                |                         |                              | <b>LG-4050-100</b>  | 4.60          |
| #9 Rubber Stopper for 10mL           |                |                         |                              | <b>LG-10392-126</b> | 3.00          |
| #10 1/2 Rubber Stopper for 25 & 50mL |                |                         |                              | <b>LG-10392-130</b> | 5.00          |

### Buret, Automatic, Straight Stopcock, Laboratory Grade

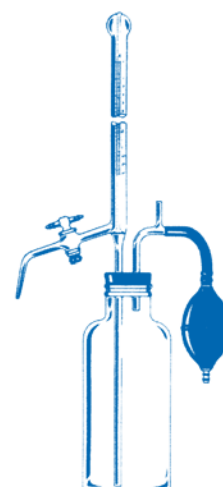
Similar to *LG-4230*, except the separable tip and clamp of the latter are replaced by an 2mm straight bore stopcock.

| Supplied                             | Capacity<br>mL | Sub-<br>divisions<br>mL | Bottle<br>Capacity<br>Ounces | Part<br>Number      | Each<br>Price |
|--------------------------------------|----------------|-------------------------|------------------------------|---------------------|---------------|
| Complete                             | 10             | 1/10                    | 16                           | <b>LG-4240-100</b>  | \$155.42      |
| Complete                             | 25             | 1/10                    | 32                           | <b>LG-4240-102</b>  | 165.69        |
| Complete                             | 50             | 1/10                    | 32                           | <b>LG-4240-104</b>  | 180.67        |
| Buret Only                           | 10             | 1/10                    |                              | <b>LG-4240-110</b>  | 131.72        |
| Buret Only                           | 25             | 1/10                    |                              | <b>LG-4240-112</b>  | 141.52        |
| Buret Only                           | 50             | 1/10                    |                              | <b>LG-4240-114</b>  | 154.37        |
| Bottle Only                          |                |                         | 16                           | <b>LG-4230-120</b>  | 15.41         |
| Bottle Only                          |                |                         | 32                           | <b>LG-4230-124</b>  | 17.81         |
| Vent Tube                            |                |                         |                              | <b>LG-4230-130</b>  | 4.16          |
| Rubber Bulb                          |                |                         |                              | <b>LG-4340-100</b>  | 13.96         |
| #9 Rubber Stopper for 10mL           |                |                         |                              | <b>LG-10392-126</b> | 3.00          |
| #10 1/2 Rubber Stopper for 25 & 50mL |                |                         |                              | <b>LG-10392-130</b> | 5.00          |

**Buret, Automatic, Straight Stopcock, With PTFE Plug, Laboratory Grade**

Buret is filled by pressure supplied by the rubber bulb. A small hole in the filling tube at zero line allows setting the liquid level and excess titrant is returned to the bottle. Supplied complete with 2mm PTFE plug. Subdivisions are 0.1mL.

| Supplied                             | Capacity<br>mL | Reservoir<br>Capacity<br>Ounces | Part<br>Number      | Each<br>Price |
|--------------------------------------|----------------|---------------------------------|---------------------|---------------|
| Complete                             | 10             | 16                              | <b>LG-4241T-100</b> | \$172.81      |
| Complete                             | 25             | 32                              | <b>LG-4241T-102</b> | 182.45        |
| Complete                             | 50             | 32                              | <b>LG-4241T-104</b> | 198.52        |
| Buret Only                           | 10             |                                 | <b>LG-4241T-110</b> | 147.15        |
| Buret Only                           | 25             |                                 | <b>LG-4241T-112</b> | 157.79        |
| Buret Only                           | 50             |                                 | <b>LG-4241T-114</b> | 170.52        |
| Rubber Bulb                          |                |                                 | <b>LG-4340-100</b>  | 13.96         |
| Vent Tube                            |                |                                 | <b>LG-4230-130</b>  | 4.16          |
| #9 Rubber Stopper for 10mL           |                |                                 | <b>LG-10392-126</b> | 3.00          |
| #10 1/2 Rubber Stopper for 25 & 50mL |                |                                 | <b>LG-10392-130</b> | 5.00          |

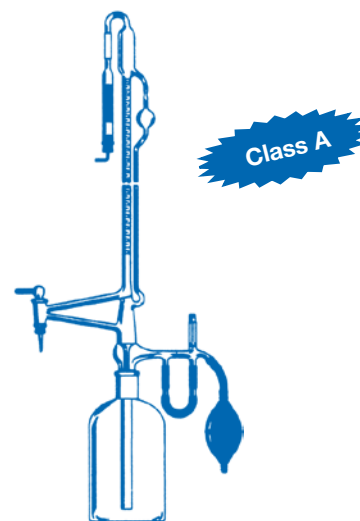


**LG-4241T**

**Buret, Automatic, Three-Way Stopcock With PTFE Plug, Class A**

Unit has a special three way 2mm PTFE plug. The buret provides for return of excess titrant to the LG-3460 reservoir bottle. A relief air valve automatically closes when air pressure is applied above the reservoir liquid level.

| Supplied    | Cap.<br>mL | Sub.<br>Division<br>mL | Tol.<br>± mL | Joint | Reservoir<br>Capacity<br>mL | Part<br>Number      | Each<br>Price |
|-------------|------------|------------------------|--------------|-------|-----------------------------|---------------------|---------------|
| Complete    | 10         | 1/20                   | 0.02         | 24/40 | 1000                        | <b>LG-4261T-110</b> | \$439.09      |
| Complete    | 25         | 1/10                   | 0.03         | 24/40 | 1000                        | <b>LG-4261T-112</b> | 451.88        |
| Complete    | 50         | 1/10                   | 0.05         | 29/42 | 2000                        | <b>LG-4261T-114</b> | 507.94        |
| Buret Only  | 10         | 1/20                   | 0.02         | 24/40 |                             | <b>LG-4261T-130</b> | 374.72        |
| Buret Only  | 25         | 1/10                   | 0.03         | 24/40 |                             | <b>LG-4261T-132</b> | 387.33        |
| Buret Only  | 50         | 1/10                   | 0.05         | 29/42 |                             | <b>LG-4261T-134</b> | 414.71        |
| Bottle Only |            |                        |              | 24/40 | 1000                        | <b>LG-3460-104</b>  | 45.31         |
| Bottle Only |            |                        |              | 29/42 | 2000                        | <b>LG-3460-106</b>  | 86.18         |
| Rubber Bulb |            |                        |              |       |                             | <b>LG-4340-100</b>  | 13.96         |

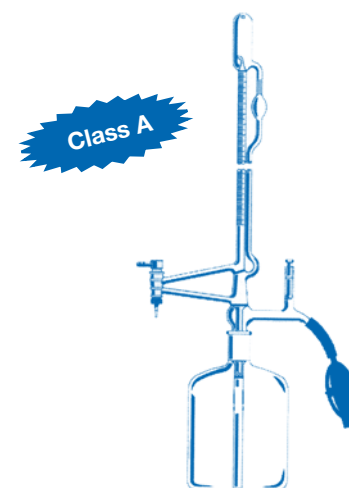


**LG-4261T**

**Buret, Automatic, Three-Way Stopcock With PTFE Plug, Class A**

A special three-way stopcock has a 2mm PTFE plug.

| Supplied    | Cap.<br>mL | Sub.<br>division<br>mL | Tol.<br>± mL | Joint | Reservoir<br>Capacity<br>mL | Part<br>Number      | Each<br>Price |
|-------------|------------|------------------------|--------------|-------|-----------------------------|---------------------|---------------|
| Complete    | 25         | 1/10                   | 0.03         | 24/40 | 1000                        | <b>LG-4271T-112</b> | \$586.67      |
| Complete    | 50         | 1/10                   | 0.05         | 29/42 | 2000                        | <b>LG-4271T-114</b> | 646.59        |
| Complete    | 100        | 1/5                    | 0.10         | 29/42 | 4000                        | <b>LG-4271T-116</b> | 819.48        |
| Buret Only  | 25         | 1/10                   | 0.03         | 24/40 |                             | <b>LG-4271T-132</b> | 500.32        |
| Buret Only  | 50         | 1/10                   | 0.05         | 29/42 |                             | <b>LG-4271T-134</b> | 523.98        |
| Buret Only  | 100        | 1/5                    | 0.10         | 29/42 |                             | <b>LG-4271T-136</b> | 630.07        |
| Bottle Only |            |                        |              | 24/40 | 1000                        | <b>LG-3460-104</b>  | 45.31         |
| Bottle Only |            |                        |              | 29/42 | 2000                        | <b>LG-3460-106</b>  | 86.18         |
| Bottle Only |            |                        |              | 29/42 | 4000                        | <b>LG-3460-108</b>  | 155.48        |
| Rubber Bulb |            |                        |              |       |                             | <b>LG-4340-100</b>  | 13.96         |



**LG-4271T**

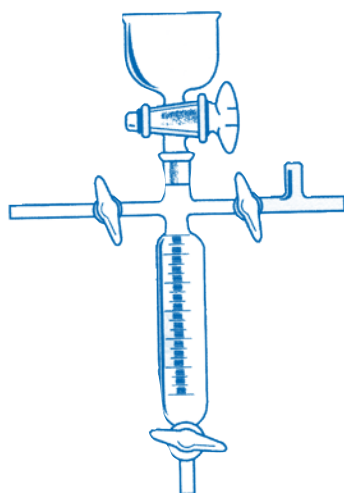


**LG-4340**

#### Buret, Rubber Bulb

Used in automatic buret assemblies. With rubber tubing attached to one end and with check valve at other end. When bulb is squeezed, valve closes, so that the displaced air is forced into the reservoir bottle to deliver titrant into the buret.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-4340-100</b> | \$13.96    |



**LG-4150**

#### Buret, Ammonia Dissociation

Used to determine the degree of dissociation of ammonia during the nitriding of steel alloys. Buret is 100mL and reads the amount of ammonia absorbed. Graduated from 10 to 90 percent in 1% subdivisions. Stopcocks are glass and a 14/20 joint connects the filling funnel with the buret.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-4150-100</b> | \$412.79   |

### Chemistry Kit, 14/20

Contains laboratory glassware components most commonly used for small scale organic procedures. Supplied in a heavy duty kit box with foam insert to hold parts securely in place.

| Supplied                                   | Part Number  | Each Price |
|--------------------------------------------|--------------|------------|
| Chemistry Kit, 14/20, Complete             | LK-13001-100 | \$416.70   |
| <i>Consists of one of each below:</i>      |              |            |
| Adapter, Claisen Type, Micro               | LK-70-100    | 43.26      |
| Adapter, Inlet (Bleed In)                  | LK-181-100   | 5.05       |
| Adapter, Thermometer, w/Rubber Fitament    | LK-280-100   | 13.49      |
| Adapter, Three Way, 75° Bend               | LK-320-100   | 33.82      |
| Adapter, Vacuum, 105° Bend                 | LK-390-100   | 36.66      |
| Column, Distilling, 190mm length           | LK-560-100   | 53.08      |
| Condenser, West, 190mm Length              | LK-590-100   | 53.68      |
| Flask, Round Bottom, 1-Neck, 25mL          | LK-1110-100  | 16.90      |
| Flask, Round Bottom, 1-Neck, 50 mL         | LK-1110-102  | 16.90      |
| Flask, Round Bottom, 1-Neck, 100mL         | LK-1110-104  | 16.90      |
| Flask, Round Bottom, 1-Neck, 250mL         | LK-1110-106  | 20.62      |
| Flask, Round Bottom, 1-Neck, 500mL         | LK-1110-108  | 25.29      |
| Funnel, Sep, Squibb, 125mL, w/2mm PTFE S/C | LK-1450T-100 | 76.11      |
| Stopper, Pennyhead                         | LK-1790-100  | 11.36      |
| Case Only                                  | LK-1945-000  | 25.00      |
| Foam Insert                                | LK-1946-000  | 15.00      |

ALL KITS CAN BE CUSTOMIZED  
TO MEET YOUR NEEDS  
REPLACEMENT PARTS AVAILABLE



LK-70  
Claisen  
Adapter



LK-320  
Three-Way  
Adapter



LK-390  
Vacuum  
Adapter



LK-280  
Thermometer  
Adapter



LK-560  
Distilling  
Column



LK-590  
West  
Condenser



LK-1450T  
Squibb  
Funnel



LK-181  
Inlet  
Adapter

### Chemistry Kit, 19/22

Contains laboratory glassware components most commonly used for small scale organic procedures. Supplied in a heavy duty kit box with foam insert to hold parts securely in place.

| Supplied                                   | Part Number  | Each Price |
|--------------------------------------------|--------------|------------|
| Chemistry Kit, 19/22 Complete              | LK-13001-102 | \$425.40   |
| <i>Consists of one each below:</i>         |              |            |
| Adapter, Claisen Type, Micro               | LK-70-102    | 44.11      |
| Adapter, Inlet (Bleed In)                  | LK-181-100   | 5.05       |
| Adapter, Thermometer, w/Rubber Fitament    | LK-280-102   | 13.60      |
| Adapter, Three Way, 75° Bend               | LK-320-102   | 36.30      |
| Adapter, Vacuum, 105° Bend                 | LK-390-102   | 37.72      |
| Column, Distilling, 190mm length           | LK-560-102   | 57.73      |
| Condenser, West, 190mm length              | LK-590-102   | 54.72      |
| Flask, Round Bottom, 1-Neck, 25mL          | LK-1110-150  | 17.02      |
| Flask, Round Bottom, 1-Neck, 50mL          | LK-1110-152  | 17.02      |
| Flask, Round Bottom, 1-Neck, 100mL         | LK-1110-154  | 17.02      |
| Flask, Round Bottom, 1-Neck, 250mL         | LK-1110-156  | 21.97      |
| Flask, Round Bottom, 1-Neck, 500mL         | LK-1110-158  | 25.67      |
| Funnel, Sep, Squibb, 125mL, w/2mm PTFE S/C | LK-1450T-102 | 78.75      |
| Stopper, Pennyhead                         | LK-1790-102  | 12.99      |
| Case Only                                  | LK-1945-000  | 25.00      |
| Foam Insert                                | LK-1946-000  | 15.00      |



LK-1110  
500mL  
Flask



LK-1110  
250mL  
Flask



LK-1110  
100mL  
Flask



LK-1110  
50mL  
Flask



LK-1110  
25mL  
Flask



LK-1790  
Stopper

CONTACT CUSTOMER SERVICE  
TO CUSTOMIZE YOUR KIT OR  
ORDER REPLACEMENT PARTS.

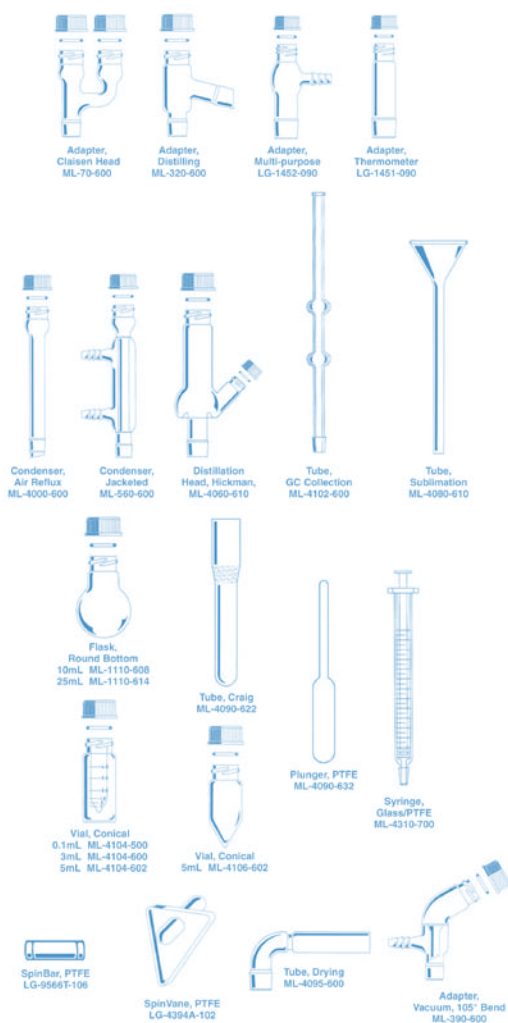


### Chemistry Kit, 14/10 Threaded Connections, Premier Kit

The 14/10 microscale kit components have an outer joint with an external thread. This allows the inner joint to be connected with an open top screw cap and O-Ring. Supplied in new easy access plastic kit box.

| Supplied                                      | Part Number         | Each Price |
|-----------------------------------------------|---------------------|------------|
| Chemistry Kit, Premier Complete               | <b>LK-15000-100</b> | \$412.59   |
| <i>Consists of: (quantity in parenthesis)</i> |                     |            |
| Adapter, Claisen Head, Threaded (1 each)      | <b>ML-70-600</b>    | 34.53      |
| Adapter, Distilling (1 each)                  | <b>ML-320-600</b>   | 33.84      |
| Adapter, Multi-Purpose (1 each)               | <b>LG-1452-090</b>  | 28.03      |
| Adapter, Thermometer (1 each)                 | <b>LG-1451-090</b>  | 19.51      |
| Adapter, Vacuum (1 each)                      | <b>ML-390-600</b>   | 36.66      |
| Condenser, Air Reflux, Threaded (1 each)      | <b>ML-4000-600</b>  | 21.06      |
| Condenser, Jacketed, Threaded (1 each)        | <b>ML-560-600</b>   | 38.14      |
| Distillation Head, Hickman, Threaded (1 each) | <b>ML-4060-600</b>  | 37.70      |
| Flask, Round Bottom, Threaded, 10mL (1 each)  | <b>ML-1110-608</b>  | 17.40      |
| Flask, Round Bottom, Threaded, 25mL (1 each)  | <b>ML-1110-614</b>  | 17.40      |
| Plunger, PTFE (1 each)                        | <b>ML-4090-632</b>  | 8.04       |
| SpinBar, PTFE 2 x 7mm (1 each)                | <b>LG-9566T-106</b> | 3.90       |
| SpinVane, PTFE, for 3mL/5mL vial (1 each)     | <b>LG-4394A-102</b> | 7.75       |
| Syringe, Glass/PTFE, 1mL (1 each)             | <b>ML-4310-700</b>  | 19.88      |
| Tube Only, Craig, 2mL (1 each)                | <b>ML-4090-622</b>  | 7.88       |
| Tube, Drying (1 each)                         | <b>ML-4095-600</b>  | 17.75      |
| Tube, GC Collection, 5/5 (2 each)             | <b>ML-4102-600</b>  | 7.62       |
| Tube, Sublimation (1 each)                    | <b>ML-4080-610</b>  | 7.94       |
| Vial, Conical, 1mL (2 each)                   | <b>ML-4104-500</b>  | 7.69       |
| Vial, Conical, 3mL (2 each)                   | <b>ML-4104-600</b>  | 15.85      |
| Vial, Conical, 5mL (1 each)                   | <b>ML-4104-602</b>  | 15.85      |
| Vial, Conical, Thin Wall, 5mL (1 each)        | <b>ML-4106-602</b>  | 15.73      |
| Kit Box for 14/10 Glassware (1 each)          | <b>ML-4400-610</b>  | 25.00      |
| Foam Insert for 14/10 Glassware (1 each)      | <b>ML-4400-620</b>  | 15.00      |

*All kits can be customized to meet your needs.  
Contact Customer Service for information.*



**Replacement  
Parts Available**

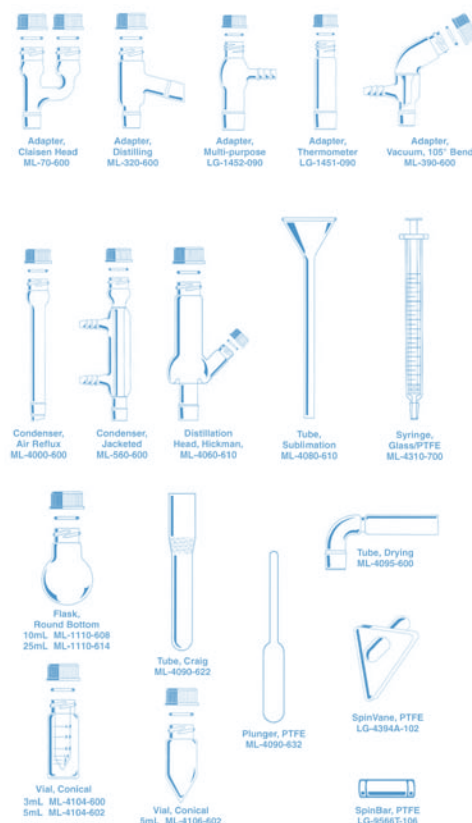


### Chemistry Kit, 14/10 Threaded Connections, Supreme Kit

The 14/10 microscale kit components have an outer joint with an external thread. This allows the inner joint to be connected with an open top screw cap and O-Ring. Supplied in new easy access plastic kit box.

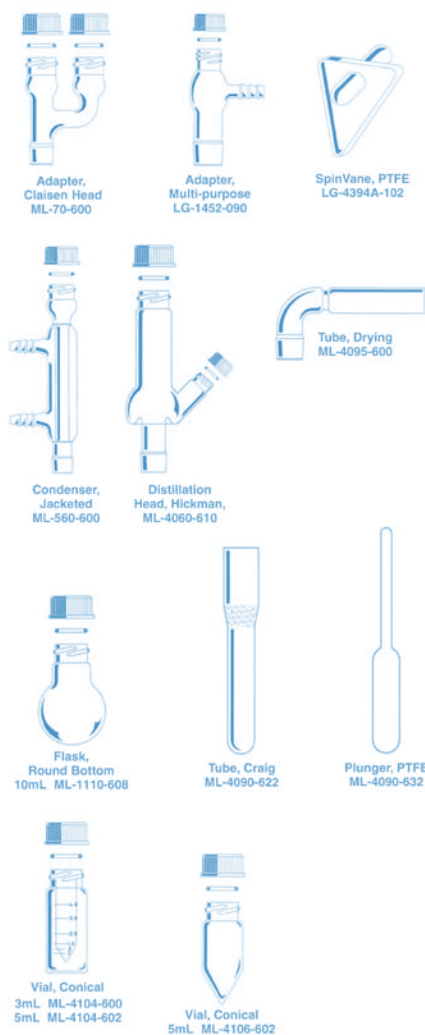
| Supplied                                      | Part Number         | Each Price |
|-----------------------------------------------|---------------------|------------|
| Chemistry Kit, Supreme Complete               | <b>LK-15000-110</b> | \$391.18   |
| <i>Consists of: (quantity in parenthesis)</i> |                     |            |
| Adapter, Claisen Head, Threaded (1 each)      | <b>ML-70-600</b>    | 34.53      |
| Adapter, Distilling (1 each)                  | <b>ML-320-600</b>   | 33.84      |
| Adapter, Multi-Purpose (1 each)               | <b>LG-1452-090</b>  | 28.03      |
| Adapter, Thermometer (1 each)                 | <b>LG-1451-090</b>  | 19.51      |
| Adapter, Vacuum (1 each)                      | <b>ML-390-600</b>   | 36.66      |
| Condenser, Air Reflux, Threaded (1 each)      | <b>ML-4000-600</b>  | 21.06      |
| Condenser, Jacketed, Threaded (1 each)        | <b>ML-560-600</b>   | 38.14      |
| Distillation Head, Hickman, Threaded (1 each) | <b>ML-4060-600</b>  | 37.70      |
| Flask, Round Bottom, Threaded 10mL (1 each)   | <b>ML-1110-608</b>  | 17.40      |
| Flask, Round Bottom, Threaded, 25mL (1 each)  | <b>ML-1110-614</b>  | 17.40      |
| Plunger, PTFE (1 each)                        | <b>ML-4090-632</b>  | 8.04       |
| SpinBar, PTFE 2 x 7mm (1 each)                | <b>LG-9566T-106</b> | 3.90       |
| SpinVane, PTFE, for 3mL/5mL vial (1 each)     | <b>LG-4394A-102</b> | 7.75       |
| Syringe, Glass/PTFE, 1mL (1 each)             | <b>ML-4310-700</b>  | 19.88      |
| Tube Only, Craig, 2mL (1 each)                | <b>ML-4090-622</b>  | 7.88       |
| Tube, Drying (1 each)                         | <b>ML-4095-600</b>  | 17.75      |
| Tube, Sublimation (1 each)                    | <b>ML-4080-610</b>  | 7.94       |
| Vial, Conical, 3mL (2 each)                   | <b>ML-4104-600</b>  | 15.85      |
| Vial, Conical, 5mL (1 each)                   | <b>ML-4104-602</b>  | 15.85      |
| Vial, Conical, Thin Wall, 5mL (1 each)        | <b>ML-4106-602</b>  | 15.73      |
| Kit Box for 14/10 Glassware (1 each)          | <b>ML-4400-610</b>  | 25.00      |
| Foam Insert for 14/10 Glassware (1 each)      | <b>ML-4400-620</b>  | 15.00      |

All kits can be customized to meet your needs.  
Contact Customer Service for information.



Replacement  
Parts Available





**Replacement  
Parts Available**

### Chemistry Kit, 14/10 Threaded Connections, Standard Kit

The 14/10 microscale kit components have an outer joint with an external thread. This allows the inner joint to be connected with an open top screw cap and O-Ring. Supplied in new easy access plastic kit box.

| Supplied                                      | Part Number         | Each Price |
|-----------------------------------------------|---------------------|------------|
| Chemistry Kit, Standard, Complete             | <b>LK-15000-120</b> | \$257.23   |
| <i>Consists of: (quantity in parenthesis)</i> |                     |            |
| Adapter, Claisen Head, Threaded (1 each)      | <b>ML-70-600</b>    | 34.53      |
| Adapter, Multi-Purpose (1 each)               | <b>LG-1452-090</b>  | 28.03      |
| Condenser, Jacketed, Threaded (1 each)        | <b>ML-560-600</b>   | 38.14      |
| Distillation Head, Hickman, Threaded (1 each) | <b>ML-4060-610</b>  | 37.70      |
| Flask, Round Bottom, Threaded, 10mL (1 each)  | <b>ML-1110-608</b>  | 17.40      |
| SpinVane, PTFE, for 3mL/5mL vial (1 each)     | <b>LG-4394A-102</b> | 7.75       |
| Tube Only, Craig, 2mL (1 each)                | <b>ML-4090-622</b>  | 7.88       |
| Plunger, PTFE (1 each)                        | <b>ML-4090-632</b>  | 8.04       |
| Tube, Drying (1 each)                         | <b>ML-4095-600</b>  | 17.75      |
| Vial, Conical, 3mL (1 each)                   | <b>ML-4104-600</b>  | 15.85      |
| Vial, Conical, 5mL (1 each)                   | <b>ML-4104-602</b>  | 15.85      |
| Vial, Conical, Thin Wall, 5mL (1 each)        | <b>ML-4106-602</b>  | 15.73      |
| Kit Box for 14/10 Glassware (1 each)          | <b>ML-4400-610</b>  | 25.00      |
| Foam Insert for 14/10 Glassware (1 each)      | <b>ML-4400-620</b>  | 15.00      |

*All kits can be customized to meet your needs.  
Contact Customer Service for information.*

**Chromatography, Column with Reservoir**

Basic column which is useful for adsorption or ion exchange chromatography.

| Column<br>I.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|-------------------------------|--------------------|---------------|
| 6 x 200                       | <b>LG-4550-098</b> | \$21.94       |
| 7 x 200                       | <b>LG-4550-100</b> | 21.94         |
| 9 x 200                       | <b>LG-4550-102</b> | 23.25         |

**LG-4550****Chromatography, Column, General Purpose**

General column for ion exchange or adsorption chromatography. Glass wool is used as a bed support.

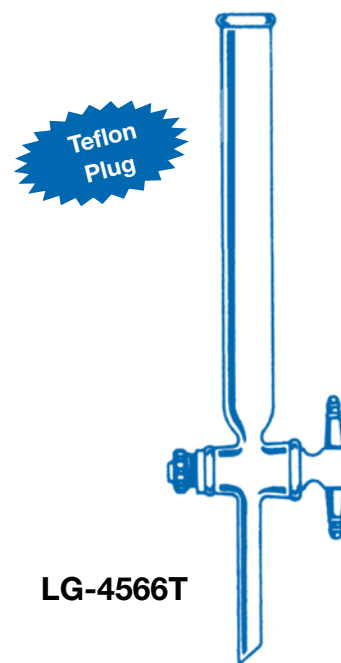
| Column<br>I.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|-------------------------------|--------------------|---------------|
| 22 x 200                      | <b>LG-4556-104</b> | \$26.59       |
| 22 x 250                      | <b>LG-4556-106</b> | 26.24         |
| 22 x 300                      | <b>LG-4556-108</b> | 26.87         |
| 22 x 400                      | <b>LG-4556-110</b> | 27.44         |

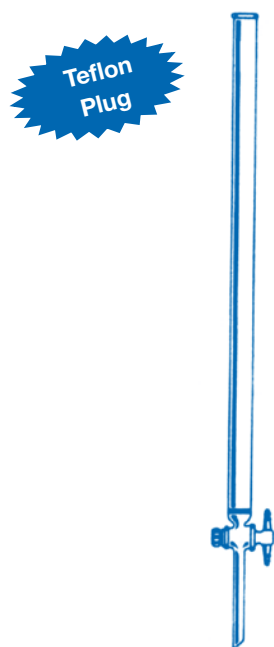
**LG-4556****Chromatography, Column, Plain, Straight Stopcock with PTFE Plug**

With stopcock having PTFE plug.

| Column<br>I.D. x Length<br>mm | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|-------------------------------|------------------|---------------------|---------------|
| 10.5 x 150                    | 2                | <b>LG-4566T-100</b> | \$67.17       |
| 10.5 x 250                    | 2                | <b>LG-4566T-104</b> | 67.17         |
| 14.5 x 250                    | 2                | <b>LG-4566T-108</b> | 67.17         |
| 14.5 x 500                    | 2                | <b>LG-4566T-110</b> | 77.46         |
| 19 x 250                      | 2                | <b>LG-4566T-114</b> | 74.72         |
| 19 x 300                      | 2                | <b>LG-4566T-116</b> | 80.76         |
| 19 x 500                      | 2                | <b>LG-4566T-118</b> | 82.62         |
| 22 x 300                      | 2                | <b>LG-4566T-122</b> | 79.41         |
| 22 x 350                      | 2                | <b>LG-4566T-124</b> | 81.99         |
| 22 x 500                      | 2                | <b>LG-4566T-126</b> | 89.09         |
| 29.5 x 350                    | 3                | <b>LG-4566T-130</b> | 95.53         |
| 29.5 x 400                    | 3                | <b>LG-4566T-132</b> | 99.42         |
| 29.5 x 500                    | 3                | <b>LG-4566T-134</b> | 105.87        |
| 34 x 500                      | 3                | <b>LG-4566T-140</b> | 114.91        |
| 34 x 600                      | 3                | <b>LG-4566T-142</b> | 111.64        |
| 41 x 500                      | 4                | <b>LG-4566T-146</b> | 118.78        |
| 44 x 500                      | 4                | <b>LG-4566T-152</b> | 127.81        |
| 44 x 600                      | 4                | <b>LG-4566T-154</b> | 140.54        |

Available in other sizes upon request

**LG-4566T**



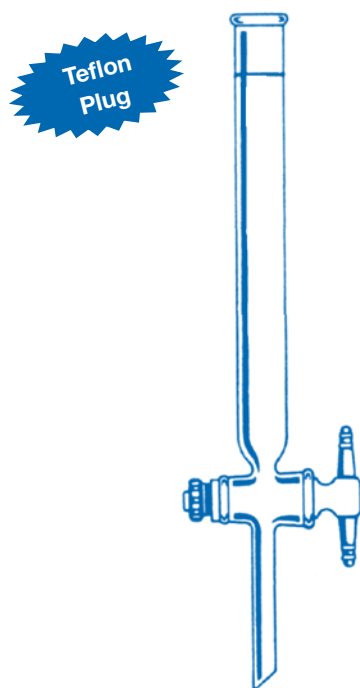
LG-4567T

## Chromatography, Column, Fritted Disc, Straight Stopcock with PTFE Plug

Similar to LG-4566T except with coarse (C) porosity fritted disc sealed into column just above stopcock.

| Column I.D. x Length mm | Stopcock Size | Part Number  | Each Price |
|-------------------------|---------------|--------------|------------|
| 10.5 x 150              | 2             | LG-4567T-100 | \$76.19    |
| 10.5 x 250              | 2             | LG-4567T-104 | 76.19      |
| 14.5 x 200              | 2             | LG-4567T-106 | 76.19      |
| 14.5 x 250              | 2             | LG-4567T-108 | 76.19      |
| 14.5 x 500              | 2             | LG-4567T-110 | 82.62      |
| 22 x 300                | 2             | LG-4567T-122 | 87.14      |
| 22 x 350                | 2             | LG-4567T-124 | 89.74      |
| 22 x 500                | 2             | LG-4567T-126 | 96.84      |
| 29.5 x 350              | 3             | LG-4567T-130 | 103.29     |
| 29.5 x 500              | 3             | LG-4567T-134 | 112.32     |
| 34 x 500                | 3             | LG-4567T-140 | 122.65     |
| 41 x 500                | 4             | LG-4567T-146 | 126.54     |
| 41 x 600                | 4             | LG-4567T-148 | 133.62     |

Available in other sizes upon request



LG-4568T

## Chromatography, Column, Plain, Joint, Straight Stopcock with PTFE Plug

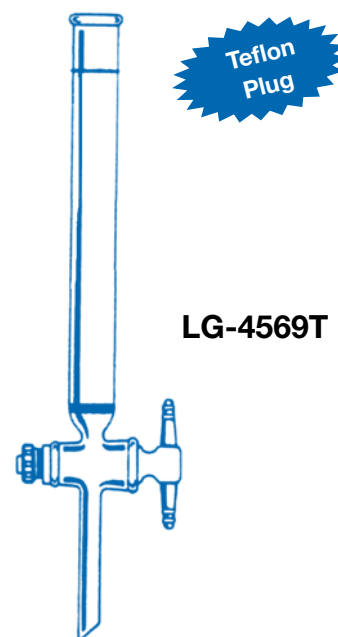
Similar to LG-4566T except with outer joint at top.

| Column I.D. x Length mm | Joint | Stopcock Size | Part Number  | Each Price |
|-------------------------|-------|---------------|--------------|------------|
| 10.5 x 150              | 24/40 | 2             | LG-4568T-100 | \$72.31    |
| 10.5 x 200              | 24/40 | 2             | LG-4568T-102 | 72.31      |
| 10.5 x 250              | 24/40 | 2             | LG-4568T-104 | 72.31      |
| 14.5 x 250              | 24/40 | 2             | LG-4568T-108 | 72.31      |
| 14.5 x 500              | 24/40 | 2             | LG-4568T-110 | 78.77      |
| 19 x 250                | 24/40 | 2             | LG-4568T-114 | 90.40      |
| 19 x 300                | 24/40 | 2             | LG-4568T-116 | 95.21      |
| 19 x 500                | 24/40 | 2             | LG-4568T-118 | 83.93      |
| 22 x 300                | 24/40 | 2             | LG-4568T-122 | 80.68      |
| 22 x 350                | 24/40 | 2             | LG-4568T-124 | 83.29      |
| 22 x 500                | 24/40 | 2             | LG-4568T-126 | 90.36      |
| 29.5 x 400              | 24/40 | 3             | LG-4568T-132 | 100.71     |
| 29.5 x 500              | 24/40 | 3             | LG-4568T-134 | 107.16     |
| 29.5 x 600              | 24/40 | 3             | LG-4568T-136 | 107.81     |
| 34 x 500                | 24/40 | 3             | LG-4568T-140 | 116.20     |
| 34 x 600                | 24/40 | 3             | LG-4568T-142 | 119.76     |

**Chromatography, Column, Fritted Disc, Joint, Straight Stopcock with PTFE Plug and Sealed in Coarse Fritted Disc**

Similar to LG-4567T, except with outer joint at top.

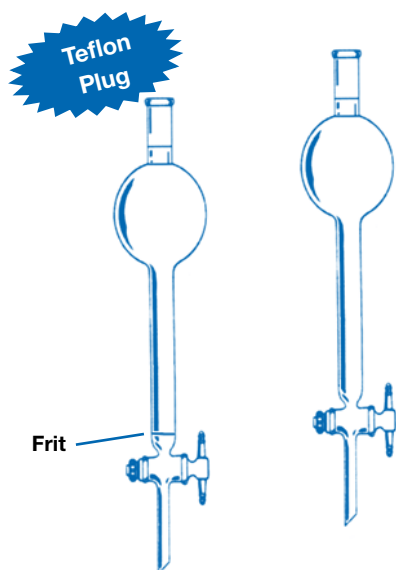
| Column<br>I.D. x Length<br>mm | Joint | Stopcock<br>Size | Part<br>Number | Each<br>Price |
|-------------------------------|-------|------------------|----------------|---------------|
| 10.5 x 150                    | 24/40 | 2                | LG-4569T-100   | \$78.77       |
| 10.5 x 200                    | 24/40 | 2                | LG-4569T-102   | 78.77         |
| 10.5 x 250                    | 24/40 | 2                | LG-4569T-104   | 78.77         |
| 14.5 x 200                    | 24/40 | 2                | LG-4569T-106   | 78.77         |
| 14.5 x 250                    | 24/40 | 2                | LG-4569T-108   | 78.77         |
| 14.5 x 500                    | 24/40 | 2                | LG-4569T-110   | 85.20         |
| 19 x 250                      | 24/40 | 2                | LG-4569T-114   | 102.45        |
| 19 x 300                      | 24/40 | 2                | LG-4569T-116   | 108.47        |
| 22 x 300                      | 24/40 | 2                | LG-4569T-122   | 89.74         |
| 22 x 350                      | 24/40 | 2                | LG-4569T-124   | 92.30         |
| 22 x 500                      | 24/40 | 2                | LG-4569T-126   | 99.42         |
| 29.5 x 350                    | 24/40 | 3                | LG-4569T-130   | 105.87        |
| 29.5 x 400                    | 24/40 | 3                | LG-4569T-132   | 109.76        |
| 29.5 x 500                    | 24/40 | 3                | LG-4569T-134   | 114.91        |
| 29.5 x 600                    | 24/40 | 3                | LG-4569T-136   | 116.86        |
| 34 x 500                      | 24/40 | 3                | LG-4569T-140   | 125.25        |
| 34 x 600                      | 24/40 | 3                | LG-4569T-142   | 128.46        |
| 41 x 500                      | 24/40 | 4                | LG-4569T-146   | 129.10        |
| 41 x 600                      | 24/40 | 4                | LG-4569T-148   | 136.20        |
| 44 x 500                      | 24/40 | 4                | LG-4569T-152   | 138.78        |
| 44 x 600                      | 24/40 | 4                | LG-4569T-154   | 151.69        |
| 49 x 250                      | 24/40 | 4                | LG-4569T-155   | 166.32        |
| 49 X 300                      | 24/40 | 4                | LG-4569T-157   | 178.38        |
| 49 X 450                      | 24/40 | 4                | LG-4569T-158   | 185.93        |
| 49 X 600                      | 24/40 | 4                | LG-4569T-159   | 196.45        |
| 49 X 1000                     | 24/40 | 4                | LG-4569T-162   | 237.58        |
| 64 x 250                      | 45/50 | 4                | LG-4569T-170   | 179.57        |
| 64 x 300                      | 45/50 | 4                | LG-4569T-172   | 190.45        |
| 64 x 450                      | 45/50 | 4                | LG-4569T-174   | 221.77        |
| 95 x 450                      | 45/50 | 4                | LG-4569T-190   | 321.99        |
| 95 x 600                      | 45/50 | 4                | LG-4569T-192   | 380.03        |
| 95 x 900                      | 45/50 | 4                | LG-4569T-194   | 415.16        |
| 95 x 1200                     | 45/50 | 4                | LG-4569T-196   | 452.88        |

**Chromatography, Column, Plain, Straight Stopcock with PTFE Plug**

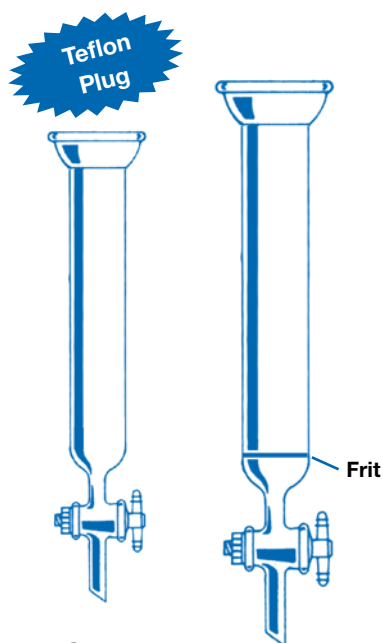
With reservoir at top and with 2mm stopcock having a PTFE plug. Reservoir has joint to accept #2 rubber stopper.

| Column<br>I.D. x Length<br>mm | Capacity of<br>Reservoir<br>mL | Part<br>Number | Each<br>Price |
|-------------------------------|--------------------------------|----------------|---------------|
| 10.5 x 250                    | 200                            | LG-4565T-100   | \$77.34       |
| 14.5 x 250                    | 250                            | LG-4565T-102   | 81.08         |
| 19 x 300                      | 250                            | LG-4565T-104   | 86.49         |
| 22 x 350                      | 300                            | LG-4565T-106   | 95.53         |
| 29.5 x 400                    | 500                            | LG-4565T-108   | 108.45        |



**LG-4564T**

All Columns  
Available  
Safety  
Coated

**LG-4530  
LG-4535****Chromatography, Column, with Reservoir, PTFE Plug**

With reservoir at top and 2mm stopcock having a PTFE plug. Also supplied with Coarse frit.

| Column<br>I.D. x Length<br>mm | Capacity of<br>Reservoir<br>mL | Joint<br>Size | Part<br>Number      | Each<br>Price |
|-------------------------------|--------------------------------|---------------|---------------------|---------------|
| 10.5 x 250                    | 200                            | 24/40         | <b>LG-4564T-100</b> | \$87.31       |
| 14.5 x 250                    | 250                            | 24/40         | <b>LG-4564T-102</b> | 91.07         |
| 19 x 300                      | 250                            | 24/40         | <b>LG-4564T-104</b> | 94.80         |
| 22 x 350                      | 300                            | 24/40         | <b>LG-4564T-106</b> | 102.29        |
| 29.5 x 400                    | 500                            | 24/40         | <b>LG-4564T-108</b> | 114.75        |
| 41 x 300                      | 500                            | 24/40         | <b>LG-4564T-110</b> | 126.50        |
| 49 x 300                      | 1000                           | 24/40         | <b>LG-4564T-112</b> | 164.80        |
| 10.5 x 250                    | 200                            | 35/25         | <b>LG-4564T-120</b> | 87.90         |
| 14.5 x 250                    | 250                            | 35/25         | <b>LG-4564T-122</b> | 91.80         |
| 19 x 300                      | 250                            | 35/25         | <b>LG-4564T-124</b> | 95.35         |
| 22 x 350                      | 300                            | 35/25         | <b>LG-4564T-126</b> | 103.45        |
| 29.5 x 400                    | 500                            | 35/25         | <b>LG-4564T-128</b> | 115.60        |
| 41 x 300                      | 500                            | 35/25         | <b>LG-4564T-130</b> | 127.80        |
| 49 x 300                      | 1000                           | 35/25         | <b>LG-4564T-132</b> | 166.05        |
| With Coarse Frit              |                                |               |                     |               |
| 10.5 x 250                    | 200                            | 24/40         | <b>LG-4564T-200</b> | \$99.40       |
| 14.5 x 250                    | 250                            | 24/40         | <b>LG-4564T-202</b> | 103.25        |
| 19 x 300                      | 250                            | 24/40         | <b>LG-4564T-204</b> | 108.10        |
| 22 x 350                      | 300                            | 24/40         | <b>LG-4564T-206</b> | 116.45        |
| 29.5 x 400                    | 500                            | 24/40         | <b>LG-4564T-208</b> | 130.05        |
| 41 x 300                      | 500                            | 24/40         | <b>LG-4564T-210</b> | 142.75        |
| 49 x 300                      | 1000                           | 24/40         | <b>LG-4564T-212</b> | 182.45        |
| 10.5 x 250                    | 200                            | 35/25         | <b>LG-4564T-220</b> | 100.10        |
| 14.5 x 250                    | 250                            | 35/25         | <b>LG-4564T-222</b> | 104.65        |
| 19 x 300                      | 250                            | 35/25         | <b>LG-4564T-224</b> | 110.00        |
| 22 x 350                      | 300                            | 35/25         | <b>LG-4564T-226</b> | 118.15        |
| 29.5 x 400                    | 500                            | 35/25         | <b>LG-4564T-228</b> | 131.90        |
| 41 x 300                      | 500                            | 35/25         | <b>LG-4564T-230</b> | 144.60        |
| 49 x 300                      | 1000                           | 35/25         | <b>LG-4564T-232</b> | 184.70        |

**Chromatography, Flash Column with PTFE Plug**

Useful for separation and purification of samples by absorption chromatography. Complete assembly consists of column, reservoir, flow controller and clamps. Each component can be ordered separately.

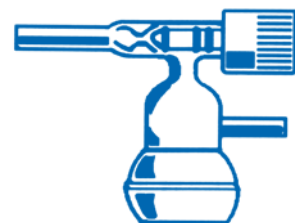
LG-4535 is similar to LG-4530 but made with heavy wall tubing to withstand greater pressure applications.

| Column<br>O.D. x Length<br>mm | Joint<br>Size | Part<br>Number     | Each<br>Price |
|-------------------------------|---------------|--------------------|---------------|
| 13 x 450                      | 35/20         | <b>LG-4530-100</b> | \$112.32      |
| 22 x 450                      | 35/20         | <b>LG-4530-102</b> | 144.25        |
| 45 x 450                      | 35/20         | <b>LG-4530-104</b> | 111.79        |
| 54 x 450                      | 35/20         | <b>LG-4530-106</b> | 119.95        |
| 38 x 400                      | 50/30         | <b>LG-4535-102</b> | 148.00        |
| 38 x 550                      | 50/30         | <b>LG-4535-104</b> | 153.50        |
| With Coarse Frit              |               |                    |               |
| 13 x 450                      | 35/20         | <b>LG-4530-200</b> | \$157.70      |
| 22 x 450                      | 35/20         | <b>LG-4530-202</b> | 171.30        |
| 45 x 450                      | 35/20         | <b>LG-4530-204</b> | 183.80        |
| 54 x 450                      | 35/20         | <b>LG-4530-206</b> | 201.05        |
| 13 x 450                      | 50/30         | <b>LG-4535-200</b> | 162.40        |
| 22 x 450                      | 50/30         | <b>LG-4535-202</b> | 178.10        |
| 45 x 450                      | 50/30         | <b>LG-4535-204</b> | 190.30        |

**Chromatography, Flow Controller**

A component to control pressure applied to the reservoir or directly to the column. Designed to effect rapid separations in both analytical and preparative modes. PTFE valve and vent control pressure to reservoir/column, Top valve is 0-4mm.

| Joint | Part Number        | Each Price |
|-------|--------------------|------------|
| 24/40 | <b>LG-4520-098</b> | \$84.20    |
| 35/20 | <b>LG-4520-100</b> | 86.31      |
| 50/30 | <b>LG-4520-102</b> | 98.83      |

**LG-4520****Chromatography, Flash Reservoir**

For containment of mobile phase when larger volumes are required to elute samples from *LG-4530*. Upper outer is used with flow controller while lower inner connects with column.

| Capacity mL | Joint | Part Number        | Each Price |
|-------------|-------|--------------------|------------|
| 250         | 24/40 | <b>LG-4526-102</b> | \$53.15    |
| 500         | 24/40 | <b>LG-4526-104</b> | 57.60      |
| 1000        | 24/40 | <b>LG-4526-106</b> | 64.10      |
| 2000        | 24/40 | <b>LG-4526-108</b> | 79.65      |
| 250         | 35/20 | <b>LG-4525-100</b> | 55.58      |
| 500         | 35/20 | <b>LG-4525-102</b> | 59.11      |
| 1000        | 35/20 | <b>LG-4525-104</b> | 65.02      |
| 1000        | 50/30 | <b>LG-4525-110</b> | 80.72      |
| 2000        | 50/30 | <b>LG-4525-112</b> | 114.50     |

*Note: Available Safety Coated.*

**LG-4525****LG-4526****Chromatography, Column, Large Diameter, Fritted Disc/PTFE Stopcock**

With PTFE stopcock at bottom and coarse porosity disc sealed in. Minimum dead space between coarse porosity fritted disc and stopcock. Other diameters and frit porosities available on request.

| Column I.D. inches | Column Length mm | Stopcock Size mm | Part Number        | Each Price |
|--------------------|------------------|------------------|--------------------|------------|
| 2                  | 300              | 4                | <b>LG-4552-100</b> | \$205.54   |
| 2                  | 600              | 4                | <b>LG-4552-102</b> | 215.38     |
| 3                  | 300              | 6                | <b>LG-4552-110</b> | 295.54     |
| 3                  | 600              | 6                | <b>LG-4552-112</b> | 311.63     |
| 4                  | 300              | 6                | <b>LG-4552-120</b> | 386.23     |
| 4                  | 600              | 6                | <b>LG-4552-122</b> | 410.11     |

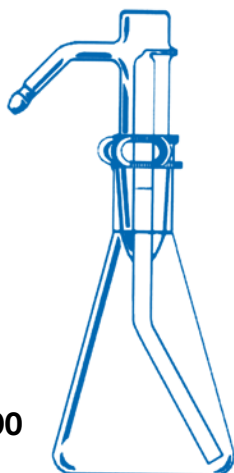
**LG-4552**

**LG-4558**

### Chromatography, Cap Adapter for Column Section

Cap adapter used on top of column sections. Use *LG-4661* clamp to connect to top of column section.

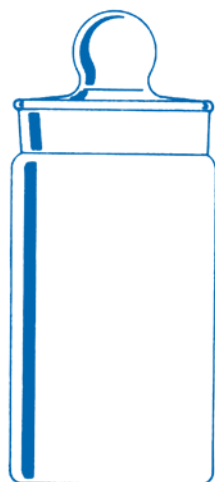
| Column I.D.<br>Inches | Joint | Part<br>Number     | Each<br>Price |
|-----------------------|-------|--------------------|---------------|
| 2                     | 29/42 | <b>LG-4558-100</b> | \$95.29       |
| 3                     | 29/42 | <b>LG-4558-102</b> | 150.82        |
| 4                     | 29/42 | <b>LG-4558-104</b> | 229.26        |
| 4                     | 45/50 | <b>LG-4558-108</b> | 239.17        |
| 2                     | 35/20 | <b>LG-4558-200</b> | 96.16         |
| 3                     | 50/30 | <b>LG-4558-202</b> | 155.19        |
| 4                     | 65/40 | <b>LG-4558-204</b> | 243.18        |
| 4                     | 75/50 | <b>LG-4558-206</b> | 250.82        |

**LG-4590**

### Chromatography, Reagent Atomizer

For spraying chromogenic reagents when using thin layer or paper chromatography. Complete unit consists of the spray head, flask and *LG-1004* clamp. All joints are 24/40. The air inlet tube has an opening to release pressure and to stop spraying.

| Supplied   | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|------------|----------------|--------------------|---------------|
| Complete   | 125            | <b>LG-4590-100</b> | \$105.77      |
| Complete   | 250            | <b>LG-4590-102</b> | 107.07        |
| Flask Only | 125            | <b>LG-4590-110</b> | 31.59         |
| Flask Only | 250            | <b>LG-4590-112</b> | 32.89         |
| Spray Only | 125            | <b>LG-4590-120</b> | 74.81         |
| Spray Only | 250            | <b>LG-4590-122</b> | 74.81         |
| Clamp Only |                | <b>LG-1004-108</b> | 2.58          |

**LG-4595**

### Chromatography, Tank, Cylindrical, TLC Developing, Round, with Stop-

Heavy wall borosilicate glass round tank. Used in development of TLC plates.

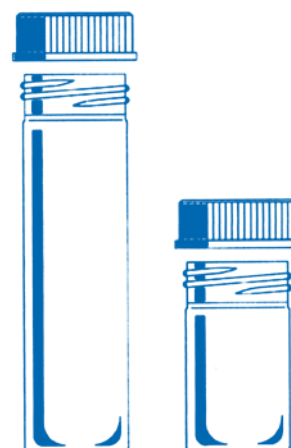
| Fits Plates<br>Supplied | Joint<br>Sizes (mm) | Part<br>Size | Each<br>Number     | Price   |
|-------------------------|---------------------|--------------|--------------------|---------|
| Complete                | 25 x 75             | 34/12        | <b>LG-4595-096</b> | \$58.10 |
| Complete                | 25 x 100            | 34/12        | <b>LG-4595-098</b> | 82.40   |
| Complete                | 50 x 100            | 60/21        | <b>LG-4595-100</b> | 119.93  |
| Complete                | 50 x 200            | 60/21        | <b>LG-4595-102</b> | 153.06  |
| Tank Only               | 25 x 75             |              | <b>LG-4595-106</b> | 34.50   |
| Tank Only               | 25 x 100            |              | <b>LG-4595-108</b> | 59.90   |
| Tank Only               | 50 x 100            |              | <b>LG-4595-110</b> | 73.63   |
| Tank Only               | 50 x 200            |              | <b>LG-4595-112</b> | 105.93  |
| Stopper Only            |                     | 34/12        | <b>LG-4595-118</b> | 28.70   |
| Stopper Only            |                     | 60/21        | <b>LG-4595-120</b> | 50.86   |



**Chromatography, Cylindrical, TLC Developing**

Glass cylindrical developing chambers with flat bottoms and molded plastic caps.

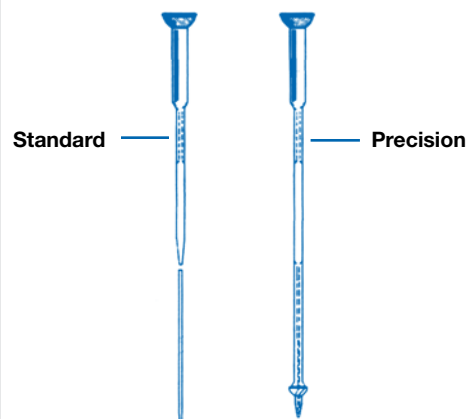
| Plate<br>WxL<br>mm | Approx. O.D.<br>x Height<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|--------------------------------|--------------------|---------------|
| 25 x 75            | 42 x 95                        | <b>LG-4597-098</b> | \$31.48       |
| 50 x 100           | 70 x 120                       | <b>LG-4597-100</b> | 33.93         |
| 50 x 200           | 70 x 220                       | <b>LG-4597-102</b> | 39.72         |

**LG-4597****Chromatography, Column, FIA, ASTM**

Used to determine saturates, nonaromatic olefins, and aromatics in petroleum fractions that distill below 315°C as specified in ASTM D 1319 Standard Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption. The standard column is drawn to a fine point for retaining silica gel. The precision bore column has a removable capillary tip joined to the analyzer section by a 12/2 spherical joint. Both columns are approximately 160cm in length and have a 28/12 socket joint at the top.

*Reference No. ASTM D 1319 Standard Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption*

| Type      | Part<br>Number     | Each<br>Price |
|-----------|--------------------|---------------|
| Standard  | <b>LG-5931-100</b> | \$76.70       |
| Precision | <b>LG-5931-102</b> | 237.32        |

**LG-5931**

**Selection Chart For CHROMWARE® HPLC Mobile Phase Handling Systems**

| <b>CHROMWARE®<br/>Systems</b>                         | <b>CHROMWARE® Systems Features</b> |                                             |                                            |                                      |          |          |          |
|-------------------------------------------------------|------------------------------------|---------------------------------------------|--------------------------------------------|--------------------------------------|----------|----------|----------|
|                                                       | <b>Filtration Cap</b>              | <b>Combination Filtration/Reservoir Cap</b> |                                            |                                      |          |          |          |
|                                                       |                                    | <b>Rapid Mixing TORNADO Reservoir</b>       | <b>Helium Sparging Fittings and Filter</b> |                                      |          |          |          |
|                                                       |                                    |                                             | <b>Air-Tight Reservoir Cap</b>             | <b>On-Off Valve on Reservoir Cap</b> |          |          |          |
|                                                       |                                    |                                             |                                            | <b>THF-Resistant</b>                 |          |          |          |
|                                                       |                                    |                                             |                                            |                                      |          |          |          |
|                                                       |                                    |                                             |                                            |                                      |          |          |          |
| <b>Economy Systems Complete</b> (BP-1970)             | <b>X</b>                           |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> |          |          |
| <b>Economy Filtration/Degassing Systems</b> (BP-1975) | <b>X</b>                           |                                             | <b>X</b>                                   |                                      |          |          |          |
| <b>Economy Reservoir Systems</b> (BP-1980)            |                                    |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> |          |          |
| <b>Integrated Systems</b> (BP-1940)                   |                                    | <b>X</b>                                    | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> |          |
| <b>Three Valve Systems</b> (BP-1925)                  |                                    |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> |          |
| <b>THF Resistant Integrated Systems</b> (BP-1941)     |                                    | <b>X</b>                                    | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> | <b>X</b> |
| <b>THF-Resistant Systems Valve Systems</b> (BP-1931)  |                                    |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> | <b>X</b> |
| <b>Five Valve Systems</b> (BP-1950)                   |                                    |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> |          |
| <b>THF-Resistant Five Valve Systems</b> (BP-1951)     |                                    |                                             | <b>X</b>                                   | <b>X</b>                             | <b>X</b> | <b>X</b> | <b>X</b> |

**Selected Solvent Compatibilities of PTFE/propylene and KALREZ® (perfluoro) O-Rings**

| <b>Table 1. Selected Solvent Compatibilities of PTFE/propylene and KALREZ (perfluoro) O-Rings</b> |                           |               |
|---------------------------------------------------------------------------------------------------|---------------------------|---------------|
| <b>R=Recommended</b>                                                                              | <b>NR=Not Recommended</b> |               |
| <b>Solvent</b>                                                                                    | <b>PTFE/propylene</b>     | <b>KALREZ</b> |
| Acetonitrile                                                                                      | R                         | R             |
| Isopropanol                                                                                       | R                         | R             |
| Methanol                                                                                          | R                         | R             |
| Methyl Chloride                                                                                   | NR                        | R             |
| Tetrahydrofuran                                                                                   | NR                        | R             |
| Water                                                                                             | R                         | R             |



**CHROMWARE® Five Valve Cap System**

System includes a five valve cap, solvent pickup adapter, TORNADO® Reservoir, related fittings and PTFE tubing. Direct membrane filtration into the mobile phase reservoir avoids transfer losses and contamination by airborne particulates.

ETFE valves are gas tight and effectively contain helium within the reservoir. Dry, deoxygenated mobile phases are maintained for chromatographic separations.

A fifth valve has been added to facilitate recycling mobile phase.

1/4"-28 flangeless fittings allow easy connection to pumps or other system components.

**COMPLETE SYSTEMS, BP-1950, INCLUDE:**

| Product No. | Description                                        | Quantity |
|-------------|----------------------------------------------------|----------|
| BP-1901     | TORNADO® HPLC Reservoir with Red UV Safety Coating | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                              | 1        |
| BP-1905-047 | 47mm Five Valve Cap                                | 1        |
| BP-1904-049 | 47mm Mobile Phase Pickup Adapter without Valve     | 1        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing             | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                  | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                         | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing         | 2        |
| BP-1916-000 | 2 micron S.S. Inlet Filter                         | 2        |
| BP-1914-014 | Vacuum Adapter, 1/4" -28 to 1/4" I.D. Tubing       | 1        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 420 x 120              | <b>BP-1950-001</b> | \$904.39      |
| 2                  | 485 x 120              | <b>BP-1950-002</b> | 960.10        |
| 5                  | 545 x 195              | <b>BP-1950-005</b> | 1,075.10      |
| 10                 | 625 x 240              | <b>BP-1950-010</b> | 1,400.79      |
| 20                 | 705 x 300              | <b>BP-1950-020</b> | 1,808.79      |

**BP-1950**

**BP-1951****CHROMWARE® Five Valve Cap System, THF Resistant**

Tetrahydrofuran (THF) which is widely used as a mobile phase for GPC, attacks the components and Viton® O-rings of the standard CHROMWARE® systems. THF-resistant version of the five valve integrated system are shown below. The integrated five valve cap system is made THF-resistant by: (1) replacing the valve stems with ETFE; (2) replacing all O-Rings with Kalrez® O-Rings; and (3) replacing standard inlet filters with stainless-steel filters.

**COMPLETE SYSTEMS, BP-1951, INCLUDE:**

| Product No. | Description                                        | Quantity |
|-------------|----------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                              | 1        |
| BP-1905-447 | 47mm Five Valve Cap, THF Resistant                 | 1        |
| BP-1904-049 | 47mm Mobile Phase Pickup Adapter without Valve     | 1        |

**COMPLETE SYSTEMS, BP-1951, INCLUDE:**

| Product No. | Description                                  | Quantity |
|-------------|----------------------------------------------|----------|
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing       | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing            | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                   | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing   | 2        |
| BP-1916-621 | 10 micron S.S. Inlet Filter                  | 2        |
| BP-1919-014 | Vacuum Adapter, 1/4" -28 to 1/4" I.D. Tubing | 1        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 420 x 120              | <b>BP-1951-001</b> | \$1,348.72    |
| 2                  | 485 x 120              | <b>BP-1951-002</b> | 1,401.99      |
| 5                  | 545 x 195              | <b>BP-1951-005</b> | 1,504.91      |
| 10                 | 625 x 240              | <b>BP-1951-010</b> | 1,922.50      |
| 20                 | 705 x 300              | <b>BP-1951-020</b> | 2,140.53      |

**CHROMWARE® Integrated HPLC Mobile Phase Handling Systems**

CHROMWARE® integrated HPLC mobile phase handling systems have a four valve reservoir cap that incorporates the functions of both a filtration cap and a three valve cap. Once the four valve cap is screwed onto the reservoir it can stay on the reservoir through an indefinite number of cycles of mobile phase filtration, sparging and delivery. This means that the inside of the reservoir can be isolated from both atmospheric gases and particulates for weeks or months as long as the mobile phase doesn't support bacterial growth.

**COMPLETE SYSTEMS, BP-1940, INCLUDE:**

| Product No. | Description                                                                             | Quantity |
|-------------|-----------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                      | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                                   | 1        |
| BP-1914-047 | 47mm Four Valve Cap, PTFE/Propylene O-Rings                                             | 1        |
| BP-1904-049 | 47mm Mobile Phase Pickup Adapter without Valve                                          | 1        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                                  | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                       | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                              | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" I.D. Tubing) | 2        |
| BP-1916-000 | 2 Micron S.S. Inlet Filter                                                              | 2        |
| BP-1919-014 | Vacuum Adapter, 1/4" -28 to 1/4" I.D. Tubing                                            | 1        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 420 x 120              | <b>BP-1940-001</b> | \$855.97      |
| 2                  | 485 x 150              | <b>BP-1940-002</b> | 910.45        |
| 5                  | 545 x 195              | <b>BP-1940-005</b> | 1,026.68      |
| 10                 | 625 x 240              | <b>BP-1940-010</b> | 1,351.14      |
| 20                 | 705 x 300              | <b>BP-1940-020</b> | 1,757.95      |

**BP-1940**

**BP-1941****CHROMWARE® THF-Resistant Integrated HPLC Mobile Phase Systems**

Tetrahydrofuran (THF), which is widely used as a mobile phase for GPC, attacks the Viton® O-Rings of the standard CHROMWARE® systems (economy, integrated and three valve systems). THF-resistant versions of the integrated and three valve systems are shown below. The only changes required to make an economy system THF-resistant are: replace the standard inlet filters (*BP-1916-000*) with all-stainless-steel inlet filters (*BP-1916-621*), and replace the size 216 Viton® O-Ring at the base of the three hole cap with a size 216 Kalrez® O-Ring (*BP-1240-026*).

The integrated and three valve cap systems have been made into THF-resistant systems by: replacing all Viton® O-Rings with Kalrez® O-Rings, and replacing the standard stainless steel inlet filters, which have components, with conventional all-stainless-steel filters.

**COMPLETE SYSTEMS, BP-1941, INCLUDE:**

| Product No. | Description                                                                        | Quantity |
|-------------|------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                 | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                              | 1        |
| BP-1914-647 | 47mm Four Valve Cap, THF-Resistant                                                 | 1        |
| BP-1904-049 | 47mm Mobile Phase Pickup Adapter without Valve                                     | 1        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                             | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                  | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                         | 1        |
| BP-1916-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" tubing) | 2        |
| BP-1916-621 | 10 Micron S.S. Inlet Filter                                                        | 2        |
| BP-1919-014 | Vacuum Adapter, 1/4" -28 to 1/4" I.D. Tubing                                       | 1        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 420 x 120              | <b>BP-1941-001</b> | \$1,259.14    |
| 2                  | 485 x 150              | <b>BP-1941-002</b> | 1,312.40      |
| 5                  | 545 x 195              | <b>BP-1941-005</b> | 1,412.88      |
| 10                 | 625 x 240              | <b>BP-1941-010</b> | 1,831.79      |
| 20                 | 705 x 300              | <b>BP-1941-020</b> | 2,049.71      |

**CHROMWARE® Three Valve Cap Reservoir Systems**

CHROMWARE® three valve cap reservoir systems (BP-1925) consist of a three valve cap, TORNADO® HPLC reservoir, stainless steel inlet filters, and fittings. In order to filter HPLC mobile phases directly into the reservoir, you need to purchase separately a filtration/degassing cap (BP-1915-047) and a mobile phase pickup adapter (BP-1904-048).

Three valve reservoir systems are recommended for applications where it is desirable to have on-off control of all three ports on the cap. For example, HPLC mobile phases for several labs can be filtered and degassed at a central location, sealed with a three valve cap with the internal inlet filters and tubing connections already in place, and delivered to the HPLC stations ready-for use. Furthermore, after an HPLC run is completed all three valves on each reservoir can be closed to maintain the mobile phase in a sealed environment until the next run.

**COMPLETE SYSTEMS, BP-1925, INCLUDE:**

| Product No. | Description                                                                             | Quantity |
|-------------|-----------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                      | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                                   | 1        |
| BP-1903-000 | Three Valve Delivery Cap, PTFE/propylene O-Rings                                        | 1        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                                  | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                       | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                              | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" I.D. tubing) | 2        |
| BP-1916-000 | 2 Micron S.S. Inlet Filter                                                              | 2        |

**ORDERING INFORMATION:**

| Capacity  | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|-----------|------------------------|--------------------|---------------|
| 1 liter   | 285 x 120              | <b>BP-1925-001</b> | \$463.69      |
| 2 liters  | 350 x 150              | <b>BP-1925-002</b> | 523.02        |
| 5 liters  | 410 x 190              | <b>BP-1925-005</b> | 639.26        |
| 10 liters | 490 x 240              | <b>BP-1925-010</b> | 1,033.94      |
| 20 liters | 570 x 300              | <b>BP-1925-020</b> | 1,416.52      |

*Note: Filtration cap and pickup adapter are not included with three valve reservoir systems, available separately.*

**BP-1925**



**BP-1970****CHROMWARE® Economy HPLC Mobile Phase Handling Systems**

CHROMWARE® economy HPLC phase systems are modular filtration and reservoir systems. There are at least four modes of operation for economy systems: filtration, stirring, sparging, and storage/delivery. A mobile phase filtration/degassing cap is required for the filtration; however, the filtration cap is replaced by a three hole mobile phase delivery cap for the next three modes of operation. Since mobile phase filtration takes a relatively short time, several CHROMWARE® HPLC reservoirs can share one filtration cap.

**COMPLETE SYSTEMS, BP-1970, INCLUDE:**

| Product No. | Description                                                                             | Quantity |
|-------------|-----------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                      | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                                   | 1        |
| BP-1915-047 | 47mm Filtration/Degassing Cap                                                           | 1        |
| BP-1904-048 | 47mm Mobile Phase Pickup Adapter w/Valve                                                | 1        |
| BP-1913-000 | Three Hole Delivery Cap                                                                 | 1        |
| BP-1913-001 | ETFE 1/4" -28 Threaded Plug                                                             | 3        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                                  | 4        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                       | 4        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                              | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" I.D. Tubing) | 2        |
| BP-1916-000 | 2 Micron S.S. Inlet Filter                                                              | 2        |

**ORDERING INFORMATION:**

| Capacity  | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|-----------|------------------------|--------------------|---------------|
| 1 liter   | 415 x 120              | <b>BP-1970-001</b> | \$746.32      |
| 2 liters  | 480 x 150              | <b>BP-1970-002</b> | 794.70        |
| 5 liters  | 540 x 195              | <b>BP-1970-005</b> | 896.30        |
| 10 liters | 620 x 240              | <b>BP-1970-010</b> | 1,214.41      |
| 20 liters | 700 x 300              | <b>BP-1970-020</b> | 2,635.29      |

**CHROMWARE® Economy HPLC Mobile Phase Filtration/Degassing**

The economy HPLC mobile phase filtration/degassing system is offered for those chromatographers who want the benefits of filtering directly into a CHROMWARE® HPLC reservoir, but don't need the air-tight three hole cap.

**COMPLETE SYSTEMS, BP-1975, INCLUDE:**

| Product No. | Description                                        | Quantity |
|-------------|----------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                              | 1        |
| BP-1915-047 | 47mm Filtration/Degassing Cap                      | 1        |
| BP-1904-048 | 47mm Mobile Phase Pickup Adapter w/Valve           | 1        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 415 x 120              | <b>BP-1975-001</b> | \$474.58      |
| 2                  | 480 x 150              | <b>BP-1975-002</b> | 531.51        |
| 5                  | 540 x 195              | <b>BP-1975-005</b> | 645.30        |
| 10                 | 620 x 240              | <b>BP-1975-010</b> | 1,007.31      |
| 20                 | 700 x 300              | <b>BP-1975-020</b> | 1,420.15      |

**BP-1975****CHROMWARE® Economy HPLC Mobile Phase Reservoir Systems****COMPLETE SYSTEMS, BP-1980, INCLUDE:**

| Product No. | Description                                                                             | Quantity |
|-------------|-----------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                      | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                                   | 1        |
| BP-1913-000 | Three Hole Delivery Cap                                                                 | 1        |
| BP-1913-001 | ETFE 1/4" -28 Threaded Plug                                                             | 3        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                                  | 4        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                       | 4        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                              | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" I.D. Tubing) | 2        |
| BP-1916-000 | 2 Micron S.S. Inlet Filter                                                              | 2        |

**ORDERING INFORMATION:**

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 285 x 120              | <b>BP-1980-001</b> | \$322.03      |
| 2                  | 350 x 150              | <b>BP-1980-002</b> | 393.47        |
| 5                  | 410 x 195              | <b>BP-1980-005</b> | 526.66        |
| 10                 | 490 x 240              | <b>BP-1980-010</b> | 826.91        |
| 20                 | 570 x 300              | <b>BP-1980-020</b> | 1,186.49      |

**BP-1980**

**BP-1931****BP-1901****BP-1911****CHROMWARE® THF-Resistant Three Valve Cap Reservoir Systems*****COMPLETE SYSTEMS, BP-1931, INCLUDE:***

| Product No. | Description                                                                             | Quantity |
|-------------|-----------------------------------------------------------------------------------------|----------|
| BP-1901-    | TORNADO® HPLC Reservoir with Red UV Safety Coating                                      | 1        |
| BP-2310-118 | TORNADO® PTFE Stirrer                                                                   | 1        |
| BP-1903-647 | Three Valve Delivery Cap, THF Resistant                                                 | 1        |
| BP-1821-018 | PEEK 1/4" -28 Nut for 1/8" O.D. Tubing                                                  | 8        |
| BP-1822-018 | ETFE Ferrule for 1/8" O.D. Tubing                                                       | 8        |
| BP-1823-018 | PTFE 1/8" O.D. Tubing, 10'                                                              | 1        |
| BP-1918-018 | ETFE Adapter, 1/4" -28 to 1/8" I.D. Tubing<br>(for Water systems with 1/8" I.D. Tubing) | 2        |
| BP-1916-621 | 10 micron S.S. Inlet Filter                                                             | 2        |

***ORDERING INFORMATION:***

| Capacity<br>Liters | Approx.<br>H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------|--------------------|---------------|
| 1                  | 285 x 120              | <b>BP-1931-001</b> | \$853.54      |
| 2                  | 350 x 150              | <b>BP-1931-002</b> | 914.09        |
| 5                  | 410 x 195              | <b>BP-1931-005</b> | 1,030.30      |
| 10                 | 490 x 240              | <b>BP-1931-010</b> | 1,388.67      |
| 20                 | 507 x 300              | <b>BP-1931-020</b> | 1,828.17      |

**CHROMWARE® HPLC Reservoir with Red UV Safety Coating**

TORNADO® HPLC reservoirs (U.S. Patents: Des. 350,609 & 5,275,723) have two bottom cavities, one for a TORNADO® PTFE stirrer and the other for a mobile phase inlet filter; an autoclavable plastic coat that absorbs UV up to 385nm, a 45mm thread size. One PTFE TORNADO® stirrer is included with each reservoir.

| Capacity<br>Liters | H x D<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|-------------|--------------------|---------------|
| 1                  | 245 x 120   | <b>BP-1901-001</b> | \$141.01      |
| 2                  | 310 x 150   | <b>BP-1901-002</b> | 217.16        |
| 5                  | 370 x 195   | <b>BP-1901-005</b> | 375.11        |
| 10                 | 450 x 240   | <b>BP-1901-010</b> | 870.09        |
| 20                 | 530 x 300   | <b>BP-1901-020</b> | 1,435.58      |

**Single Cavity HPLC Reservoir with Red UV Safety Coating**

Single cavity HPLC reservoirs (U.S. Patent: Des. 341,205) have one central cavity for a mobile phase inlet filter; an autoclavable plastic coat that absorbs UV up to 385nm, and a 45mm thread size. While these reservoirs do not permit the rapid mixing of the TORNADO® HPLC reservoirs, they can be stirred by placing a plus type stirring bar in the inlet filter cavity just below the inlet filter. See BP-2315 for "Plus" Stir Bar.

| Capacity<br>Liters | H X D<br>mm | Filter<br>Cavity ID<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|-------------|---------------------------|--------------------|---------------|
| 0.5                | 225 x 110   | 21                        | <b>BP-1911-500</b> | \$105.03      |
| 1                  | 260 x 120   | 21                        | <b>BP-1911-001</b> | 121.07        |
| 2                  | 325 x 150   | 21                        | <b>BP-1911-002</b> | 186.46        |
| 5                  | 385 x 195   | 30                        | <b>BP-1911-005</b> | 322.03        |
| 10                 | 465 x 240   | 30                        | <b>BP-1911-010</b> | 747.01        |
| 20                 | 545 x 300   | 30                        | <b>BP-1911-020</b> | 1,232.50      |

**TORNADO® PTFE Stirrer**

This special PTFE stirrer is 28mm O.D. x 42mm high overall with four 15mm high blades, and includes a PTFE coated magnetic stirring bar to drive it. It has been designed to fit the central cavity at the bottom of 1, 2, 5, 10 and 20 liter CHROMWARE® TORNADO® HPLC reservoirs.

Recommended  
for TORNADO®  
HPLC Reservoirs  
Size

D x H  
mm

Part  
Number

Each  
Price

1 to 20L

28 x 42

**BP-2310-118**

\$26.89



**BP-2310**

**PTFE “Plus” Stirring Bar**

This plus shape PTFE stirring bar is recommended for use with the CHROMWARE® single cavity HPLC reservoirs.

Size

Recommended  
for  
Reservoirs

Part  
Number

Each  
Price

3/4" (19.1mm)

0.5L, 1L and 2L

**BP-2315-034**

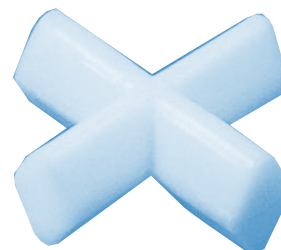
\$8.02

1" (25.4mm)

5L, 10L, and 20L

**BP-2315-100**

8.60



**BP-2315**

**Reservoir Storage Cap**

Polypropylene (PPL) cap with 45mm thread and PTFE liner. Fits all CHROMWARE® HPLC reservoirs.

Description

Part  
Number

Each  
Price

Reservoir Storage Cap

**BP-1909-000**

\$8.66



**BP-1909**

**BP-1905**

### Five Valve Mobile Phase Filtration/Delivery Cap

Designed to control HPLC Mobile Phase Systems. The upper portion has a screw clamp to secure a solvent pickup adapter. There is a recess to accommodate a support disc for membrane filtration. Valves are supplied to control filtration, vacuum, sparging, recirculation and output to the pump.

Connections are 1/4" -28 allowing installation of optional sparging or pressure relief valves.

Valve body is glass-filled PTFE, resistant to organic solvents and has stronger threads than PTFE alone. Filter diameter is 47mm.

| Description                      | Part Number        | Each Price |
|----------------------------------|--------------------|------------|
| Five Valve Cap, Standard Version | <b>BP-1905-047</b> | \$544.83   |
| Five Valve Cap, THF Version      | <b>BP-1905-647</b> | 986.73     |

**BP-1914**

### Four Valve Cap, CHROMWARE®

The CHROMWARE® Four Valve Cap combines the mobile phase filtration, sparging/degassing, storage and delivery functions. The 1/4" -28 fitting connections allow easy connection to any HPLC pump system. Cap body is manufactured from glass-filled PTFE. Cap will attach to any reservoir or bottle with a GL 45 thread.

Standard version cap is supplied with Viton® O-Rings. The THF-resistant version cap is supplied with Kalrez® O-Rings.

| Description                      | Part Number        | Each Price |
|----------------------------------|--------------------|------------|
| Four Valve Cap, Standard Version | <b>BP-1914-047</b> | \$495.18   |
| Four Valve Cap, THF Version      | <b>BP-1914-647</b> | 897.13     |

**BP-1915**

### Mobile Phase Filtration/Degassing Cap

Constructed of PTFE with polypropylene vacuum adapter for 1/4" I.D. tubing. Lower screw cap has 45mm thread. Upper screw clamp holds mobile phase pickup adapter. Includes a removable coarse fritted glass filter support (specially treated to resist flaking), and a Viton® O-Ring for sealing to the reservoir.

| Description                   | Part Number        | Each Price |
|-------------------------------|--------------------|------------|
| 47mm Cap, Complete            | <b>BP-1915-047</b> | \$308.74   |
| Replacement Glass Frit, 47mm  | <b>BP-1914-001</b> | 29.65      |
| Replacement Screw Clamp, 47mm | <b>BP-1914-002</b> | 33.22      |

**Three Valve Mobile Phase Delivery Cap**

Three on-off ETFE valves  $\frac{1}{4}$ " -28 threads top and bottom. Body is constructed of glass-filled PTFE. Screw cap has 45mm thread.

| Description                                | Part Number        | Each Price |
|--------------------------------------------|--------------------|------------|
| Three Valve Delivery Cap, Standard Version | <b>BP-1903-000</b> | \$322.03   |
| Three Valve Delivery Cap, THF Version      | <b>BP-1903-647</b> | 525.45     |

**BP-1903****Three Hole Mobile Phase Delivery Cap**

The three holes have  $\frac{1}{4}$ " -28 threads in the top with  $\frac{1}{8}$ " holes through for  $\frac{1}{8}$ " O.D. PTFE tubing. Body is glass-filled PTFE. Screw cap has 45mm thread. Includes three  $\frac{1}{4}$ " -28 ETFE plugs and Viton® O-Ring for sealing to reservoir. Integral pressure relief valve relieves reservoir at 10 psi.

| Description                          | Part Number        | Each Price |
|--------------------------------------|--------------------|------------|
| Three Hole Mobile Phase Delivery Cap | <b>BP-1913-000</b> | \$115.02   |

**BP-1913****Economy Three Hole Mobile Phase Delivery Cap**

Similar to *BP-1913-000* above except cap is made of PBT (Polybutylene terephthalate) with PTFE faced silicone liner. Thread finish is *GL45*. Attaches to mobile phase reservoirs or PYREX® 1395 Media bottles. Openings in cap are  $\frac{1}{4}$ " -28 and have ETFE stems. Inlet PTFE tubing threads through external openings and then tightened. Inlet filters for sparging or pumping can be easily positioned within the vessel. The remaining third opening serves as a vent.

| Description                                | Part Number        | Each Price |
|--------------------------------------------|--------------------|------------|
| Econo Three Hole Mobile Phase Delivery Cap | <b>BP-1908-000</b> | \$92.20    |

*Note: See bottle section for C-1395 Media Bottles.*

**BP-1908****Mobile Phase Pickup Adapter**

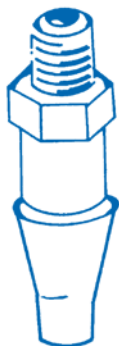
Glass Adapter with flange to fit the Mobile Phase Filtration/Degassing Cap or the Integrated Mobile Phase Filtration/Delivery Cap. This adapter holds a 47mm diameter membrane filter in place while providing for continuous in-line filtration of mobile phase. Includes 4mm PTFE valve with  $\frac{1}{4}$ " 1-28 O.D. outlet, PTFE union with compression fittings for  $\frac{1}{4}$ " O.D. tubing and 3' of  $\frac{1}{4}$ " O.D. PTFE tubing. Required for Filtration/Degassing Cap.

Pickup adapter without valve is used with 4 and 5 valve integrated caps. Upper valve is not required with this system. Includes  $\frac{1}{4}$ " O.D. outlet PTFE 90°.

PTFE 90° elbow with compression fittings for  $\frac{1}{4}$ " O.D. tubing and 3' of  $\frac{1}{4}$ " O.D. PTFE tubing.

| Description                            | Part Number        | Each Price |
|----------------------------------------|--------------------|------------|
| Mobile Phase Pickup Adapter with Valve | <b>BP-1904-048</b> | \$128.34   |
| Mobile Phase Pickup                    | <b>BP-1904-049</b> | 76.19      |

**BP-1904**

**BP-1821****BP-1918****BP-1919****BP-1824****BP-1916****BP-1926****Fittings for OD PTFE Tubing**

| Description                     | Tubing Size | Part Number        | Each Price |
|---------------------------------|-------------|--------------------|------------|
| PEEK nut, 1/4" -28 (brown)      | 1/8" O.D.   | <b>BP-1821-018</b> | \$2.45     |
| ETFE ferrule 1/8" O.D. (yellow) | 1/8" O.D.   | <b>BP-1822-018</b> | 1.06       |
| PTFE tubing 1/8" O.D., 10'      | 1/8" O.D.   | <b>BP-1823-018</b> | 24.79      |

**Tefzel Adapter**

| Description                               | Part Number        | Each Price |
|-------------------------------------------|--------------------|------------|
| ETFE Adapter 1/4" -28 to 1/8" I.D. tubing | <b>BP-1918-018</b> | \$3.33     |

**Polypropylene Vacuum Adapter**

| Description                  | Part Number        | Each Price |
|------------------------------|--------------------|------------|
| 1/4" -28 to 1/4" I.D. tubing | <b>BP-1919-014</b> | \$5.05     |

**Unions for 1/4" -28 Fittings**

| Description                                       | Part Number        | Each Price |
|---------------------------------------------------|--------------------|------------|
| PEEK Union, 1/4" -28 with nuts & ferrules (brown) | <b>BP-1824-018</b> | \$17.72    |

**Inlet Filter**

For direct connection to 1/8" O.D. PTFE tubing. The diameter is approximately 1/2"; height is approximately 1".

Disposable 10µm porosity metal free filter with 1/4" -28 ETFE cap for connection to 1/8" O.D. PTFE tubing. Filter is constructed from ultra-high molecular weight polyethylene (UHMWPE).

| Description                    | Part Number        | Each Price |
|--------------------------------|--------------------|------------|
| Stainless Steel, 2µm porosity  | <b>BP-1916-000</b> | \$20.26    |
| Stainless Steel, 10µm porosity | <b>BP-1916-621</b> | 14.41      |

**PEEK Tee**

Three 1/4" -28 ports. PEEK nuts and ferrules for 1/8" O.D. PTFE tubing are included.

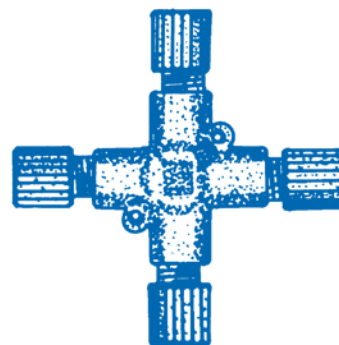
| Description | Part Number        | Each Price |
|-------------|--------------------|------------|
| PEEK Tee    | <b>BP-1926-018</b> | \$27.43    |



**PEEK Cross**

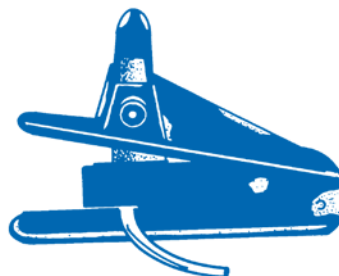
Four 1/4" -28 ports. PEEK nuts and ferrules for 1/8" O.D. PTFE tubing are included.

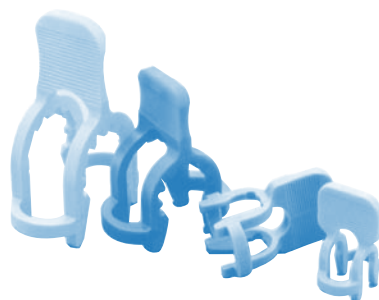
| Description | Part Number        | Each Price |
|-------------|--------------------|------------|
| PEEK Cross  | <b>BP-1927-018</b> | \$34.18    |

**BP-1927****PTFE Tubing Cutter**

This simple guillotine-style polymer tubing cutter provides the flat 90 degree, burr-free cuts which the flangeless fittings listed above require for leak-free seals. It has been designed specifically for cutting PTFE, PEEK, and ETFE tubing in either 1/8" or 1/16" O.D. sizes. Construction is durable, molded glass-filled nylon.

| Description                | Part Number        | Each Price |
|----------------------------|--------------------|------------|
| Tubing Cutter              | <b>BP-1928-100</b> | \$18.67    |
| Replacement blades, 5-pack | <b>BP-1928-001</b> | 4.85       |

**BP-1928**

**LG-1004****LG-4600****LG-1006****Clamp, Keck**

Holds joints under light pressure securely. The plastic resin is polyoxymethylene (POM) and can be used at temperatures up to 150°C. Resistant to concentrated alkalis and dilute acids. Not resistant to concentrated acids or halogen gases. Color coded according to size.

| For<br>Size  | Color       | Part<br>Number     | Each<br>Price |
|--------------|-------------|--------------------|---------------|
| 10/18, 10/30 | Light Green | <b>LG-1004-100</b> | \$2.24        |
| 12/18, 12/30 | Violet      | <b>LG-1004-102</b> | 2.32          |
| 14/20, 14/35 | Yellow      | <b>LG-1004-104</b> | 2.39          |
| 19/22, 19/38 | Blue        | <b>LG-1004-106</b> | 2.51          |
| 24/25, 24/40 | Green       | <b>LG-1004-108</b> | 2.58          |
| 29/26, 29/42 | Red         | <b>LG-1004-110</b> | 2.78          |
| 34/28, 34/45 | Orange      | <b>LG-1004-112</b> | 3.04          |
| 40/35, 40/50 | Dark Yellow | <b>LG-1004-114</b> | 3.38          |
| 45/50        | Brown       | <b>LG-1004-116</b> | 4.60          |

**Clamp, Ball and Socket, Plastic**

Secures ball and socket joints. Manufactured from polyoxymethylene (POM) and safe to 150°C.

| For<br>Size | Color        | Part<br>Number     | Each<br>Price |
|-------------|--------------|--------------------|---------------|
| 12          | Dark Violet  | <b>LG-4600-100</b> | \$3.18        |
| 18          | Light Blue   | <b>LG-4600-102</b> | 3.99          |
| 28          | Dark Red     | <b>LG-4600-104</b> | 4.33          |
| 35          | Light Orange | <b>LG-4600-106</b> | 4.29          |

**Clamp, Metal**

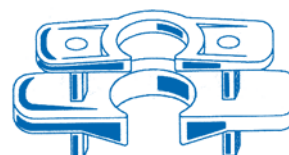
Design is similar to *LG-1004* but fabricated from metal. Clamp is silicone lacquer coated to avoid scratching glass surfaces. Joints are secure under moderate pressure to 200°C. Suitable where higher temperatures are used or cracking occurs in the plastic equivalent.

| For<br>Size  | Part<br>Number     | Each<br>Price |
|--------------|--------------------|---------------|
| 14/20, 14/35 | <b>LG-1006-100</b> | \$6.97        |
| 19/22, 19/38 | <b>LG-1006-102</b> | 7.07          |
| 24/25, 24/40 | <b>LG-1006-104</b> | 7.61          |
| 29/26, 29/42 | <b>LG-1006-106</b> | 8.01          |

**Clamp, Safety**

Two piece adjustable, made of polyoxymethylene (POM). Can be used to 150°C.

| Size | Part Number | Each Price |
|------|-------------|------------|
| 10   | LG-1008-100 | \$3.04     |
| 12   | LG-1008-102 | 3.15       |
| 14   | LG-1008-104 | 3.26       |
| 19   | LG-1008-106 | 3.39       |
| 24   | LG-1008-108 | 3.49       |
| 29   | LG-1008-110 | 3.62       |
| 34   | LG-1008-112 | 3.86       |
| 40   | LG-1008-114 | 4.20       |
| 45   | LG-1008-116 | 4.67       |

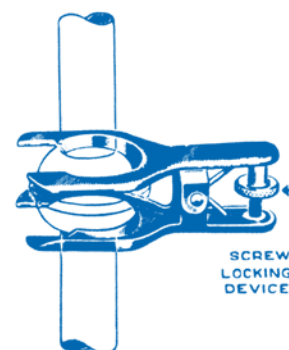
**LG-1008****Clamp, Pinch**

For use with ball and socket and O-Ring joints.

Sizes 12A, 18A and 28 to 75, inclusive, have a locking device in addition to the spring. These clamps will support considerable weight and the locking device is also necessary when clamps are used with O-Ring joints to furnish needed compression of the O-ring.

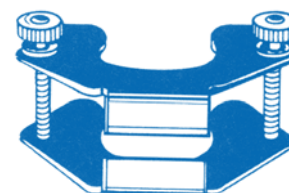
The size numbers given below are the same as the nominal diameters of the ball members of the sizes of ball and socket joints the clamps will fit.

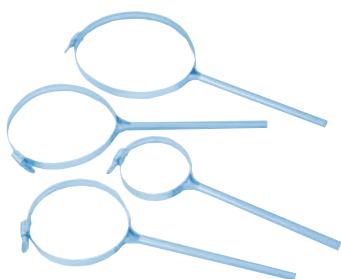
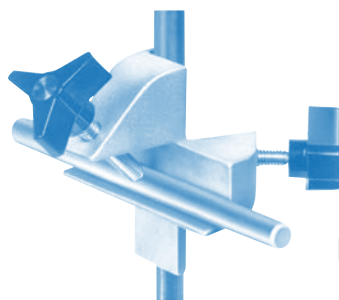
| Size | Part Number | Each Price |
|------|-------------|------------|
| 12   | LG-1045-102 | \$10.29    |
| 12A  | LG-1045-104 | 14.65      |
| 18   | LG-1045-106 | 11.21      |
| 18A  | LG-1045-108 | 12.05      |
| 28   | LG-1045-110 | 14.86      |
| 35   | LG-1045-112 | 17.89      |
| 40   | LG-1045-114 | 40.24      |
| 50   | LG-1045-116 | 45.64      |
| 65   | LG-1045-118 | 53.60      |
| 75   | LG-1045-120 | 99.63      |
| 102  | LG-1045-122 | 155.66     |

**LG-1045****Clamp, Horseshoe Style**

Designed for use with ball and socket joints. Clamp provides uniform tension and secures the assembly. It is horseshoe shaped and supplied with two bolts and nuts for tightening.

| Size | Part Number | Each Price |
|------|-------------|------------|
| 12   | LG-4631-100 | \$9.04     |
| 18   | LG-4631-102 | 11.08      |
| 28   | LG-4631-104 | 11.80      |
| 35   | LG-4631-106 | 12.30      |
| 40   | LG-4631-107 | 12.90      |
| 65   | LG-4631-108 | 13.38      |
| 75   | LG-4631-110 | 17.65      |

**LG-4631**

**LG-4622****LG-4623****LG-4624****LG-4626****LG-4627****Clamp, Holder**

For use in lattice systems. Fits rods to 3/4" diameter.

| Supplied                         | Part Number        | Each Price |
|----------------------------------|--------------------|------------|
| Cast-iron 1/4" steel thumbscrew  | <b>LG-4622-100</b> | \$8.49     |
| Cast-iron 5/16" steel thumbscrew | <b>LG-4622-102</b> | 9.59       |

**Clamp, Column**

Sturdy, easily adjusted, multi-purpose stainless steel clamps are ideal for holding large cylindrical glassware and similar objects. Large, flat thumbscrew on worm drive allows placement and removal.

| Diameter Inches | Part Number        | Each Price |
|-----------------|--------------------|------------|
| 2 1/2 - 3 1/2   | <b>LG-4623-100</b> | \$47.00    |
| 3 3/4 - 4 1/2   | <b>LG-4623-102</b> | 48.00      |
| 4 3/4 - 5 1/2   | <b>LG-4623-104</b> | 49.00      |
| 5 1/2 - 6 1/2   | <b>LG-4623-106</b> | 49.00      |

**Clamp, Buret**

Swivel type, adjustable for 360°. Accommodates a variety of laboratory apparatus having diameters from 10 to 35mm. Jaws have polymer coating for secure hold.

| Jaw Opening mm | Length mm | Jaw Type                           | Part Number        | Each Price |
|----------------|-----------|------------------------------------|--------------------|------------|
| 10-35          | 162       | Round, w/Plasticol                 | <b>LG-4624-100</b> | \$11.30    |
| 10-35          | 248       | Double, Round-burets w/Rubber Jaws | <b>LG-4624-102</b> | 25.58      |

**Clamp, Chain**

Accommodates up to 6 1/2" (17cm) diameter or irregular shaped objects. Quick slip-on chain connection with large, easy-to-turn adjusting knob. Holds equipment in place at any angle to lattice rods. Distance from frame can be varied by using 6" (15cm) extension arm.

| Description           | Part Number        | Each Price |
|-----------------------|--------------------|------------|
| Complete              | <b>LG-4626-100</b> | \$41.00    |
| Replacement Chain Set | <b>LG-4626-102</b> | 14.90      |

**Clamp, Ultra**

Heavy duty construction, fits shafts 1/4" to 1" diameter. Aluminum alloy with brushed finish.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-4627-100</b> | \$65.00    |

**Clamp, Nester**

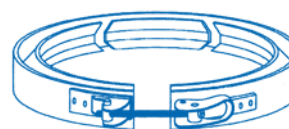
Strong brass chromed band, chain and stainless steel rod hold large or small glass distillation columns, odd shaped glassware, etc. from 2" to 6 1/2" diameter, in clamp.

|  | Part Number        | Each Price |
|--|--------------------|------------|
|  | <b>LG-4628-100</b> | \$62.50    |

**LG-4628****Clamp, Quick Release, For Duran® Flanges**

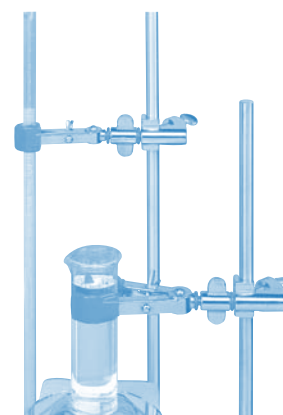
Quick release clamp made of stainless steel. Has screw adjustment for tension control to flange.

| Fits Flange I.D. mm | Part Number        | Each Price |
|---------------------|--------------------|------------|
| 60                  | <b>LG-4632-100</b> | \$59.34    |
| 100                 | <b>LG-4632-102</b> | 76.51      |
| 120                 | <b>LG-4632-104</b> | 92.77      |
| 150                 | <b>LG-4632-106</b> | 94.34      |
| 200                 | <b>LG-4632-108</b> | 106.30     |

**LG-4632****Clamp, Swivel, Two-Prong**

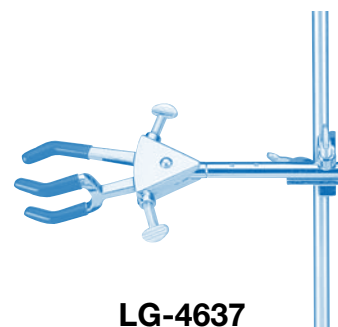
Two prong clamp. Swivel type which allows for 360° adjustment.

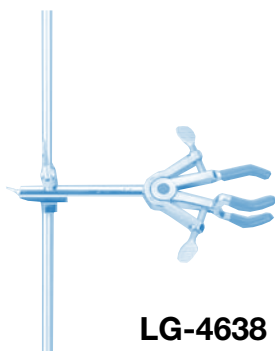
| Max. Grip Size | Clamp Extension | Part Number        | Each Price |
|----------------|-----------------|--------------------|------------|
| 1 1/2"         | 1/2"            | <b>LG-4635-100</b> | \$22.35    |
| 2 1/2"         | 5/8"            | <b>LG-4635-102</b> | 25.20      |

**LG-4635****Clamp, Extension, Three-Prong, Lab**

Single and dual adjustment versions are available in three sizes to provide wide range of jaw openings. Three jaw configuration holds irregular shapes easily. Long, seamless brass tubing attaches clamping heads securely and offers easy positioning in the deepest fume hoods. Available in high tensile strength zinc alloy or stainless steel.

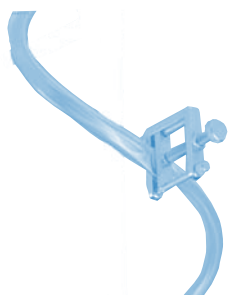
| Clamp Size                            | Max. Grip Size inches | Overall Length inches | Prong Height inches | Part Number        | Each Price |
|---------------------------------------|-----------------------|-----------------------|---------------------|--------------------|------------|
| <b><u>ZINC ALLOY</u></b>              |                       |                       |                     |                    |            |
| Single Small                          | 1.10                  | 5.82                  | 0.82                | <b>LG-4637-100</b> | \$29.00    |
| Single Medium                         | 2.44                  | 8.62                  | 1.33                | <b>LG-4637-102</b> | 30.50      |
| Single Large                          | 3.30                  | 10.43                 | 1.92                | <b>LG-4637-104</b> | 32.00      |
| Dual Small                            | 1.41                  | 6.57                  | 0.82                | <b>LG-4637-106</b> | 29.00      |
| Dual Medium                           | 2.28                  | 9.02                  | 1.37                | <b>LG-4637-108</b> | 30.50      |
| Dual Large                            | 3.66                  | 10.62                 | 1.89                | <b>LG-4637-110</b> | 32.00      |
| <b><u>STAINLESS STEEL 3-PRONG</u></b> |                       |                       |                     |                    |            |
| Small                                 | 1.1                   | 5.8                   | 0.82                | <b>LG-4637-206</b> | 50.00      |
| Medium                                | 2.4                   | 8.6                   | 1.33                | <b>LG-4637-208</b> | 59.00      |
| Large                                 | 3.3                   | 10.4                  | 1.92                | <b>LG-4637-210</b> | 67.00      |

**LG-4637**

**LG-4638****Clamp, Extension, Three-Prong, Ultra**

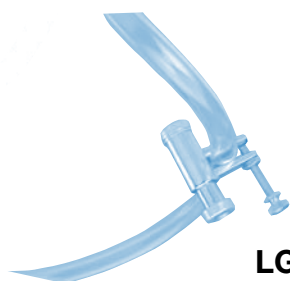
Clamp features an innovative closed yoke construction that minimizes contamination and corrosion of the internal components. Available in single or dual adjustment. High tensile strength zinc alloy construction, exposed surfaces are nickel plated for maximum corrosion resistance. Supplied with both non-slip vinyl as well as fiberglass prong covers.

| Clamp Size    | Max. Grip Size Inches | Overall Length Inches | Prong Height Inches | Part Number        | Each Price |
|---------------|-----------------------|-----------------------|---------------------|--------------------|------------|
| Single Small  | 0.70                  | 6.54                  | 0.59                | <b>LG-4638-100</b> | \$33.00    |
| Single Medium | 1.69                  | 8.66                  | 1.37                | <b>LG-4638-102</b> | 34.00      |
| Single Large  | 2.67                  | 10.47                 | 1.85                | <b>LG-4638-104</b> | 37.50      |
| Dual Small    | 1.10                  | 6.14                  | 0.55                | <b>LG-4638-106</b> | 33.00      |
| Dual Medium   | 2.55                  | 8.74                  | 1.34                | <b>LG-4638-108</b> | 34.00      |
| Dual Large    | 3.93                  | 10.27                 | 1.85                | <b>LG-4638-110</b> | 37.50      |

**LG-4641****Clamp, Regular Hosecock**

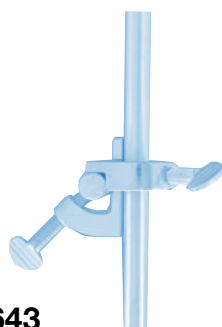
Fine machined adjustment screw with oversized head for very accurate regulation of fluid flow. Tubing retainer screw on side of clamp can be raised to allow easy positioning of tubing. When screwed back in place it keeps tubing from disengaging under varying fluid pressures. For tubing up to  $\frac{3}{4}$ " (19mm) diameter.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-4641-100</b> | \$16.50    |

**LG-4642****Clamp, Pinchcock, Variable Flow**

Features thumbscrew and locking nut to allow true flow regulation. Locknut provides baseline setting for repeatable stop-start operations, allows precise duplication of flow rate. For use on tubing up to  $\frac{3}{8}$ " (10mm) O.D.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-4642-100</b> | \$21.35    |

**LG-4643****Clamp, Regular Holder**

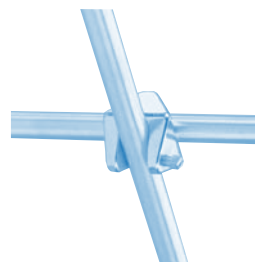
Streamlined design for maximum contamination resistance and easy cleaning. Use wherever clamping at 90° is required.

| Supplied        | Max. Grip Size | Part Number        | Each Price |
|-----------------|----------------|--------------------|------------|
| Zinc Alloy      | 19mm           | <b>LG-4643-100</b> | \$14.65    |
| Stainless Steel | 21mm           | <b>LG-4643-202</b> | 35.00      |

**Clamp, S-Connector**

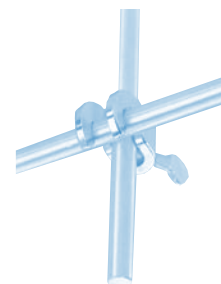
Connector features separate adjustment capability with two rods or clamps versus single clamp action of the hook connector. Clamps item at 90° angle.

| Supplied        | Part Number        | Each Price |
|-----------------|--------------------|------------|
| Zinc Alloy      | <b>LG-4644-100</b> | \$13.30    |
| Stainless Steel | <b>LG-4644-200</b> | 20.00      |

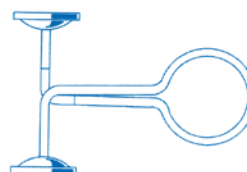
**LG-4644****Clamp, Hook Connector**

Easy-to-use hook connector allows one-handed assembly of two components with one adjustment screw.

| Supplied        | Part Number        | Each Price |
|-----------------|--------------------|------------|
| Zinc Alloy      | <b>LG-4645-100</b> | \$8.15     |
| Stainless Steel | <b>LG-4645-200</b> | 17.00      |

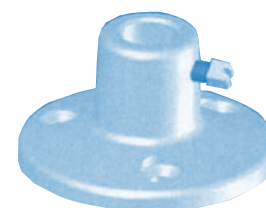
**LG-4645****Clamp, Pinchcock**

|  | Part Number        | Each Price |
|--|--------------------|------------|
|  | <b>LG-4647-100</b> | \$1.81     |

**LG-4647****Clamp, Lab Frame Foot**

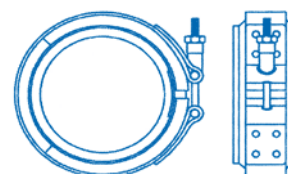
Strong, durable lab frame foot is designed for mounting lab frames permanently to floors, walls, bench tops or fumehoods. Supplied with 3 stainless steel screws.

| Max. Rod Size | Part Number        | Each Price |
|---------------|--------------------|------------|
| Up to .5"     | <b>LG-4646-200</b> | \$33.00    |

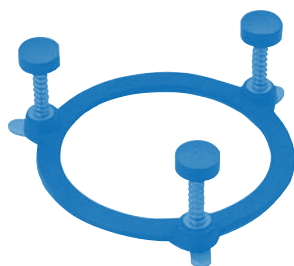
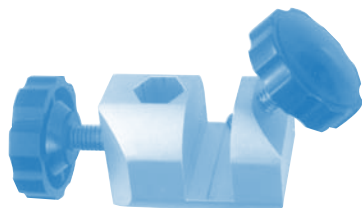
**LG-4646****Clamp, Coupling, Beaded Fitting, PTFE/Viton®**

Provides inert and greaseless connection for equipment having beaded fittings. Unique design eliminates pressure points which cause glassware to break. Used with *LG-4552* and *LG-4558* beaded ends.

| Column I.D. in. | Part Number        | Each Price |
|-----------------|--------------------|------------|
| 1/2             | <b>LG-4661-098</b> | \$49.00    |
| 1               | <b>LG-4661-100</b> | 72.49      |
| 1 1/2           | <b>LG-4661-102</b> | 83.36      |
| 2               | <b>LG-4661-104</b> | 96.33      |
| 3               | <b>LG-4661-106</b> | 176.19     |
| 4               | <b>LG-4661-108</b> | 250.33     |
| 6               | <b>LG-4661-110</b> | 498.19     |

**LG-4661**



**LG-7316****LG-7317****LG-8070****ML-1288****LG-9571****Clamp, McCarter**

A unique stainless steel horseshoe-shaped clamp particularly designed to connect two pieces of glass that have flat flanges of the same diameter. The clamp has adjustable tension springs to secure even pressure over the flange area. Construction is such that clamp may be slid on or off easily, facilitating assembly and disassembly of apparatus setups.

| Size              | Part Number        | Each Price |
|-------------------|--------------------|------------|
| 32mm              | <b>LG-7316-100</b> | \$57.84    |
| 57mm              | <b>LG-7316-102</b> | 64.59      |
| 80mm              | <b>LG-7316-104</b> | 84.01      |
| 4 $\frac{1}{2}$ " | <b>LG-7316-106</b> | 140.76     |
| 5 $\frac{1}{2}$ " | <b>LG-7316-108</b> | 149.81     |

**Clamp, Kettle**

Cast bronze ring with black oxidized finish. Three insulated, spring activated clamping arms fit beneath the flange of the flask body. Simple pressure on the heat-resistant fiber knobs, and a twist, permit attachment or removal.

| Flask Capacity     | Part Number        | Each Price |
|--------------------|--------------------|------------|
| 500, 1000mL        | <b>LG-7317-100</b> | \$115.00   |
| 2000, 3000, 4000mL | <b>LG-7317-102</b> | 117.00     |

**Clamp, for Reaction Flasks**

Designed for easy removal of top clamp without disturbing the cover or body of reaction flask. Disassemble by loosening nuts. Complete with an extension rod for clamping to a laboratory stand.

| Inside Diameter in. | Part Number        | Each Price |
|---------------------|--------------------|------------|
| 4                   | <b>LG-8070-100</b> | \$138.00   |
| 2                   | <b>ML-1288-700</b> | 59.90      |

*NOTE: Use with LG-8010 to LG-8050 vessels and lids.*

**Clamp, Universal**

Will hold any stirrer with mounting rod from 3/8" to 5/8" diameter. Large knob gives power to clamp securely. Precision adjustment makes it easy to slide up and down. Adjustable stop for safety and speed in operating and setting up. Clamp made with precision machined aluminum for strength and long life.

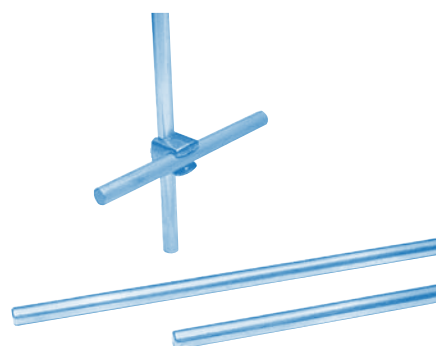
| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-9571-100</b> | \$45.56    |

**Clamp, Support, Lattice Clamp and Rod**

Supplied for erecting a lattice support. Unit provides a versatile support for laboratory apparatus. Clamps are high strength with Allen head screws. V-shaped slots allow easy attachment of rods without disturbing the existing support. Aluminum alloy rod is furnished without threads and ends are smoothly finished. Packaged in a set of twelve with one Allen wrench.

| Description       | Part Number         | Each Price |
|-------------------|---------------------|------------|
| Clamp (set of 12) | <b>LG-10445-100</b> | \$141.00   |
| 1/2" Rod 36"      | <b>LG-10445-208</b> | 16.31      |
| 1/2" Rod 48"      | <b>LG-10445-210</b> | 24.99      |

*Other rod lengths available upon request.*

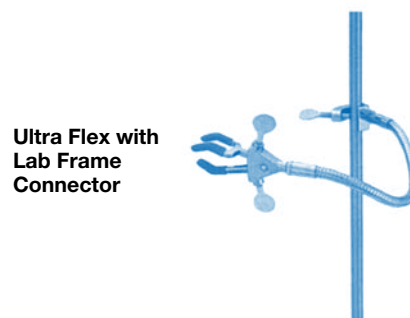
**LG-10445****Clamp/Support System, Ultra Flex**

Ultra Flex Support comes complete with three types of clamp heads. (2-prong, 3-prong, and spring clamp). Three unique systems used to attach to a base plate, lab frame connector or a bench top. All three types have the unique flexible support arm system to easily move clamp in any direction.

| Description                            | Part Number        | Each Price |
|----------------------------------------|--------------------|------------|
| Ultra Flex 12 with Base Plate          | <b>LG-4633-100</b> | \$190.00   |
| Ultra Flex 12 with Bench Clamp         | <b>LG-4633-102</b> | 168.00     |
| Ultra Flex 12 with Lab Frame Connector | <b>LG-4633-104</b> | 147.00     |
| Ultra Flex 18 with Base Plate          | <b>LG-4633-110</b> | 228.00     |
| Ultra Flex 18 with Bench Clamp         | <b>LG-4633-112</b> | 201.00     |
| Ultra Flex 18 with Lab Frame Connector | <b>LG-4633-114</b> | 175.00     |

**Replacement Parts**

|                     |                    |        |
|---------------------|--------------------|--------|
| 2-Prong Clamp Head  | <b>LG-4633-150</b> | 21.00  |
| 3-Prong Clamp Head  | <b>LG-4633-152</b> | 27.85  |
| Spring Clamp Head   | <b>LG-4633-154</b> | 21.85  |
| 12" Flex Arm        | <b>LG-4633-200</b> | 89.00  |
| 18" Flex Arm        | <b>LG-4633-210</b> | 132.00 |
| Base Plate          | <b>LG-4633-300</b> | 102.65 |
| Lab-Frame Connector | <b>LG-4633-302</b> | 35.00  |
| Bench Clamp         | <b>LG-4633-304</b> | 63.50  |

**Ultra Flex with Base Plate****Ultra Flex with Lab Frame Connector****Ultra Flex with Bench Clamp****LG-4633**


**LG-4670**

### Condenser, Air

A plain 13mm tube with a 24/40 inner joint having a drip tip.

| Tube Length<br>mm | Part<br>Number     | Each<br>Price |
|-------------------|--------------------|---------------|
| 300               | <b>LG-4670-100</b> | \$27.44       |
| 500               | <b>LG-4670-102</b> | 29.94         |
| 600               | <b>LG-4670-104</b> | 31.19         |
| 750               | <b>LG-4670-106</b> | 37.41         |
| 900               | <b>LG-4670-108</b> | 42.42         |

Replaces LX3870

### Condenser, Allihn

With outer joint at top and a inner drip joint of the same size at bottom.

| Jacket Length<br>mm | Joint | Part<br>Number     | Each<br>Price |
|---------------------|-------|--------------------|---------------|
| 200                 | 24/40 | <b>LG-4680-100</b> | \$78.64       |
| 250                 | 24/40 | <b>LG-4680-102</b> | 84.18         |
| 300                 | 24/40 | <b>LG-4680-104</b> | 90.45         |
| 400                 | 24/40 | <b>LG-4680-106</b> | 98.86         |
| 500                 | 24/40 | <b>LG-4680-108</b> | 106.67        |
| 600                 | 24/40 | <b>LG-4680-110</b> | 108.84        |
| 400                 | 29/42 | <b>LG-4680-126</b> | 105.93        |
| 500                 | 29/42 | <b>LG-4680-128</b> | 113.19        |
| 600                 | 29/42 | <b>LG-4680-130</b> | 127.46        |


**LG-4680**

### Condenser, PYREX®, Allihn

With the outer joint at the top and the inner at the bottom the same size. Suitable for use and vacuum distillations. The tubulations have an O.D. of approximately 10mm.

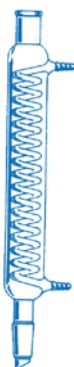
| Jacket Length<br>mm | Joint | No. of<br>Bulbs | Part<br>Number    | Each<br>Price |
|---------------------|-------|-----------------|-------------------|---------------|
| 200                 | 19/38 | 3               | <b>C-2480-200</b> | \$135.48      |
| 300                 | 24/40 | 5               | <b>C-2480-300</b> | 116.48        |
| 400                 | 24/40 | 6               | <b>C-2480-400</b> | 136.30        |
| 500                 | 24/40 | 8               | <b>C-2480-500</b> | 156.69        |
| 600                 | 29/42 | 10              | <b>C-2480-600</b> | 183.52        |


**C-2480**

### Condenser, Cool Coil

Coolant is circulated through a coil in the jacket and vapors rise within the jacket itself. With outer joint at top and a inner drip tip joint of the same size at bottom.

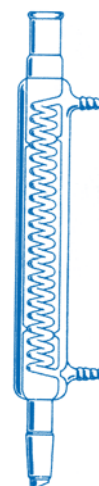
| Jacket Length<br>mm | Joint | Part<br>Number     | Each<br>Price |
|---------------------|-------|--------------------|---------------|
| 200                 | 24/40 | <b>LG-5037-100</b> | \$124.51      |
| 250                 | 24/40 | <b>LG-5037-102</b> | 143.07        |
| 300                 | 24/40 | <b>LG-5037-104</b> | 146.61        |
| 400                 | 24/40 | <b>LG-5037-106</b> | 161.21        |
| 600                 | 24/40 | <b>LG-5037-110</b> | 202.25        |
| 300                 | 29/42 | <b>LG-5037-124</b> | 151.35        |
| 400                 | 29/42 | <b>LG-5037-126</b> | 167.92        |


**LG-5037**

**Condenser, Double Cooling**

Double wall with interior spiral coil for efficient cooling. As vapors rise, they are condensed on the jacket inner wall and the outer surface of the coil. Top and bottom joints are the same size.

| Jacket Length<br>mm | Joint | Part<br>Number     | Each<br>Price |
|---------------------|-------|--------------------|---------------|
| 80                  | 14/20 | <b>ML-545-700</b>  | \$122.36      |
| 80                  | 19/22 | <b>ML-545-702</b>  | 124.74        |
| 200                 | 24/40 | <b>LG-4811-100</b> | 228.78        |
| 250                 | 24/40 | <b>LG-4811-102</b> | 226.91        |
| 300                 | 24/40 | <b>LG-4811-104</b> | 234.70        |
| 400                 | 24/40 | <b>LG-4811-106</b> | 245.23        |
| 500                 | 24/40 | <b>LG-4811-108</b> | 278.08        |
| 600                 | 24/40 | <b>LG-4811-110</b> | 291.52        |
| 200                 | 29/42 | <b>LG-4811-120</b> | 236.32        |
| 250                 | 29/42 | <b>LG-4811-122</b> | 236.72        |
| 300                 | 29/42 | <b>LG-4811-124</b> | 241.90        |
| 400                 | 29/42 | <b>LG-4811-126</b> | 253.10        |
| 500                 | 29/42 | <b>LG-4811-128</b> | 285.88        |
| 600                 | 29/42 | <b>LG-4811-130</b> | 295.67        |

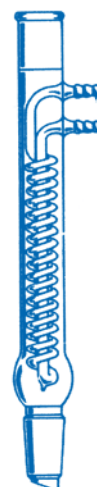


**ML-545  
LG-4811**

**Condenser, Coil, Hopkins**

A combination of the cool coil and Hopkins styles. The finger consists of a small straight inner tube connected at its bottom to a coil which spirals up around the inner tube. Both hose connections are on the side near the top. The top of the outer jacket has a outer joint and there is a inner joint of the same size, having a drip tip, at the bottom.

| Jacket Length<br>mm | Joint | Part<br>Number     | Each<br>Price |
|---------------------|-------|--------------------|---------------|
| 100                 | 14/20 | <b>ML-580-700</b>  | \$112.32      |
| 100                 | 19/22 | <b>ML-580-702</b>  | 114.70        |
| 125                 | 24/40 | <b>LG-5076-100</b> | 149.47        |
| 175                 | 24/40 | <b>LG-5076-102</b> | 154.30        |
| 225                 | 24/40 | <b>LG-5076-104</b> | 164.72        |
| 275                 | 29/42 | <b>LG-5076-106</b> | 186.81        |

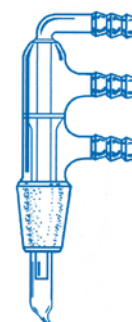


**ML-580  
LG-5076**

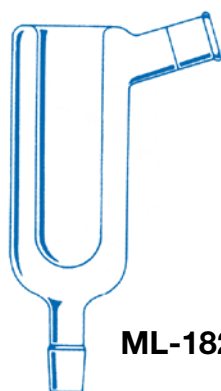
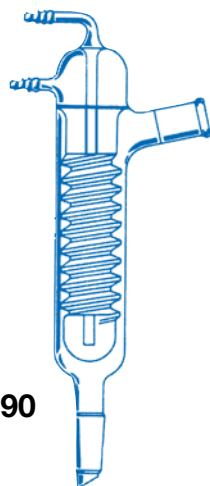
**Condenser, Cold Finger, Micro**

Compact design makes this condenser suitable for microscale refluxing in flasks from 5mL capacity upward. Lower side hose connector is provided for connection to vacuum/gas source. Minimal surface area provides better efficiency.

| Joint | Part<br>Number     | Each<br>Price |
|-------|--------------------|---------------|
| 14/10 | <b>LG-5236-100</b> | \$116.78      |
| 14/20 | <b>LG-5236-102</b> | 116.78        |
| 19/22 | <b>LG-5236-104</b> | 118.10        |



**LG-5236**

**ML-1825****LG-4820****LG-4821****LG-4890****Condenser, Dewar**

Similar to a Dewar flask but with addition of inner joint at bottom and an outer joint of the same size and style extending in an upward direction from the side of jacket near the top. The inside diameter of flask is approximately 32mm and the inside height is approximately 120mm.

| ⌘ Joint | Part Number        | Each Price |
|---------|--------------------|------------|
| 14/20   | <b>ML-1825-700</b> | \$112.09   |
| 19/22   | <b>ML-1825-702</b> | 118.23     |

**Condenser, Dry Ice**

Large top opening allows easy filling of dry ice/alcohol mixtures or liquid nitrogen. Contact with inner wall surface results in condensation of volatile solvents.

| I.D. x Length mm | ⌘ Joint | Part Number        | Each Price |
|------------------|---------|--------------------|------------|
| 40 x 200         | 24/40   | <b>LG-4820-100</b> | \$131.55   |
| 50 x 250         | 24/40   | <b>LG-4820-102</b> | 167.90     |
| 60 x 345         | 24/40   | <b>LG-4820-104</b> | 183.97     |
| 75 x 300         | 24/40   | <b>LG-4820-106</b> | 187.22     |

**Condenser, Dry Ice**

Similar to *LG-4820* except the top vent has a outer joint of the same size as the drip tip.

| I.D. x Length mm | ⌘ Joint | Part Number        | Each Price |
|------------------|---------|--------------------|------------|
| 40 x 200         | 24/40   | <b>LG-4821-100</b> | \$161.51   |
| 50 x 250         | 24/40   | <b>LG-4821-102</b> | 194.65     |
| 60 x 345         | 24/40   | <b>LG-4821-104</b> | 209.92     |
| 75 x 300         | 24/40   | <b>LG-4821-106</b> | 213.50     |

**Condenser, Friedrich**

With spiral inner tube, containing the coolant, which fits closely within the jacket, so that vapor must pass along spiral in a thin layer. With outer joint attached to upper end jacket and extending upward at an angle of 15°. The bottom of condenser has a inner joint, with a drip tip, of the same size.

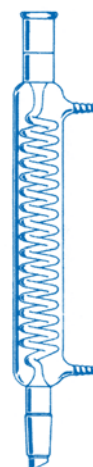
| Approx. Length mm | ⌘ Joint | Part Number        | Each Price |
|-------------------|---------|--------------------|------------|
| 325               | 24/40   | <b>LG-4890-100</b> | \$137.97   |
| 325               | 29/26   | <b>LG-4890-101</b> | 150.14     |
| 325               | 29/42   | <b>LG-4890-102</b> | 147.07     |
| 360               | 45/50   | <b>LG-4890-104</b> | 180.20     |

### Condenser, Graham

With an outer joint at the top and an inner drip tip joint of the same size at the bottom.

| Jacket Length<br>mm | £ Joint | Part<br>Number     | Each<br>Price |
|---------------------|---------|--------------------|---------------|
| 200                 | 24/40   | <b>LG-4940-100</b> | \$106.42      |
| 250                 | 24/40   | <b>LG-4940-102</b> | 109.97        |
| 300                 | 24/40   | <b>LG-4940-104</b> | 113.51        |
| 400                 | 24/40   | <b>LG-4940-106</b> | 122.97        |
| 500                 | 24/40   | <b>LG-4940-108</b> | 137.73        |
| 600                 | 24/40   | <b>LG-4940-110</b> | 146.37        |
| 300                 | 29/42   | <b>LG-4940-124</b> | 120.77        |
| 400                 | 29/42   | <b>LG-4940-126</b> | 132.97        |
| 500                 | 29/42   | <b>LG-4940-128</b> | 143.34        |
| 600                 | 29/42   | <b>LG-4940-130</b> | 154.94        |

**LG-4940**



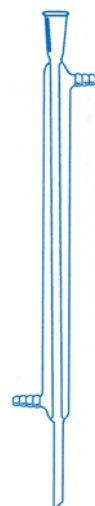
### Condenser, Liebig, Plain Stem

The top of the Liebig condenser accepts a #3 rubber stopper. The bottom has a plain drip tip.

| Jacket Length<br>mm | Part<br>Number     | Each<br>Price |
|---------------------|--------------------|---------------|
| 200                 | <b>LG-5140-100</b> | \$74.60       |
| 300                 | <b>LG-5140-102</b> | 80.80         |

Replaces LX3930

**LG-5140**



### Condenser, Liebig

With outer joint at top and an inner joint, having a drip tip at the bottom.

| Jacket Length<br>mm | Top<br>£ Joint | Bottom<br>£ Joint | Part<br>Number     | Each<br>Price |
|---------------------|----------------|-------------------|--------------------|---------------|
| 110                 | 14/20          | 14/20             | <b>ML-560-700</b>  | \$53.08       |
| 110                 | 14/20          | 14/35             | <b>ML-560-702</b>  | 57.73         |
| 110                 | 19/22          | 19/22             | <b>ML-560-704</b>  | 55.69         |
| 200                 | 24/40          | 24/40             | <b>LG-5150-100</b> | 77.33         |
| 250                 | 24/40          | 24/40             | <b>LG-5150-102</b> | 82.53         |
| 300                 | 24/40          | 24/40             | <b>LG-5150-104</b> | 85.24         |
| 400                 | 24/40          | 24/40             | <b>LG-5150-106</b> | 89.15         |
| 500                 | 24/40          | 24/40             | <b>LG-5150-108</b> | 93.18         |
| 600                 | 24/40          | 24/40             | <b>LG-5150-110</b> | 100.28        |
| 200                 | 29/26          | 29/26             | <b>LG-5150-112</b> | 81.23         |
| 250                 | 29/26          | 29/26             | <b>LG-5150-114</b> | 86.53         |
| 300                 | 29/26          | 29/26             | <b>LG-5150-116</b> | 89.31         |
| 400                 | 29/26          | 29/26             | <b>LG-5150-118</b> | 93.28         |
| 200                 | 29/42          | 29/42             | <b>LG-5150-120</b> | 81.23         |
| 250                 | 29/42          | 29/42             | <b>LG-5150-122</b> | 86.53         |
| 300                 | 29/42          | 29/42             | <b>LG-5150-124</b> | 89.31         |
| 400                 | 29/42          | 29/42             | <b>LG-5150-126</b> | 93.28         |
| 500                 | 29/42          | 29/42             | <b>LG-5150-128</b> | 97.38         |
| 600                 | 29/42          | 29/42             | <b>LG-5150-130</b> | 102.68        |

**ML-560  
LG-5150**




**LG-5794**

### Distilling Column/Condenser

Distilling Column with indentations for random packing support and water jacket that allows for alternative use as a condenser. With outer joint at top and inner drip tip joint at bottom.

| Joint | Column Length mm | Part Number        | Each Price |
|-------|------------------|--------------------|------------|
| 14/20 | 100              | <b>LG-5794-100</b> | \$52.08    |
| 14/20 | 200              | <b>LG-5794-102</b> | 52.97      |
| 19/22 | 100              | <b>LG-5794-104</b> | 54.50      |
| 19/22 | 200              | <b>LG-5794-106</b> | 56.40      |
| 24/40 | 200              | <b>LG-5794-108</b> | 63.85      |

### Distilling Column/Condenser West

With a outer joint at top and an inner joint of the same size, having a drip tip, at the bottom.

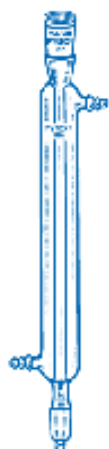
| Joint | Column Length mm | Part Number        | Each Price |
|-------|------------------|--------------------|------------|
| 14/20 | 110              | <b>ML-590-700</b>  | \$53.68    |
| 14/20 | 200              | <b>ML-590-701</b>  | 57.34      |
| 19/22 | 110              | <b>ML-590-702</b>  | 54.72      |
| 19/22 | 200              | <b>ML-590-703</b>  | 58.82      |
| 24/40 | 200              | <b>LG-5350-100</b> | 69.27      |
| 24/40 | 250              | <b>LG-5350-102</b> | 72.00      |
| 24/40 | 300              | <b>LG-5350-104</b> | 74.74      |
| 24/40 | 400              | <b>LG-5350-106</b> | 83.64      |
| 24/40 | 500              | <b>LG-5350-108</b> | 89.50      |


**ML-590  
LG-5350**

### Condenser, PYREX® Liebig,

A general purpose condenser that can be used for distillation and extraction. With the outer joint at the top and the inner joint at the bottom the same size. The tubulation O.D. is approximately 10mm.

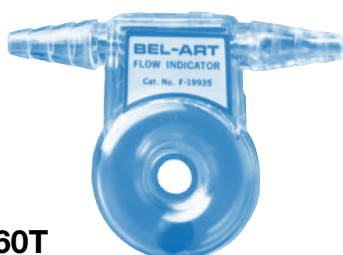
| Joint | Column Length mm | Part Number       | Each Price |
|-------|------------------|-------------------|------------|
| 19/38 | 200              | <b>C-2400-200</b> | \$100.30   |
| 24/40 | 300              | <b>C-2400-300</b> | 93.73      |
| 24/40 | 400              | <b>C-2400-400</b> | 109.22     |
| 24/40 | 500              | <b>C-2400-500</b> | 116.04     |


**C-2400**

### Flow Indicator

Useful attachment for condensers to indicate liquid flow. Ball rotation can be observed at distances of 20-25 feet. Flow rates as low as 100mL/minute can be used with this indicator. Molded of polycarbonate with a white nylon ball.

| Part Number         | Each Price |
|---------------------|------------|
| <b>LG-9560T-100</b> | \$16.46    |


**LG-9560T**



### Cooling Equipment, RS Recirculating Chillers

For use with vessels up to 10 liters. Supplied with digital control unit RS-232.

| Temperature Range                         | Power Supply | Model # | Part Number         | Each Price |
|-------------------------------------------|--------------|---------|---------------------|------------|
| -10°C to +35°C                            | 1050W@20°C   | RS33    | <b>LG-18000-100</b> | \$3,925.00 |
| -10°C to +35°C                            | 1410W@20°C   | RS44    | <b>LG-18000-110</b> | \$4,115.00 |
| <i>Options:</i>                           |              |         |                     |            |
| Low temperature -40°C to 35°C             |              |         | <b>LG-18000-120</b> | 415.00     |
| -600W heater to 75°C (for RS44 unit only) |              |         | <b>LG-18000-122</b> | 415.00     |

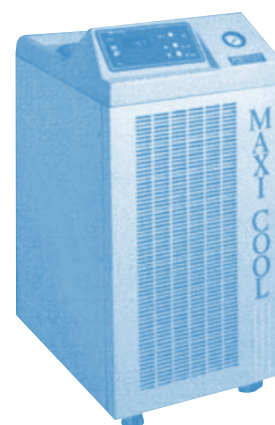


**LG-18000**

### Cooling Equipment, Maxi-Cool Recirculating Chillers

For use with vessels up to 20 liters. Supplied with digital control unit RS-232.

| Temperature Range                             | Power Supply | Model # | Part Number         | Each Price |
|-----------------------------------------------|--------------|---------|---------------------|------------|
| -10°C to +35°C                                | 3800W@20°C   | RC100   | <b>LG-18005-100</b> | \$7,015.00 |
| -10°C to +35°C                                | 5700W@20°C   | RC150   | <b>LG-18005-110</b> | \$7,420.00 |
| <i>Options:</i>                               |              |         |                     |            |
| Low temperature -38°C (for RC100 unit only)   |              |         | <b>LG-18005-120</b> | 755.00     |
| Deluxe Digital Control, 1500W Heater to +75°C |              |         | <b>LG-18005-122</b> | \$1,745.00 |



**LG-18005**

### Cooling Equipment, ULT Recirculating Chiller

For use with vessels up to 20 liters and larger. Supplied with digital control unit RS-232.

*Features:*

RC210 uses Digital Control Unit RS232

RC211 uses Deluxe Digital Control Unit EMO w/1500W Heater

RC311 uses Deluxe Digital Control Unit EMO w/1500W Heater & has Water Cooled System

RC311GWT uses Deluxe Digital Control Unit EMO w/3500W heater and has Water Cooled System

| Temperature Range | Power Supply | Model #  | Part Number         | Each Price  |
|-------------------|--------------|----------|---------------------|-------------|
| -80°C to -10°C    | 550W@-70°C   | RC210    | <b>LG-18009-100</b> | \$13,970.00 |
| -80°C to +75°C    | 550W@-70°C   | RC211    | <b>LG-18009-110</b> | \$15,985.00 |
| -90°C to +75°C    | 500W@-80°C   | RC311    | <b>LG-18009-120</b> | \$24,455.00 |
| -75°C to +150°C   | 1200W@-70°C  | RC311GWT | <b>LG-18009-100</b> | \$31,120.00 |

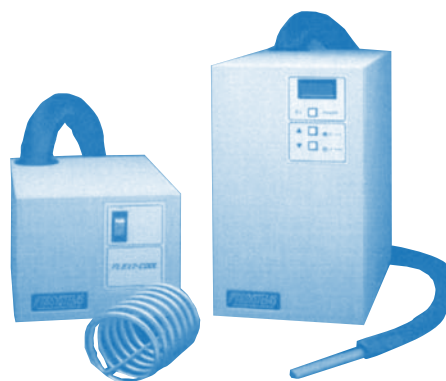


**LG-18009**


**LG-18012**
**Cooling Equipment, XR Sample Coolers**

For temperature control of NMR Samples.

| Temperature Range    | Model # | Part Number         | Each Price |
|----------------------|---------|---------------------|------------|
| -80°C to +100°C      | XR11851 | <b>LG-18012-100</b> | \$8,403.00 |
| -40°C to +100°C      | XR401   | <b>LG-18012-110</b> | \$7,030.00 |
| <i>Options:</i>      |         |                     |            |
| RS-232 Interface     |         | <b>LG-18012-120</b> | 755.00     |
| 15 Ft. Delivery Line |         | <b>LG-18012-122</b> |            |


**LG-18014**
**Cooling Equipment, Flexi-Cool Immersion Cooler**

For replacement of Dry Ice or LN2. Supplied with digital control RS-232.

| Temperature Range   | Power Supply | Model # | Part Number         | Each Price |
|---------------------|--------------|---------|---------------------|------------|
| maximum low @ -50°C | 70W@ -40°C   | FC55    | <b>LG-18014-100</b> | \$2,593.00 |
| maximum low @ 100°C | 110W@ -60°C  | FC100   | <b>LG-18014-110</b> | \$3,798.00 |


**LG-18016**
**Cooling Equipment, Multi-Cool Low Temperature Bath**

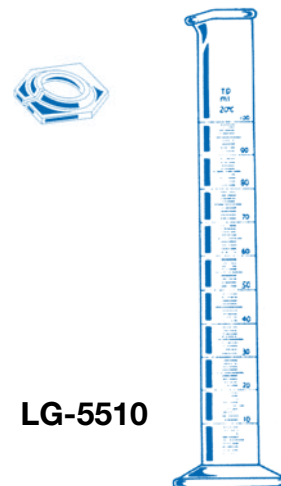
Supplied with digital control RS-232.

| Temperature Range                     | Power Supply | Model # | Part Number         | Each Price |
|---------------------------------------|--------------|---------|---------------------|------------|
| -80°C to +100°C                       | 110W@ -60°C  | MC480   | <b>LG-18016-100</b> | \$5,600.00 |
| -80°C to +100°C                       | 110W@ -60°C  | MC880   | <b>LG-18016-110</b> | \$6,055.00 |
| <i>Options:</i>                       |              |         |                     |            |
| Charpy Rack, holds up to 65 Specimens |              | CRA-4   | <b>LG-18016-120</b> | \$1,045.00 |
| Charpy Rack, holds up to 91 Specimens |              | CRA-8   | <b>LG-18016-122</b> | \$1,150.00 |

**Cylinder, Graduated, Laboratory Grade, with Pourout**

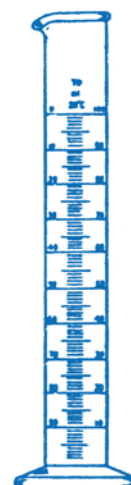
Complies with ASTM E1272 having a reinforced bead and pouring lip. 5mL has a funnel top. Calibrated to deliver at 20°C and suitable for general laboratory use, with collar.

| Capacity<br>mL | Subdivision<br>mL | Tol.<br>±<br>mL | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 5              | 0.1               | 0.1             | 110                     | <b>LG-5510-100</b> | \$21.20       |
| 10             | 0.2               | 0.2             | 135                     | <b>LG-5510-102</b> | 22.45         |
| 25             | 0.5               | 0.34            | 140                     | <b>LG-5510-104</b> | 26.20         |
| 50             | 1                 | 0.5             | 190                     | <b>LG-5510-106</b> | 28.69         |
| 100            | 1                 | 1.0             | 255                     | <b>LG-5510-108</b> | 33.67         |
| 250            | 2                 | 2.0             | 330                     | <b>LG-5510-110</b> | 43.67         |
| 500            | 5                 | 4.0             | 375                     | <b>LG-5510-112</b> | 56.87         |
| 1000           | 10                | 6.0             | 460                     | <b>LG-5510-114</b> | 83.58         |
| 2000           | 20                | 12.0            | 520                     | <b>LG-5510-116</b> | 137.94        |
| 4000           | 50                | 29.0            | 585                     | <b>LG-5510-118</b> | 274.46        |

**LG-5510****Cylinder, Graduated, Double Metric Scale**

Calibrated to deliver. Double scale, numbered up and down.

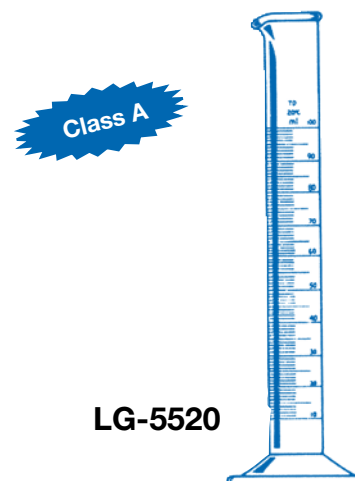
| Capacity<br>mL | Subdivision<br>mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|---------------|
| 10             | 0.2               | <b>LG-5512-100</b> | \$16.80       |
| 25             | 0.5               | <b>LG-5512-102</b> | 21.59         |
| 50             | 1                 | <b>LG-5512-104</b> | 23.39         |
| 100            | 1                 | <b>LG-5512-106</b> | 26.38         |
| 250            | 2                 | <b>LG-5512-108</b> | 37.19         |
| 500            | 5                 | <b>LG-5512-110</b> | 52.78         |
| 1000           | 10                | <b>LG-5512-112</b> | 67.17         |
| 2000           | 20                | <b>LG-5512-114</b> | 120.10        |

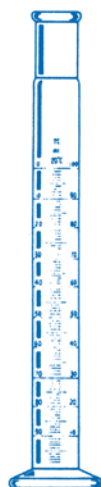
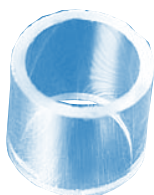
**LG-5512****Cylinder, Graduated, Precision Grade, with Pourout**

Similar to *LG-5510* but with a greater level of precision conforming to ASTM E1272 Style 1 Class A.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>±mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|------------------|--------------------|---------------|
| 5*             | 0.1               | 0.05             | <b>LG-5520-098</b> | \$83.66       |
| 10             | 0.1               | 0.10             | <b>LG-5520-100</b> | 90.44         |
| 25             | 0.2               | 0.17             | <b>LG-5520-102</b> | 98.46         |
| 50             | 1                 | 0.25             | <b>LG-5520-104</b> | 81.82         |
| 100            | 1                 | 0.50             | <b>LG-5520-106</b> | 87.04         |
| 250            | 2                 | 1.00             | <b>LG-5520-108</b> | 98.46         |
| 500            | 5                 | 2.00             | <b>LG-5520-110</b> | 115.14        |
| 1000           | 10                | 3.00             | <b>LG-5520-112</b> | 141.70        |
| 2000           | 20                | 6.00             | <b>LG-5520-114</b> | 186.20        |

Replaces LX4002

**LG-5520**

**LG-5530****LG-5560****C-3166****Cylinder, Graduated, Laboratory Grade, with Stopper**

Laboratory, general purpose grade which conforms to ASTM E1272. Calibrated to contain at 20°C. Used to measure foam characteristics of emulsions and sedimentation values for solids. See *LG-10320* for replacement stoppers.

| Capacity<br>mL | Subdivision<br>mL | Tol.<br>± mL | Stopper | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------|---------|--------------------|---------------|
| 10             | 0.2               | 0.2          | 13      | <b>LG-5530-102</b> | \$31.19       |
| 25             | 0.5               | 0.34         | 13      | <b>LG-5530-104</b> | 39.91         |
| 50             | 1                 | 0.5          | 16      | <b>LG-5530-106</b> | 42.61         |
| 100            | 1                 | 1.0          | 22      | <b>LG-5530-108</b> | 48.42         |
| 250            | 2                 | 2.0          | 27      | <b>LG-5530-110</b> | 61.97         |
| 500            | 5                 | 4.0          | 32      | <b>LG-5530-112</b> | 86.36         |
| 1000           | 10                | 6.0          | 32      | <b>LG-5530-114</b> | 121.14        |
| 2000           | 20                | 12.0         | 38      | <b>LG-5530-116</b> | 185.93        |

**Cylinder, Graduated, Laboratory Grade, Outer Joint**

Calibrated to contain according to ASTM E1272. Unit has double metric scale numbered up and down. The neck allows incorporation in apparatus where volume measurement is needed. See *LG-10315* for stoppers.

| Capacity<br>mL | Subdivision<br>mL | Tol.<br>± mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------|-------|--------------------|---------------|
| 25             | 0.5               | 0.34         | 19/38 | <b>LG-5560-100</b> | \$49.04       |
| 50             | 1                 | 0.5          | 19/38 | <b>LG-5560-102</b> | 62.26         |
| 50             | 1                 | 0.5          | 24/40 | <b>LG-5560-104</b> | 60.82         |
| 100            | 1                 | 1.0          | 19/38 | <b>LG-5560-106</b> | 57.14         |
| 100            | 1                 | 1.0          | 24/40 | <b>LG-5560-108</b> | 62.85         |
| 250            | 2                 | 2.0          | 24/40 | <b>LG-5560-110</b> | 89.05         |
| 500            | 5                 | 4.0          | 24/40 | <b>LG-5560-112</b> | 103.68        |
| 500            | 5                 | 4.0          | 29/42 | <b>LG-5560-114</b> | 106.30        |
| 1000           | 10                | 6.0          | 24/40 | <b>LG-5560-116</b> | 125.94        |
| 1000           | 10                | 6.0          | 29/42 | <b>LG-5560-118</b> | 128.65        |
| 2000           | 20                | 12.0         | 34/45 | <b>LG-5560-120</b> | 184.62        |

**Cylinder, PYREX®, Cloning**

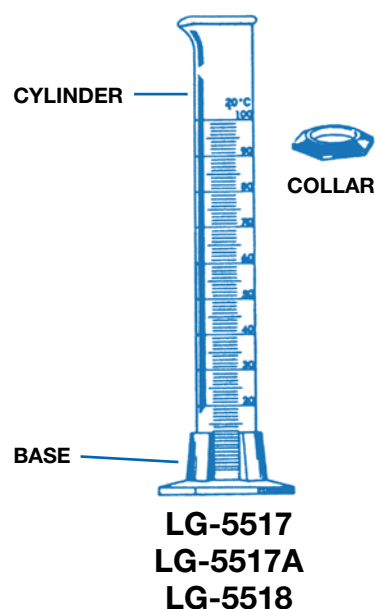
Clone a single cell or group of cells by surrounding them with this glass cylinder. Dip the end of the cylinder into a sterile silicone grease before pressing to the bottom of a culture flask to create identical cells. 125 pieces per pack.

| Dimensions<br>O.D. x Height mm | Part<br>Number   | Each<br>Price |
|--------------------------------|------------------|---------------|
| 6 x 8                          | <b>C-3166-6</b>  | \$ .37        |
| 8 x 8                          | <b>C-3166-8</b>  | .37           |
| 10 x 10                        | <b>C-3166-10</b> | .43           |

**Cylinder, Graduated, Single Metric Scale, with Detachable Plastic Base**

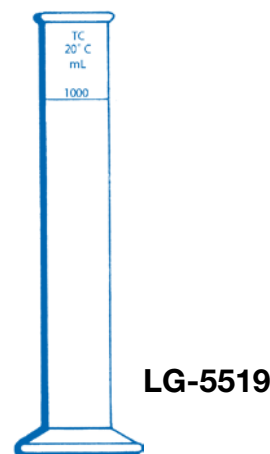
With durable graduations. Calibrated to deliver. See *LG-5517A* & *LG-5518* for replacement parts.

| Supplied                          | Capacity<br>mL | Sub-<br>division<br>mL | Part<br>Number      | Each<br>Price |
|-----------------------------------|----------------|------------------------|---------------------|---------------|
| Complete                          | 10             | 0.2                    | <b>LG-5517-100</b>  | \$4.79        |
| Complete                          | 25             | 0.5                    | <b>LG-5517-102</b>  | 5.16          |
| Complete                          | 50             | 1                      | <b>LG-5517-104</b>  | 5.85          |
| Complete                          | 100            | 1                      | <b>LG-5517-106</b>  | 7.63          |
| Plastic Collar for 10mL cylinder  |                |                        | <b>LG-5517A-100</b> | 0.45          |
| Plastic Collar for 25mL cylinder  |                |                        | <b>LG-5517A-102</b> | 0.45          |
| Plastic Collar for 50mL cylinder  |                |                        | <b>LG-5517A-104</b> | 2.44          |
| Plastic Collar for 100mL cylinder |                |                        | <b>LG-5517A-106</b> | 2.29          |
| Plastic Base for 10mL cylinder    |                |                        | <b>LG-5517A-110</b> | 1.42          |
| Plastic Base for 25mL cylinder    |                |                        | <b>LG-5517A-112</b> | 2.12          |
| Plastic Base for 50mL cylinder    |                |                        | <b>LG-5517A-114</b> | 2.45          |
| Plastic Base for 100mL cylinder   |                |                        | <b>LG-5517A-116</b> | 2.29          |
| Glass Cylinder for 10mL           |                |                        | <b>LG-5518-100</b>  | 4.32          |
| Glass Cylinder for 25mL           |                |                        | <b>LG-5518-102</b>  | 5.10          |
| Glass Cylinder for 50mL           |                |                        | <b>LG-5518-104</b>  | 5.46          |
| Glass Cylinder for 100mL          |                |                        | <b>LG-5518-106</b>  | 7.59          |

**Cylinder, Soil Suspension, ASTM-AASHO**

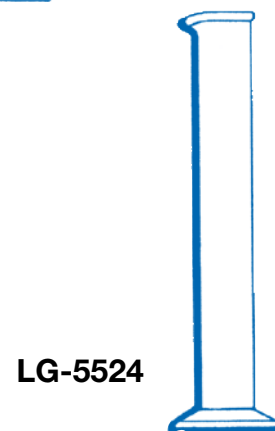
Calibrated to contain. Used in determining the amount of soil in dispersed suspensions as described in ASTM Standard Method D422 and AASHO Method T 88. With heavy beaded finish at top.

| Capacity<br>mL | Graduation<br>Ring at<br>mL | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------|-------------------------|--------------------|---------------|
| 1000           | 1000                        | 460                     | <b>LG-5519-100</b> | \$81.17       |

**Cylinder, Hydrometer, with Pourout**

Cylinders with large stable round base and pourout on top.

| Diameter<br>mm | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------------|--------------------|---------------|
| 38             | 200                     | <b>LG-5524-112</b> | \$21.94       |
| 38             | 300                     | <b>LG-5524-114</b> | 23.25         |
| 38             | 375                     | <b>LG-5524-116</b> | 23.90         |
| 50             | 375                     | <b>LG-5524-116</b> | 27.12         |





LG-7671



LG-7680



LG-7681



LG-5618

### Cylinder, Dewar, Flask, Laboratory Grade

For routine use. Furnished silvered, evacuated and with aluminum base.

| Capacity<br>mL | Inside<br>Diameter<br>Inches    | Inside<br>Depth<br>Inches       | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------|---------------------------------|--------------------|---------------|
| 350            | 2 <sup>3</sup> / <sub>8</sub>   | 4 <sup>7</sup> / <sub>16</sub>  | <b>LG-7671-100</b> | \$90.35       |
| 665            | 2 <sup>3</sup> / <sub>4</sub>   | 7 <sup>11</sup> / <sub>16</sub> | <b>LG-7671-102</b> | 89.64         |
| 1000           | 2 <sup>11</sup> / <sub>16</sub> | 11 <sup>7</sup> / <sub>8</sub>  | <b>LG-7671-104</b> | 94.53         |
| 1900           | 4 <sup>3</sup> / <sub>4</sub>   | 7 <sup>3</sup> / <sub>4</sub>   | <b>LG-7671-106</b> | 218.81        |
| 4300           | 6                               | 10 <sup>7</sup> / <sub>8</sub>  | <b>LG-7671-108</b> | 288.51        |
| 5000           | 8 <sup>1</sup> / <sub>2</sub>   | 15                              | <b>LG-7671-110</b> | 407.03        |

*Note: LG-7671-110 has spherical shape.*

### Cylinder, Dewar, Flask, Low Form

Flasks are silvered and evacuated with Aluminum Base. Suitable for use with liquid nitrogen. Convenient when doing sub-ambient reactions or working biological materials. Entire unit can be placed on a magnetic stirrer.

| Capacity<br>mL | Inside<br>Diameter<br>mm | Inside<br>Depth<br>mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------------|-----------------------|--------------------|---------------|
| 150            | 80                       | 35                    | <b>LG-7680-100</b> | \$169.15      |
| 350            | 80                       | 75                    | <b>LG-7680-102</b> | 173.04        |
| 500            | 105                      | 53                    | <b>LG-7680-104</b> | 212.90        |
| 850            | 130                      | 75                    | <b>LG-7680-106</b> | 227.24        |
| 2500           | 170                      | 135                   | <b>LG-7680-108</b> | 407.18        |

### Cylinder, Dewar, Flask, Freezing Point, ASTM

Apparatus consists of two unsilvered Dewar flasks. The inner flask contains the sample while the outer flask holds the coolant.

*Reference: ASTM D2386 Test Method for Freezing Point of Aviation Fuels.*

| Supplied           | Outside Diameter<br>x Length<br>mm | Part<br>Number     | Each<br>Price |
|--------------------|------------------------------------|--------------------|---------------|
| Complete           |                                    | <b>LG-7681-100</b> | \$357.08      |
| Vacuum Flask       | 90 x 280                           | <b>LG-7681-102</b> | 238.22        |
| Inner Sample Flask | 30 x 238                           | <b>LG-7681-104</b> | 128.30        |

### Cylinder, Dilatometer, Volumetric, AOCs

For the determination of the solid fat index. Stem is made from precision bore capillary tubing and graduated from 0 to 1.400mL in 0.005mL subdivisions. Details of method is described in method AOCs Cd 10-57. Tube, bulb, and stopper are permanently marked for easy identification. Furnished with LG-1004-104 clamp to keep the 14/20 stopper in place.

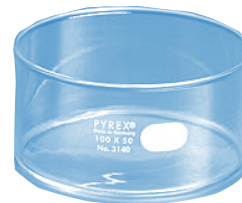
| Supplied    | Part<br>Number     | Each<br>Price |
|-------------|--------------------|---------------|
| Amber Grads | <b>LG-5618-102</b> | \$176.88      |
| Black Grads | <b>LG-5618-104</b> | 176.88        |



### Dishes, PYREX®, Crystallizing

The rims on these dishes are reinforced and fire polished to reduce chipping. Will withstand repeated sterilization (wet or dry). Ideal for storage and crystallization.

| Capacity (mL) | Fl. Oz. | Approx. Diam. x Height (mm) | Part Number       | Each Price |
|---------------|---------|-----------------------------|-------------------|------------|
| 180           | 6       | 70 x 50                     | <b>C-3140-70</b>  | \$11.23    |
| 180           | 6       | 80 x 40                     | <b>C-3140-80</b>  | 10.99      |
| 270           | 9       | 90 x 50                     | <b>C-3140-90</b>  | 11.99      |
| 325           | 11      | 100 x 50                    | <b>C-3140-100</b> | 14.73      |
| 740           | 25      | 125 x 65                    | <b>C-3140-125</b> | 27.69      |
| 1200          | 30      | 150 x 75                    | <b>C-3140-150</b> | 36.76      |
| 1770          | 60      | 170 x 90                    | <b>C-3140-170</b> | 44.42      |
| 2500          | 85      | 190 x 100                   | <b>C-3140-190</b> | 52.52      |

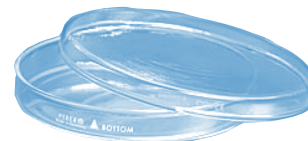


**C-3140**

### Dishes, PYREX®, Culture, Petri

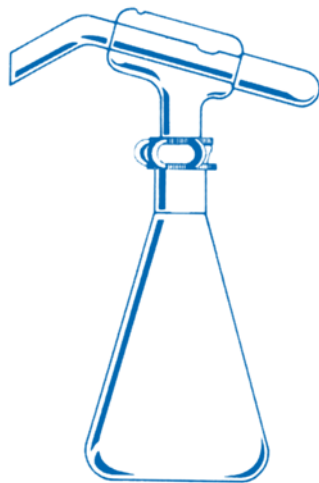
These flat, clear dishes will withstand repeated sterilization (wet or dry). The edges are beaded to provide greater mechanical strength. The bead also provides a means to equally space the side walls of the bottom and cover, thereby reducing the capillary action of condensed moisture on the sides.

| Size (mm) | Approx. Diam. x Height (mm) | Part Number       | Each Price |
|-----------|-----------------------------|-------------------|------------|
| 60 x 15   | 58 x 15                     | <b>C-3160-60</b>  | \$5.91     |
| 100 x 10  | 98 x 10                     | <b>C-3160-100</b> | 5.35       |
| 100 x 15  | 98 x 15                     | <b>C-3160-101</b> | 5.44       |
| 100 x 20  | 98 x 20                     | <b>C-3160-102</b> | 4.68       |
| 150 x 15  | 148 x 15                    | <b>C-3160-150</b> | 14.35      |
| 150 x 20  | 148 x 20                    | <b>C-3160-152</b> | 13.70      |



**C-3160**



**LG-7915****Dispenser, Tilting, Pipet Type**

Fixed volume designed to deliver measured volumes quickly with reproducibility. To fill, tilt backward so that the head is vertical. When assembly is returned to an upright position, the excess liquid in the head flows into the flask. Tilting forward delivers the measured volume. Complete with joint clamp. (LG-1004)

| Supplied   | Capacity<br>mL | Joint | Reservoir<br>Flask Capacity<br>mL | Part<br>Number     | Each<br>Price |
|------------|----------------|-------|-----------------------------------|--------------------|---------------|
| Complete   | 5              | 24/40 | 250                               | <b>LG-7915-108</b> | \$132.80      |
| Complete   | 10             | 24/40 | 500                               | <b>LG-7915-110</b> | 134.10        |
| Complete   | 15             | 24/40 | 500                               | <b>LG-7915-112</b> | 136.25        |
| Complete   | 25             | 24/40 | 1000                              | <b>LG-7915-118</b> | 146.65        |
| Complete   | 50             | 24/40 | 2000                              | <b>LG-7915-132</b> | 159.70        |
| Complete   | 100            | 34/45 | 2000                              | <b>LG-7915-138</b> | 192.15        |
| Flask Only |                | 24/40 | 250                               | <b>LG-7750-126</b> | 21.16         |
| Flask Only |                | 24/40 | 500                               | <b>LG-7750-130</b> | 22.78         |
| Flask Only |                | 24/40 | 1000                              | <b>LG-7750-132</b> | 26.03         |
| Flask Only |                | 24/40 | 2000                              | <b>LG-7750-134</b> | 34.77         |
| Flask Only |                | 34/45 | 2000                              | <b>LG-7750-162</b> | 42.61         |
| Head Only  | 5              | 24/40 |                                   | <b>LG-7915-208</b> | 111.15        |
| Head Only  | 10             | 24/40 |                                   | <b>LG-7915-210</b> | 111.15        |
| Head Only  | 15             | 24/40 |                                   | <b>LG-7915-212</b> | 113.48        |
| Head Only  | 25             | 24/40 |                                   | <b>LG-7915-218</b> | 120.52        |
| Head Only  | 50             | 24/40 |                                   | <b>LG-7915-232</b> | 124.88        |
| Head Only  | 100            | 34/45 |                                   | <b>LG-7915-238</b> | 149.36        |

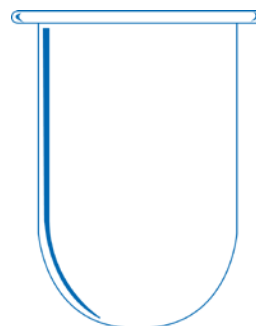
**Dissolution Vessel**

Vessels have smooth hemispherical bottoms, straight sides and flat flanges.

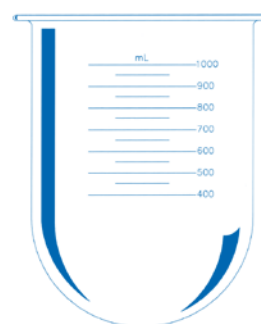
Reference: USP 23 (711)

| Supplied  | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|-----------|----------------|--------------------|---------------|
| Plain     | 1000           | <b>LG-7980-102</b> | \$73.80       |
| Graduated | 1000           | <b>LG-7981-100</b> | 79.95         |
| Ambered   | 1000           | <b>LG-7982-102</b> | 123.00        |

Note: LG-7981-100 is graduated in 50mL increments.



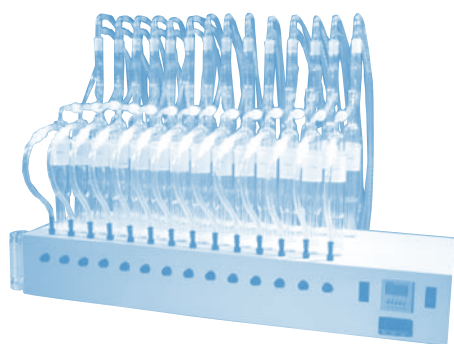
**LG-7980**



**LG-7981**



**LG-7982**

**LG-3166****Distilling Apparatus, MIDI-STIL™ Environmental Distillation Systems**

**Ref:** a. Method 335.2 and 335.4 Contract Lab Program Statement of Work 788.  
 b. *Standard Methods* 19th Edition-4500CN, 4500F, 4500 NH3B & 5530 Uniquely designed MIDI-STIL™ distillation system for scaled down midi-cyanide distillations and other USEPA approved distillations. Complete systems available with heating units that hold either 10 sets or 14 sets of glassware at one time. Additional features include:

**Glassware** - Complete sets of midi-cyanide glassware, for either 10 position or 14 position heating units, are supplied with each complete MIDI-STIL™ system. Tygon tubing, along with quick disconnect fittings, for both coolant and vacuum connections are also included. Glassware sets available with either 24/40 or 29/42 condenser joints on both sizes. For glassware for phenol, ammonia, and fluoride distillations, see LG-3166F.

**Economical to Use** - Uses 50mL of sample; reduces quantity of start-up material and reagent waste by 90%.

**Save Time** - The MIDI-STIL™ system features digital readout controls for both time and temperature. Automatic shut-off when selected reaction time is complete.

**Heater Unit** - Provides uniform heat to each position. This system features digital timer (120 min.) and digital heater control with thermocouple for automatic shut-off. Equipped with indicator lights, solid state relay, 15 amp fuse, and high temperature protection switch, 10 position 24"L x 10"W, 115V/1000W-, 14 position 30"L x 10"W, 115V/1000W.

**Vacuum Control** - PTFE needle valve provides accurate control for each absorber tube position.

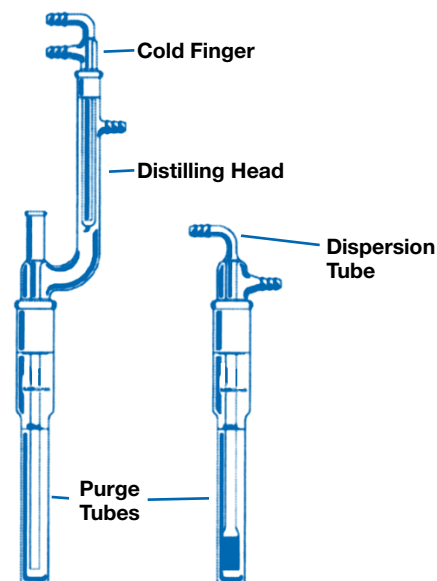
**Coolant Control** - Manifold system, with flow meter, provides even flow of water to each position so all samples are cooled at the same temperature to achieve accurate test results.

| Supplied                         | Joint | Part Number         | Each Price |
|----------------------------------|-------|---------------------|------------|
| 10 Position System Complete      | 24/40 | <b>LG-3166-100</b>  | \$6,989.26 |
| 14 Position System Complete      | 24/40 | <b>LG-3166-105</b>  | 9,000.23   |
| 10 Position System Complete      | 29/42 | <b>LG-3166-200</b>  | 7,011.48   |
| 14 Position System Complete      | 29/42 | <b>LG-3166-205</b>  | 9,063.35   |
| Heater Unit Only for 10 Position |       | <b>LG-3166-110</b>  | 4,877.75   |
| Heater Unit Only for 14 Position |       | <b>LG-3166-115</b>  | 5,841.15   |
| 1 Individual Set of Glassware    | 24/40 | <b>LG-3166C-100</b> | 263.88     |
| 1 Individual Set of Glassware    | 29/42 | <b>LG-3166C-200</b> | 269.16     |

### Distilling Apparatus, Midi-Cyanide

Distillation apparatus for removal of interfering substances during quantitative analysis of industrial waste waters, saline, and reagent grade water. Designed for 50mL or less or aqueous samples. The reflux distillation process releases cyanide as HCN from cyanide complexes which is absorbed in a scrubber containing a sodium hydroxide solution. Purge tube is 50mL capacity. May be used with other midi-scale distillation systems. Supplied with *LG-1004* clamps.

| Supplied                               | Joint | Part Number         | Each Price |
|----------------------------------------|-------|---------------------|------------|
| Complete Set, 24/40                    | 24/40 | <b>LG-3166C-100</b> | \$263.88   |
| Distilling Head, 14/20 Condenser Joint | 24/40 | <b>LG-3166C-120</b> | 82.72      |
| Condenser, Cold Finger 14/20           | 14/20 | <b>LG-3166C-125</b> | 51.31      |
| Dispersion/Absorber Tube, Fritted      | 24/40 | <b>LG-3166C-130</b> | 73.72      |
| Purge Tube/Reaction Flask (2 req'd)    | 24/40 | <b>LG-3166C-135</b> | 29.55      |
| Complete Set, 29/42                    | 29/42 | <b>LG-3166C-200</b> | 269.16     |
| Distilling Head, 14/20 Condenser Joint | 29/42 | <b>LG-3166C-220</b> | 85.06      |
| Condenser, Cold Finger 14/20           | 14/20 | <b>LG-3166C-125</b> | 51.31      |
| Dispersion/Absorber Tube Fritted       | 29/42 | <b>LG-3166C-230</b> | 76.07      |
| Purge Tube/Reaction Flask (2 req'd)    | 29/42 | <b>LG-3166C-235</b> | 30.70      |

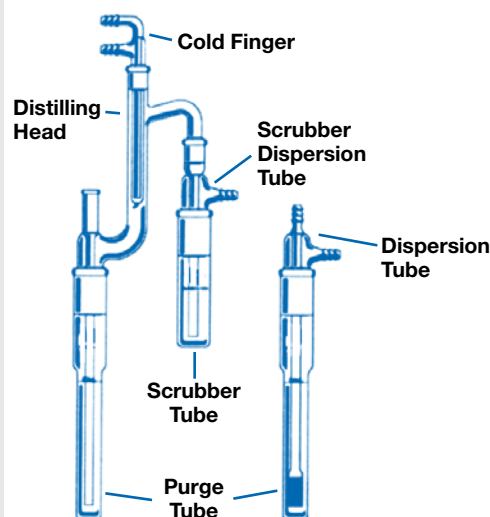


**LG-3166C**

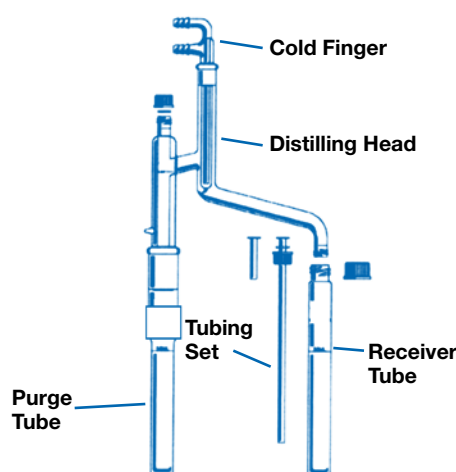
### Distilling Apparatus, Midi-Cyanide with Sulfide Scrubber

Midi-Cyanide apparatus same as *LG-3166C* except with addition of a sulfide scrubber between reaction flask and absorber tube. Supplied with delrin clamps for joints on the sulfide scrubber. Condenser and scrubber dispersion tube joints are 14/20: all others are 29/42. May be used with other midi-scale distillation systems. Supplied with *LG-1004* clamps.

| Supplied                                   | Part Number         | Each Price |
|--------------------------------------------|---------------------|------------|
| Complete Set                               | <b>LG-3166D-200</b> | \$333.82   |
| Distilling Head, 14/20, 29/42              | <b>LG-3166D-220</b> | 99.46      |
| Dispersion/Absorber Tube, 29/42            | <b>LG-3166D-230</b> | 75.54      |
| Purge Tube/Reaction Flask, 29/42 (2 Req'd) | <b>LG-3166C-235</b> | 30.70      |
| Scrubber Dispersion Tube 14/20, 29/42      | <b>LG-3166D-240</b> | 42.47      |
| Scrubber Tube, 29/42                       | <b>LG-3166D-245</b> | 17.19      |
| Condenser, Cold Finger, 14/20              | <b>LG-3166C-125</b> | 51.31      |



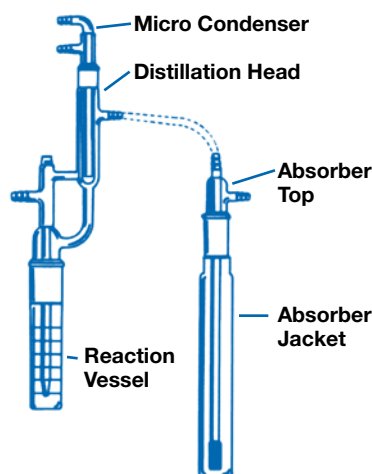
**LG-3166D**

**LG-3166F****Distilling Apparatus, Midi-AFP for Ammonia, Fluoride, and Phenols**

MIDI scale distillation apparatus for quantitative analysis of ammonia, fluoride, and phenols in water and waste water. This apparatus scaled down versions of the above referenced methods to reduce costs and minimize waste products and lab space. Designed for 50mL or less of aqueous samples. Also used in MIDI-STIL™ distillation systems. May be used with other midi-scale distillation systems.

The vacuum jacketed distilling head and skirted purge tube maintains higher vapor temperatures required for the above distillations. This design suggested and tested by Dr. David J. Kaptain of Fox Valley Water Reclamation District.

| Supplied                                  | Part Number         | Each Price |
|-------------------------------------------|---------------------|------------|
| Complete Set                              | <b>LG-3166F-200</b> | \$289.36   |
| Distilling Head, 14/20, 29/42 with caps   | <b>LG-3166F-220</b> | 146.96     |
| Purge/Reaction Tube, Female Skirted 29/42 | <b>LG-3166F-225</b> | 54.30      |
| Receiver Tube with GL25 Cap               | <b>LG-3166F-230</b> | 29.05      |
| PTFE Tubing Set                           | <b>LG-3166F-240</b> | 10.10      |
| Condenser, Cold Finger, 14/20             | <b>LG-3166C-125</b> | 51.31      |

**LG-6324****Distilling Apparatus, Midi Cyanide Distillation Kit, with Joints**

Kit is designed for use with U.S.E.P.A. method for total cyanide analysis by midi distillation in water and soils, Method 335.2 CLP-M. The midi distillation method covers the determination of cyanide within a semi-automated colorimetric analysis of the distillate. It is defined as cyanide ion and complex cyanides converted to hydrocyanic acid. The reaction occurs in a reflux system with mineral acid in the presence of magnesium ions.

| Supplied                                        | Part Number        | Each Price |
|-------------------------------------------------|--------------------|------------|
| Complete                                        | <b>LG-6324-100</b> | \$264.70   |
| Micro Condenser Only, 14/20 Joints              | <b>LG-6324-102</b> | 45.19      |
| Distillation Head Only, 24/40 Joint             | <b>LG-6324-104</b> | 103.23     |
| Reaction Vessel 50mL Only, 24/40 Joint          | <b>LG-6324-106</b> | 28.80      |
| Absorber Top Only, 19/38 Joint, Coarse Porosity | <b>LG-6324-108</b> | 73.59      |
| Absorber Jacket Only, 19/38 Joint               | <b>LG-6324-110</b> | 22.78      |

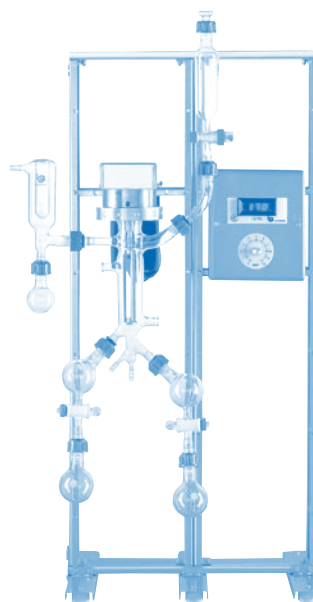
### Distilling Apparatus, Wiping Film

User friendly and efficient.

- Scale up from 2 inches to 4 inches without changing the drive unit.
- Batch or continuous feed systems available.
- Standard and two piece separable units available utilizing quick release clamps.
- Custom fabrication capabilities.

Each system is supplied complete including stainless steel frame, motorized drive unit, speed controller, basket, carbon wiping blades, and all glassware required for a continuous feed setup ready to connect to a circulator.

| Supplied              | Part Number        | Each Price  |
|-----------------------|--------------------|-------------|
| Model 7000, 2" System | <b>LG-4000-100</b> | \$10,230.10 |
| Model 7000, 4" System | <b>LG-4001-100</b> | 11,399.20   |



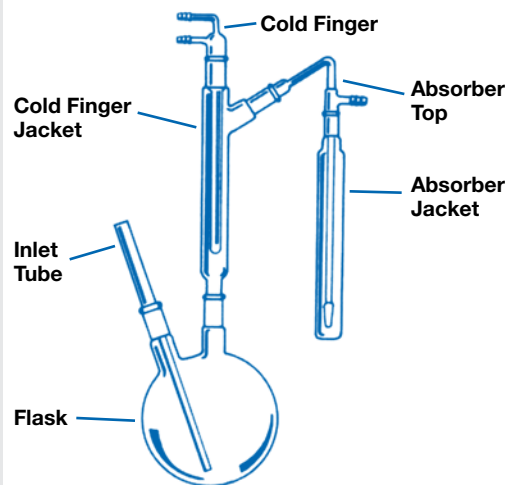
**LG-4000**

### Distilling Apparatus, Cyanide Distillation Kit, with Joints & Medium Porosity Frit

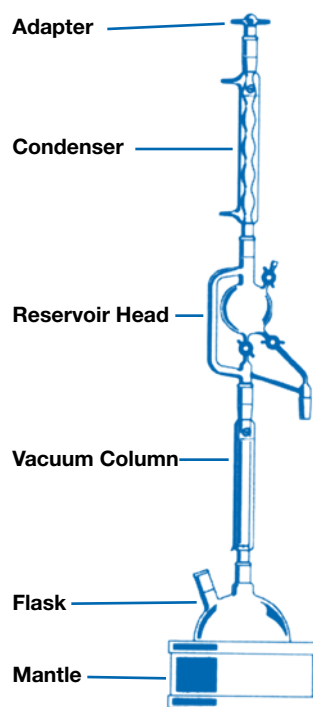
For removing interfering substances in quantitative analysis for cyanide. The sample is reacted with  $H_2SO_4$  and  $MgCl_2$  which converts any cyanide to HCN. The HCN distills over and is absorbed in a NaOH solution which is then analyzed for the presence of cyanide.

Reference: ASTM D2036.

| Supplied                    | Part Number        | Each Price |
|-----------------------------|--------------------|------------|
| Complete                    | <b>LG-6320-100</b> | \$320.20   |
| Absorber Jacket, 19/38      | <b>LG-6320-102</b> | 24.52      |
| Absorber Top, 19/38         | <b>LG-6320-104</b> | 87.80      |
| Cold Finger, 45/50          | <b>LG-6320-106</b> | 59.39      |
| Cold Finger Jacket, 45/50   | <b>LG-6320-108</b> | 73.59      |
| Flask, 1000mL, 24/40, 19/38 | <b>LG-6320-110</b> | 63.26      |
| Inlet Tube, 19/38           | <b>LG-6320-112</b> | 27.12      |



**LG-6320**

**LG-6334T****Distilling Apparatus, Continuous Reflux**

A continuous reflux apparatus to keep solvents pure and free of oxygen. The modified solvent reservoir allows the preparation of pure, dry solvents in quantity. This equipment boasts several advantages over similar pieces of equipment, which are:

Solvent in reservoir is not re-heated by rising vapors in vapor tube and can be maintained at ambient temperature under nitrogen.

Small samples of dry solvent may be removed via syringe using the upper septum stoppered PTFE stopcock port.

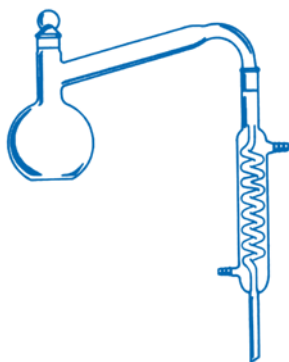
Large quantities of solvent may be removed from side port into receiver with 24/40 ground glass joint.

Solvent may be recycled through center PTFE stopcock, to maintain very dry material.

Complete system includes reservoir/head, boiling flask, vacuum jacketed distilling column, Allihn condenser, adapter, and heating mantle. Joints are 24/40.

| Supplied         | Part Number         | Each Price |
|------------------|---------------------|------------|
| Complete, 1000mL | <b>LG-6334T-100</b> | \$893.88   |

| Components Include                        | Part Number         | Each Price |
|-------------------------------------------|---------------------|------------|
| Column Vacuum, Jacketed, 300mm, 19mm I.D. | <b>LG-5791-120</b>  | \$191.91   |
| Condenser, Allihn, 250mm, 24/40           | <b>LG-4680-102</b>  | 84.18      |
| Reservoir/Head, 500mL, 24/40              | <b>LG-6334T-110</b> | 321.00     |
| Flask, 1000mL, 24/40                      | <b>LG-7291-254</b>  | 70.81      |
| Heating Mantle, 1L                        | <b>LG-8887-112</b>  | 290.00     |
| Adapter, 24/40                            | <b>LG-1465-100</b>  | 21.57      |

**LG-6600****Distilling Apparatus**

Used in general purpose distillation and phenol distillation. Good for batch production of high purity water. Flask has a flat bottom with distillation head having a 19/38 joint. Supplied with a stopper. Condenser is Graham style having a 200mm jacket with a 19/38 joint at top only.

| Supplied       | Capacity mL | Stopper | Part Number         | Each Price |
|----------------|-------------|---------|---------------------|------------|
| Complete       | 500         | 22      | <b>LG-6600-100</b>  | \$200.13   |
| Complete       | 1000        | 27      | <b>LG-6600-102</b>  | 225.94     |
| Stopper Only   |             | 22      | <b>LG-10320-108</b> | 7.92       |
| Stopper Only   |             | 27      | <b>LG-10320-110</b> | 10.05      |
| Flask Only     | 500         | 22      | <b>LG-6600-120</b>  | 104.25     |
| Flask Only     | 1000        | 27      | <b>LG-6600-122</b>  | 130.41     |
| Condenser Only |             |         | <b>LG-6600-130</b>  | 90.36      |

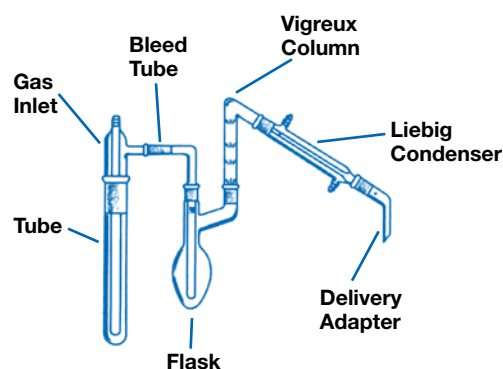


### Distilling Apparatus, Hydroxypropoxy Determination Apparatus

This apparatus includes a steam generator with a 24/40 outer joint, a capillary tipped gas inlet having a sidearm with a 10/30 inner joint. A capillary tipped bleed tube extends into the Claisen style boiling flask, Flask capacity is 25mL with 14/20 outer joints. A 95mm Vigreux Column with 14/20 inner joints, a 110mm Liebig condenser, and a 14/20 delivery adapter complete this assembly.

Reference: ASTM D2363 Methods of Testing Hydroxypropyl Methylcellulose. USP 23 (421)

| Supplied                           | Part Number        | Each Price |
|------------------------------------|--------------------|------------|
| Complete                           | <b>LG-6605-100</b> | \$426.94   |
| Steam Generator Tube, 24/40        | <b>LG-6605-102</b> | 36.83      |
| Gas Inlet, 24/40 and 10/30         | <b>LG-6605-104</b> | 83.05      |
| Bleed Tube, 10/30 and 14/20        | <b>LG-6605-106</b> | 48.05      |
| Claisen Boiling Flask, 25mL, 14/20 | <b>LG-6605-108</b> | 111.45     |
| Vigreux Column, 14/20              | <b>LG-6605-110</b> | 131.15     |
| Liebig Condenser                   | <b>ML-560-700</b>  | 53.08      |
| Delivery Adapter                   | <b>ML-10-700</b>   | 18.96      |



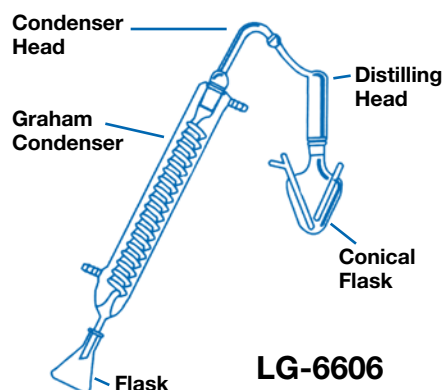
**LG-6605**

### Distilling Apparatus, Hydroxypropoxy Determination Apparatus

Complete apparatus as described in USP 23-NF 18 (421) for hydroxypropoxy group determinations.

The apparatus includes; a 125mL conical bottom flask with a 24/40 outer joint, thermocouple well and an inlet with a 1.0mm capillary tip for nitrogen and water; a distillation head; condenser head and condenser. A 250mL Erlenmeyer flask is supplied as a receiver.

| Supplied                               | Part Number        | Each Price |
|----------------------------------------|--------------------|------------|
| Hydroxypropoxy Determination Apparatus | <b>LG-6606-100</b> | \$380.54   |
| Conical Boiling Flask, 24/40, 125mL    | <b>LG-6606-102</b> | 176.72     |
| Distillation Head, 24/40, 12/5         | <b>LG-6606-104</b> | 59.33      |
| Condenser Head, 12/5, 19/38            | <b>LG-6606-106</b> | 63.21      |
| Graham Condenser, 19/38                | <b>LG-5308-100</b> | 85.60      |
| Erlenmeyer Flask, 250mL                | <b>C-4980-250</b>  | 3.72       |



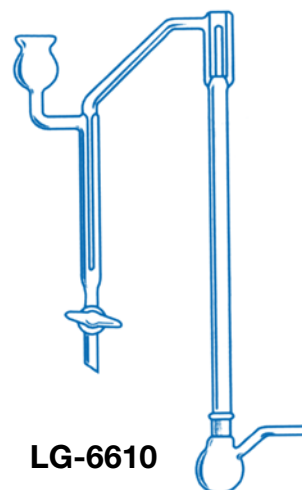
**LG-6606**

### Distilling Apparatus, Methoxy Determination Apparatus

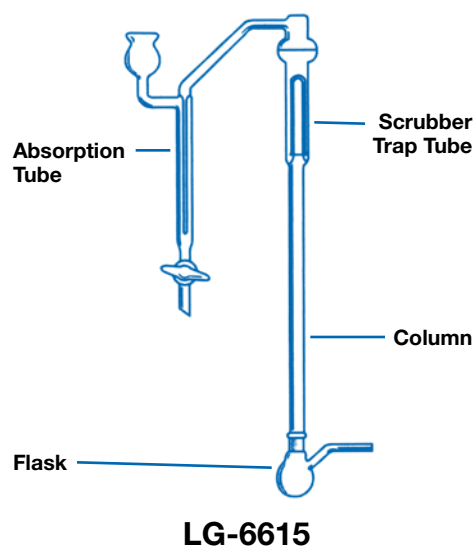
Complete apparatus is one piece except for the boiling flask. Flask is 25mL capacity with a 14/20 outer joint and a capillary sidearm. A 2mm stopcock serves as a drain.

Reference: ASTM D914 Methods of Testing Ethylcellulose ASTM D1347 Methods of Testing Methylcellulose. ASTM D2363 Methods of Testing, Hydroxypropyl Methylcellulose

| Supplied                                   | Part Number        | Each Price |
|--------------------------------------------|--------------------|------------|
| Complete                                   | <b>LG-6610-100</b> | \$232.17   |
| Column, Scrubber, Absorption Tube Assembly | <b>LG-6610-102</b> | 193.49     |
| Flask, 25mL                                | <b>LG-6610-104</b> | 45.15      |



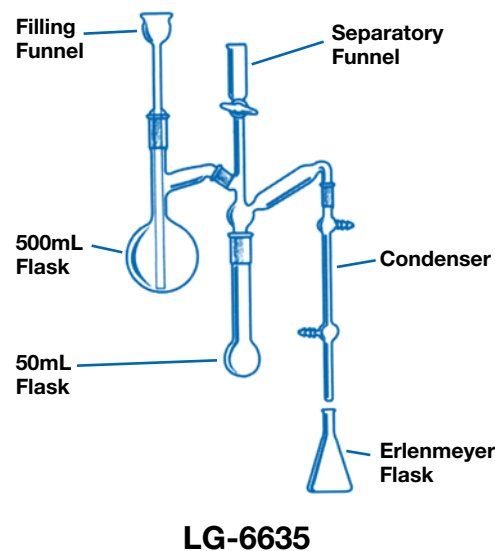
**LG-6610**



### Distilling Apparatus, Methoxy Determination Apparatus

Complete apparatus consists of a 25mL flask with a 14/20 outer joint with a capillary sidearm for the introduction of carbon dioxide or nitrogen. Included in the assembly is a column, scrubber trap, and an absorption tube with a 2mm stopcock as a drain. The body of the scrubber is part of the column assembly, and has a 35/20 socket joint at top. The trap includes a separate tube which is inverted within the scrubber body. A size 35 clamp (LG-1045-112) and a size 14 clamp (LG-1006-100) are supplied with the complete apparatus.

| Supplied                  | Part Number        | Each Price |
|---------------------------|--------------------|------------|
| Complete                  | <b>LG-6615-100</b> | \$251.54   |
| Column with Scrubber Body | <b>LG-6615-102</b> | 107.08     |
| Scrubber Trap Tube        | <b>LG-6615-104</b> | 76.51      |
| Absorption Tube           | <b>LG-6615-106</b> | 42.70      |
| Flask, 25mL               | <b>LG-6610-104</b> | 45.15      |



### Distilling Apparatus, Kjeldahl

Supplied with a 500mL round bottom boiling flask with a 24/40 joint and a sidearm having a 14/35 inner joint. A 50mL digestion flask with a 24/40 joint, filling funnel with a 24/40 joint, and an addition funnel with a 4mm bore stopcock is provided. Attached to the filling funnel are two sidearms, one a joint and a plain drip tip tube complete the glass assembly. Appropriate clamps are furnished to secure the apparatus.

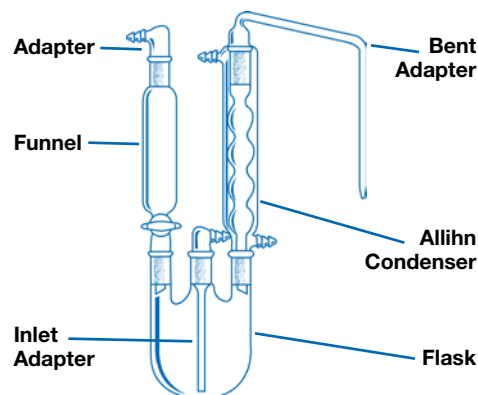
| Supplied                | Part Number        | Each Price |
|-------------------------|--------------------|------------|
| Complete                | <b>LG-6635-100</b> | \$403.91   |
| Flask Only, 500mL       | <b>LG-6635-102</b> | 70.08      |
| Flask Only, 50mL        | <b>LG-6635-104</b> | 33.00      |
| Separatory Funnel Only  | <b>LG-6635-106</b> | 202.01     |
| Condenser Only          | <b>LG-6635-108</b> | 75.76      |
| Filling Funnel Only     | <b>LG-6635-110</b> | 38.52      |
| Plastic Clamp, sz 14    | <b>LG-1004-104</b> | 2.39       |
| Plastic Clamp, sz 24    | <b>LG-1004-108</b> | 2.58       |
| Erlenmeyer Flask, 250mL | <b>C-4980-250</b>  | 3.72       |

### Distilling Apparatus, Monier-Williams Sulfites

Apparatus is used for the determination of sulfites in food and related products. Assembly consists of a three neck 1000mL boiling flask with 24/40 joints, a 300mm Allihn condenser, a right angle inlet adapter with a bubbler tube. The remaining components are a right angle hose connection adapter and a special 24/40 outlet adapter with a double bend.

Reference: Federal register, Vol 51, No. 131, July 9, 1986

| Supplied                                | Part Number        | Each Price |
|-----------------------------------------|--------------------|------------|
| Complete                                | <b>LG-6675-100</b> | \$453.46   |
| Cylindrical Separatory Funnel, 24/40    | <b>LG-6675-102</b> | 137.10     |
| Inlet Adapter, with Bubbler Tube, 24/40 | <b>LG-6675-104</b> | 60.60      |
| Special Bent Outlet Adapter, 24/40      | <b>LG-6675-106</b> | 43.71      |
| 3-Neck Boiling Flask, 1000mL, 24/40     | <b>LG-7330-194</b> | 94.84      |
| Ful-Jak® Allihn Condenser, 300mm, 24/40 | <b>LG-6675-110</b> | 130.32     |
| Adapter, Right Angle, 24/40             | <b>LG-1702-102</b> | 16.67      |



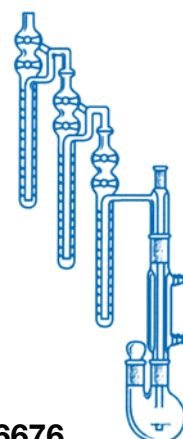
**LG-6675**

### Distilling Apparatus, Evolution, Carbon Disulfide, AOAC

Apparatus is used in the analysis for dithiocarbamates by carbon disulfide evolution. Complete assembly has three absorber traps with 12/5 spherical joint, and a distilling head with a 24/40 inner joint. Also supplied are Liebig condenser with 24/40 inner and outer joints and a 250mL 2-neck flask with stopper. For clamps see LG-1045-104 or LG-4600-100.

Reference: AOAC, Official Methods of Analysis, Vol 1, page 217

| Supplied                                  | Part Number         | Each Price |
|-------------------------------------------|---------------------|------------|
| Complete                                  | <b>LG-6676-100</b>  | \$627.29   |
| Absorber Trap, (Potash) 12/5 Inner        | <b>LG-6676-102</b>  | 139.75     |
| Absorber Trap, (Lead) 12/5 Outer          | <b>LG-6676-104</b>  | 117.49     |
| Absorber Trap, (Lead) 12/5 Inner & Outer  | <b>LG-6676-106</b>  | 156.70     |
| Condenser, Liebig, 130mm, 24/40           | <b>LG-6676-108</b>  | 92.88      |
| Distilling Head, 24/40 Inner              | <b>LG-6676-110</b>  | 72.12      |
| Flask, 2-Neck, Round Bottom, 250mL, 24/40 | <b>LG-7290-234</b>  | 56.89      |
| Stopper, Hollow Pennyhead, 24/40          | <b>LG-10300-112</b> | 14.41      |

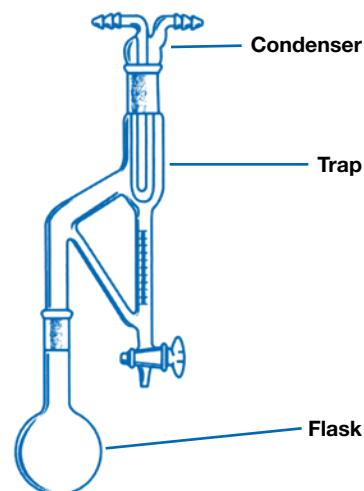


**LG-6676**

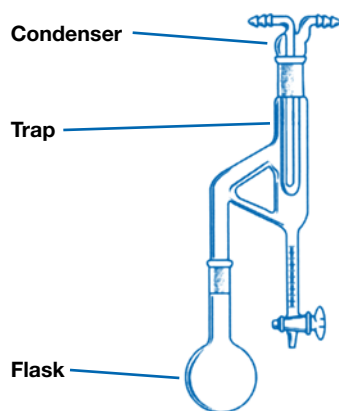
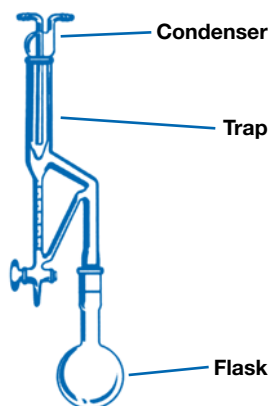
### Distilling Apparatus, Volatile Oil, for Oils Lighter Than Water

Designed for oils lighter than water. Apparatus consists of a Clevenger-type trap with a 24/40 outer joint on top and inner joint of the same size on the sidearm. Trap is graduated to 5mL in 0.1mL subdivisions. A long neck round bottom flask and a cold finger condenser with a 24/40 inner joint complete the assembly.

| Supplied                        | Part Number        | Each Price |
|---------------------------------|--------------------|------------|
| Complete                        | <b>LG-6655-100</b> | \$199.60   |
| Clevenger Trap Only, 5ml, 24/40 | <b>LG-6655-102</b> | 127.23     |
| Condenser Only, 24/40           | <b>LG-6655-104</b> | 56.77      |
| Flask Only, 250mL, 24/40        | <b>LG-7221-148</b> | 24.71      |



**LG-6655**


**LG-6656**

**LG-11125**
**Distilling Apparatus, Volatile Oil, for Oils Heavier Than Water**

Designed to be used with oils heavier than water. Unit consists of a Clevenger-type oil trap with a 24/40 top outer joint and inner joint on the sidearm. Included are a 250mL round bottom flask and a cold finger condenser with a 24/40 inner joint. Trap is graduated to 5mL in 0.1mL increments.

| Supplied                 | Part Number        | Each Price |
|--------------------------|--------------------|------------|
| Complete                 | <b>LG-6656-100</b> | \$199.60   |
| Clevenger Trap Only, 5ml | <b>LG-6656-102</b> | 127.23     |
| Condenser Only           | <b>LG-6656-104</b> | 56.77      |
| Flask, 250mL, 24/40      | <b>LG-7221-148</b> | 24.71      |

**Distilling Apparatus, Volatile Oil, Lighter Than Water**

Used to determine volatile oil in drugs by distillation of a weighted quantity of drug in contact with water. The receiver (trap), Clevenger type, included in this apparatus is for use when the oils are lighter than water.

In addition to the receiver, the apparatus includes a 300mL round bottom flask and a finger type condenser. The flask and receiver are connected by a 24/40 joint while the condenser merely rests on top of the receiver. The latter piece has a tube connecting the lower part below the scale with the top of the vapor tube to return excess water to the flask. The receiver also has a discharge stopcock below the return tube. Trap is graduated to 5mL and 0.1mL increments.

| Supplied                 | Part Number         | Each Price |
|--------------------------|---------------------|------------|
| Complete                 | <b>LG-11125-100</b> | \$161.00   |
| Clevenger Trap Only, 5ml | <b>LG-11125-102</b> | 102.49     |
| Condenser Only           | <b>LG-11125-104</b> | 34.91      |
| Flask, 300mL, 24/40      | <b>LG-7221-150</b>  | 26.79      |

### Distilling Column, Plain, Hempel

Column consists of a plain tube with full length inner joint at bottom and a outer joint of the same size at top. Near the bottom there is a row of indentations to support random type packing material.

| Column I.D. mm | Length for Packing Material mm | ⌘ Joint | Part Number       | Each Price |
|----------------|--------------------------------|---------|-------------------|------------|
| 10.5           | 130                            | 14/20   | <b>ML-780-700</b> | \$37.49    |
| 10.5           | 250                            | 14/20   | <b>ML-780-704</b> | 42.40      |
| 14.5           | 130                            | 19/22   | <b>ML-780-702</b> | 42.69      |
| 14.5           | 250                            | 19/22   | <b>ML-780-706</b> | 40.85      |



**ML-780**

### Distilling Column

Similar to *ML-780*, except with a sealed-in glass honeycomb support for packing.

| Column I.D. mm | Length for Packing Material mm | ⌘ Joint | Part Number        | Each Price |
|----------------|--------------------------------|---------|--------------------|------------|
| 19             | 300                            | 24/40   | <b>LG-5820-120</b> | \$151.88   |
| 19             | 600                            | 24/40   | <b>LG-5820-126</b> | 167.84     |
| 25             | 300                            | 29/42   | <b>LG-5820-140</b> | 178.52     |



**LG-5820**

### Distilling Column, Jacketed, Hempel

Similar to *ML-780*, except the column section is enclosed in an evacuated jacket.

| Column I.D. mm | Length for Packing Material mm | ⌘ Joint | Part Number        | Each Price |
|----------------|--------------------------------|---------|--------------------|------------|
| 9              | 130                            | 14/20   | <b>ML-785-700</b>  | \$156.70   |
| 9              | 130                            | 19/22   | <b>ML-785-702</b>  | 160.29     |
| 12.5           | 300                            | 24/40   | <b>LG-5791-100</b> | 168.74     |
| 12.5           | 600                            | 24/40   | <b>LG-5791-106</b> | 251.89     |
| 19             | 300                            | 24/40   | <b>LG-5791-120</b> | 191.91     |
| 19             | 600                            | 24/40   | <b>LG-5791-126</b> | 269.90     |
| 25             | 600                            | 29/42   | <b>LG-5791-146</b> | 293.89     |



**ML-785  
LG-5791**

**LG-5792****LG-6740****LG-6750****Distilling Column, Hempel Type, Vacuum Jacketed**

Similar to *LG-5791*, but with jacket completely silvered except for two narrow clear strips 180° apart that serve as windows.

| Column I.D. mm | Column Length mm | ⌘ Joint | Part Number        | Each Price |
|----------------|------------------|---------|--------------------|------------|
| 19             | 300              | 24/40   | <b>LG-5792-120</b> | \$320.60   |
| 19             | 500              | 24/40   | <b>LG-5792-124</b> | 370.19     |
| 25             | 300              | 29/42   | <b>LG-5792-140</b> | 342.08     |

**Distilling Column, Packing, Raschig Rings**

Made of borosilicate glass. Sold in one pound packages.

| Outside Diameter and Length mm | Approx. Pcs. per lbs. | Pcs. per cu. ft. | Part Number        | Each Price |
|--------------------------------|-----------------------|------------------|--------------------|------------|
| 6 x 6                          | 1910                  | 114000           | <b>LG-6740-100</b> | \$94.61    |
| 7 x 7                          | 1475                  | 63500            | <b>LG-6740-102</b> | 94.61      |
| 8 x 8                          | 1070                  | 39000            | <b>LG-6740-104</b> | 94.61      |
| 12 x 12                        | 430                   | 11200            | <b>LG-6740-106</b> | 94.61      |

Other sizes available on special order.

**Distilling Column, Packing, Solid Glass Beads**

Made of borosilicate glass. Sold in one pound packages.

| Approx. Diameter mm | Approx. Beads per lbs. | Part Number        | Each Price |
|---------------------|------------------------|--------------------|------------|
| 3                   | 11000                  | <b>LG-6750-100</b> | \$122.47   |
| 4                   | 5500                   | <b>LG-6750-102</b> | 107.73     |
| 5                   | 2500                   | <b>LG-6750-104</b> | 102.05     |
| 6                   | 1600                   | <b>LG-6750-106</b> | 88.46      |

**Distilling Column, Packing, Heli-Pak**

Heli-Pak is a particle type packing and can be “poured” into any laboratory or pilot scale column. Easily removed for replacement or cleaning.

**Special Features**

**LOW H.E.T.P.** - Lowest reported for random packings.

**HIGH EFFICIENCY** - Holdup per plate for a given distilling rate gives high efficiency and optimum all around performance.

**NON-CHANNELING** - Furnished in larger column diameter because of its capillary liquid redistributing action.

**POURS EASILY** - Maximum effectiveness requires no laborious or critical filling techniques.

**LOW COST** - Economical to use on a per plate and per distillation basis.

**Available in Three Sizes**

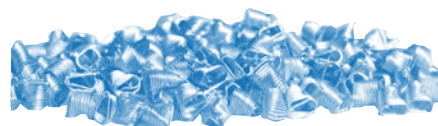
**SIZE “C”** - .090” x .175” - A larger size packing with high capacity and low pressure drop. Specially designed for use in columns 25mm I.D. and larger. For operation at atmospheric and reduced pressures. Free space is 84%.

**SIZE “B”** - .050” x .100” x .100” - A balanced all purpose packing with efficiency factor higher than any reported random packing. Low holdup and pressure drop. Recommended for columns from 10mm to 30mm diameter, operating at atmospheric or vacuum conditions. Free space is 83%.

**SIZE “A”** - .035” x .070” x .070” - Smallest packing physically possible without flooding. Recommended for columns 5mm to 15mm I.D. operating at atmospheric pressure. Free space is 78%.

| Material            | Size | Part Number        | Each Price |
|---------------------|------|--------------------|------------|
| 316 Stainless Steel | A    | <b>LG-6730-100</b> | \$181.81   |
| 316 Stainless Steel | B    | <b>LG-6730-102</b> | 163.56     |
| 316 Stainless Steel | C    | <b>LG-6730-104</b> | 158.06     |

*Available in other metals on request. Contact customer service for details.*

**LG-6730****Distilling Column, Snyder**

Column designed for rapid solvent evaporation while retaining a high percentage of solute. Used as a component in the Kuderna-Danish evaporative concentrator. Each section contains a floating ball valve which allows vapors to rise and condensate to flow downward. Used in *LG-6867* Kuderna-Danish apparatus.

| Number of Sections | Overall Length mm | £ Joints | Part Number        | Each Price |
|--------------------|-------------------|----------|--------------------|------------|
| 2                  | 150               | 19/22    | <b>LG-5850-098</b> | \$85.24    |
| 3                  | 325               | 24/40    | <b>LG-5850-100</b> | 81.96      |
| 6                  | 475               | 24/40    | <b>LG-5850-102</b> | 118.50     |

**LG-5850**





**ML-782**  
**LG-5890**

### Distilling Column, Vigreux

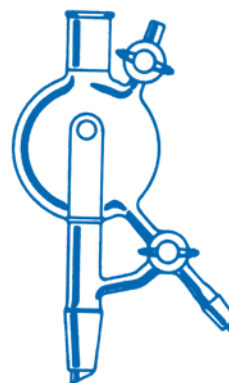
Design of column includes indentations, alternately horizontal and angled downward. These indents improve refluxing and promote separation of volatile mixtures. All indented columns are vacuum tested to insure leak free operation. Effective length is distance between top and bottom indents.

| Joint | Effective Length mm | Part Number        | Each Price |
|-------|---------------------|--------------------|------------|
| 14/20 | 100                 | <b>ML-782-696</b>  | \$50.46    |
| 14/20 | 130                 | <b>ML-782-700</b>  | 51.24      |
| 14/20 | 300                 | <b>ML-782-704</b>  | 78.59      |
| 19/22 | 100                 | <b>ML-782-698</b>  | 52.51      |
| 19/22 | 130                 | <b>ML-782-702</b>  | 54.45      |
| 19/22 | 300                 | <b>ML-782-706</b>  | 79.54      |
| 24/40 | 150                 | <b>LG-5890-100</b> | 53.91      |
| 24/40 | 200                 | <b>LG-5890-102</b> | 54.68      |
| 24/40 | 300                 | <b>LG-5890-104</b> | 69.22      |
| 24/40 | 450                 | <b>LG-5890-106</b> | 101.41     |
| 24/40 | 600                 | <b>LG-5890-108</b> | 140.97     |
| 24/40 | 900                 | <b>LG-5890-110</b> | 167.27     |
| 29/42 | 150                 | <b>LG-5890-120</b> | 56.96      |
| 29/42 | 200                 | <b>LG-5890-122</b> | 58.33      |
| 29/42 | 300                 | <b>LG-5890-124</b> | 74.72      |
| 29/42 | 450                 | <b>LG-5890-126</b> | 106.50     |
| 29/42 | 600                 | <b>LG-5890-128</b> | 143.69     |
| 29/42 | 900                 | <b>LG-5890-130</b> | 171.42     |

**Distilling Head, Solvent Purification**

Component of apparatus used to prepare dry, deoxygenated solvents. Flask provides storage and access by syringe. Drainage or return to the boiling flask is accomplished with a T-Bore PTFE stopcock. All joints on *IG-345T* are 14/20 while the joints on *LG-6330T* are 24/40 and the takeoff arm is 14/20.

| Storage Capacity<br>mL | Flask Size<br>mL | Joint | Part Number         | Each Price |
|------------------------|------------------|-------|---------------------|------------|
| 125                    | 250              | 14/20 | <b>IG-345T-100</b>  | \$334.71   |
| 250                    | 500              | 24/40 | <b>LG-6330T-100</b> | 310.98     |
| 500                    | 1000             | 24/40 | <b>LG-6330T-102</b> | 336.99     |

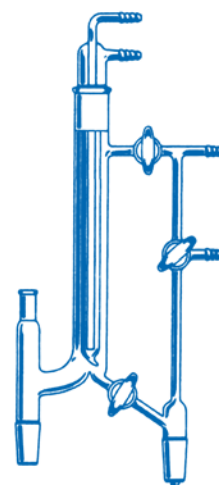


**IG-345T**  
**LG-6330T**

**Distilling Head**

With removable cold finger condenser. Two stopcocks are in the pressure equalizing line to allow receiver changes without interrupting the distillation. Thermometer joint is 10/30. Both heads have a 29/42 top joint.

| Supplied                   | Joint | Part Number        | Each Price |
|----------------------------|-------|--------------------|------------|
| Complete                   | 24/40 | <b>LG-6290-100</b> | \$536.62   |
| Complete                   | 29/42 | <b>LG-6290-102</b> | 545.90     |
| Head Only                  | 24/40 | <b>LG-6290-120</b> | 485.34     |
| Head Only                  | 29/42 | <b>LG-6290-122</b> | 495.77     |
| Cold Finger Condenser Only | 29/42 | <b>LG-6290-112</b> | 69.13      |



**LG-6290**

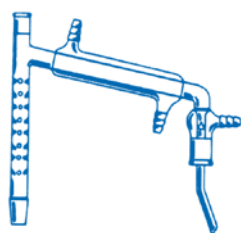
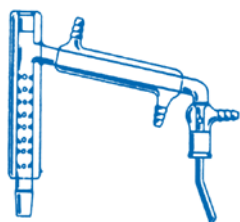
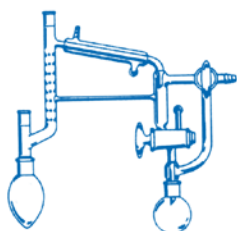
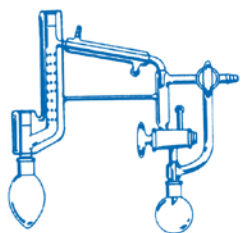
**Distilling Head, Claisen-Vigreux, Jacketed**

Distilling column which combines the Claisen style adapter and the Vigreux column. With an evacuated jacket for increased distillation efficiency. The top joint of both tubes have a 10/18 outer joint to accept *ML-1820-712*, thermometer.

| Joint | Indented Length<br>mm | Part Number       | Each Price |
|-------|-----------------------|-------------------|------------|
| 14/20 | 100                   | <b>ML-806-700</b> | \$287.96   |
| 19/22 | 100                   | <b>ML-806-702</b> | 275.62     |



**ML-806**

**ML-835****ML-837****ML-670****ML-675****Distilling Head, Vigreux**

Unit consists of a Vigreux column, attached West condenser, and a vacuum adapter with a bent delivery tube. See *ML-970* for distributing adapters. Top of Vigreux column has an 10/18 joint to accept *ML-1820-712* thermometer.

| Size Joint | Part Number       | Each Price |
|------------|-------------------|------------|
| 14/20      | <b>ML-835-700</b> | \$185.62   |
| 19/22      | <b>ML-835-702</b> | 191.72     |

**Distilling Head, Vigreux, Jacketed**

One piece construction with the Vigreux column jacketed to achieve greater distillation efficiency. See *ML-835* for thermometer and *ML-970* for distribution adapters. Top of vigreux column has an 10/18 joint to accept *ML-1820-712* thermometer.

| Size Joint | Part Number       | Each Price |
|------------|-------------------|------------|
| 14/20      | <b>ML-837-700</b> | \$449.32   |

**Distilling Head, Claisen-Vigreux**

For fractional distillations at reduced pressures. Consists of a 50mL pear-shaped distilling flask, a combination Claisen-Vigreux distilling head with attached condenser and vacuum distilling receiver (adapter), and one 25mL round bottom receiving flask. The vacuum adapter is provided with stopcocks so that the receiving flask may be removed and replaced without interrupting the distillation. The tops of both arms of the Claisen head have 10/18 joints to accept *ML-1820-712* thermometer. The flask connections are 14/20 joints.

| Supplied                     | Part Number        | Each Price |
|------------------------------|--------------------|------------|
| Complete                     | <b>ML-670-800</b>  | \$432.20   |
| Distilling Head Only         | <b>ML-670-802</b>  | 425.42     |
| Distilling Flask, 50mL, Only | <b>ML-1160-718</b> | 17.25      |
| Receiving Flask, 25mL Only   | <b>ML-1110-714</b> | 16.90      |

**Distilling Head, Jacketed**

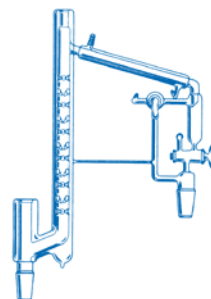
Similar to *ML-670* except that the distilling head is jacketed.

| Supplied                     | Part Number        | Each Price |
|------------------------------|--------------------|------------|
| Complete                     | <b>ML-675-800</b>  | \$571.40   |
| Distilling Head Only         | <b>ML-675-802</b>  | 565.98     |
| Distilling Flask, 50mL, Only | <b>ML-1160-718</b> | 17.25      |
| Receiving Flask, 25mL Only   | <b>ML-1110-714</b> | 16.90      |

**Distilling Head**

Jacketed fractionating apparatus featuring a Vigreux column for vacuum distillations. Unit has a 10/30 outer at the top of column for a 50mm immersion thermometer. One piece construction, *LG-6245* has glass stopcocks, while *LG-6245T* has PTFE stopcocks. This design allows distilled fractions to be removed without interrupting the distillation.

| Top<br>Joint | Stopcock<br>Plug | Part<br>Number      | Each<br>Price |
|--------------|------------------|---------------------|---------------|
| 24/40        | Glass            | <b>LG-6245-100</b>  | \$730.61      |
| 24/40        | PTFE             | <b>LG-6245T-100</b> | 743.65        |



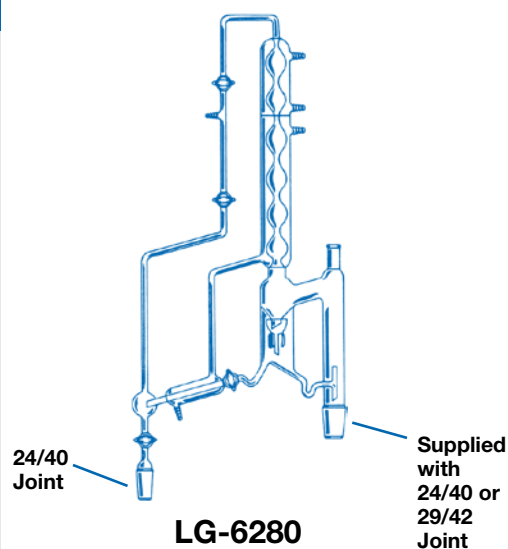
**LG-6245**  
**LG-6245T**

**Distilling Head, Magnetic Control**

Distilling head for magnetically controlling reflux ratio. The proper electro-magnetic coil to use to actuate the magnet is *LG-6212*.

With stopcock in receiver tube to permit change of receivers without interrupting the distillation. Also, with stopcocks which allow operation at atmospheric or reduced pressure. The top of vapor tube has a 10/30 outer joint to take a thermometer calibrated for 75mm immersion. Receiver connection is a 24/40 inner joint, while bottom of uptake tube is available in two different inner joints.

| Uptake Tube<br>Joint | Part<br>Number     | Each<br>Price |
|----------------------|--------------------|---------------|
| 24/40                | <b>LG-6280-100</b> | \$993.26      |
| 29/42                | <b>LG-6280-102</b> | 1,001.00      |



**LG-6280**

**Distilling Head, Automatic Liquid Dividing, Shell Design**

The head has an interchangeable inner joint at the bottom, for connection to a distilling column, and a full length 10/30 outer member to receive a thermometer calibrated for 75mm immersion. A tilting funnel in the head receives the condensate from the condenser and normally returns the liquid to the column. A glass-enclosed iron core attached to the funnel may be energized by an external solenoid at timed intervals to tip the funnel and deliver the liquid instead to a product receiver. The takeoff tube has 18/9 ball. The head is completely vacuum jacketed, and jacket is silvered to improve the accuracy of temperature measurements and minimize heat transfer. The jacket has internal bellows to allow for differential expansion of jacket and head. Other combinations of interchangeable joint sizes and pipe flange can be supplied. For a solenoid to use with these heads, see *LG-6215*; for product receivers for tubes to connect heads and receivers see *LG-6190*.

| Top<br>Joint<br>Size | Bottom<br>Joint<br>Size | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------|--------------------|---------------|
| 29/42                | 24/40                   | <b>LG-6171-100</b> | \$1,487.75    |
| 29/42                | 29/42                   | <b>LG-6171-102</b> | 1,511.36      |
| 55/50                | 55/50                   | <b>LG-6171-106</b> | 1,958.26      |



**LG-6171**

**LG-6190****Distilling Head, Adapter, 105° Bend**

Used to connect distilling head, *LG-6171*, to a distilling receiver. Adapter has socket joint to connect the takeoff tube on the distilling head. Lower portion has a ball joint for attachment to the receiver.

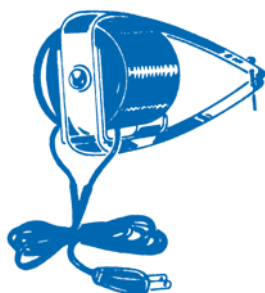
| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 18/9       | <b>LG-6190-100</b> | \$36.45    |
| 28/15      | <b>LG-6190-102</b> | 38.74      |

**LG-6210****Distilling Head, Electromagnetic Coil (Solenoid)**

Intended for use with an automatic reflux type of distilling head to control direction of flow of condensate. The coil fits around a glass tube in which is sealed a metal rod. The lower end of glass piece is shaped to act as a closure for a valve. Actuation of the coil lifts the glass tube and opens the valve.

Approximately 1  $\frac{7}{16}$ " outside diameter and 1  $\frac{1}{4}$ " long with  $\frac{1}{2}$ " hole. For intermittent use only in a 115 volt, 60 cycle AC hookup. Furnished with wires and plug to connect to a timer.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-6210-100</b> | \$103.12   |

**LG-6212****Distilling Head, Electromagnetic Coil (Solenoid)**

For use with the funnel type of take-off device (so-called "swinging bucket"). Activation of the coil pulls the funnel to one side to direct flow of condensate to the ultimate receiver rather than back to the still.

Coil is approximately 1  $\frac{7}{16}$ " outside diameter and 1  $\frac{1}{4}$ " long with  $\frac{1}{2}$ " core. For intermittent use only in a 115 volt, 60 cycle AC hookup. Furnished complete with clamp for attachment to distilling head, and with wires and plug to connect to a timer.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-6212-100</b> | \$134.32   |

**LG-6215****Distilling Head, Electromagnetic Coil (Solenoid)**

Similar to *LG-6212*, except larger for use with large distilling heads. Coil is approximately 3" outside diameter and 1  $\frac{5}{8}$ " long with 1  $\frac{3}{8}$ " core. For intermittent use in a 115 volt, 60 cycle AC hookup. Furnished complete with metal strap for attachment to a support, and with wires and plug to connect to a timer.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-6215-100</b> | \$189.27   |

### Distilling Head, Timer, Reflux, Stil-Time

Convenient, easy to use digital electronic timer control for controlling reflux ratio on magnetically controlled distillation heads. With solid state timer control and large LED display. Sealed membrane keypad provides protection against most industrial environments. Time range from 1 second to 99.59 minutes for both on/off set points for reflux and product take-off. Supplied with complete operating instructions. 120V, 50/60 Hz.

| Supplied                                  | Part Number         | Each Price |
|-------------------------------------------|---------------------|------------|
| Time Range from 1 second to 99.59 minutes | <b>LG-10880-100</b> | \$880.78   |

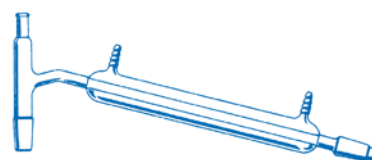


**LG-10880**

### Distilling Head

One piece distilling unit incorporating a Liebig condenser. Supplied with a 10/30 joint for a 75mm immersion thermometer. See *LG-1453* for thermometer adapters for 14/20 and 19/22 joints.

| Joint | Length of Jacket mm | Part Number        | Each Price |
|-------|---------------------|--------------------|------------|
| 24/40 | 200                 | <b>LG-6100-100</b> | \$129.94   |
| 24/40 | 250                 | <b>LG-6100-101</b> | 131.37     |
| 24/40 | 400                 | <b>LG-6100-104</b> | 151.87     |

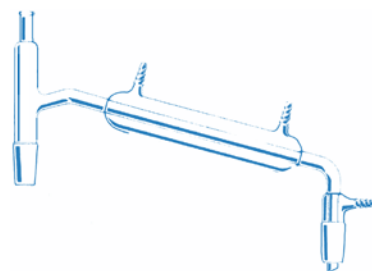


**LG-6100**

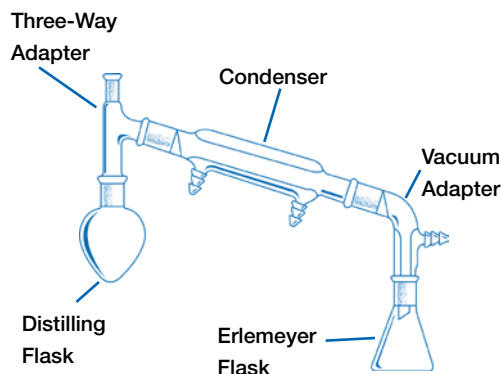
### Distilling Head

One piece design with the condenser at 75° angle. The product side of this unit has a vacuum port which can be left open for atmospheric distillations. A 10/30 outer joint is provided for a thermometer calibrated for 75mm immersion on the 24/40 and 29/42 joint sizes (*LG-6115*). See *LG-1453* for thermometer adapters for 14/20 and 19/22 joints (*ML-870*).

| Joint | Length of Jacket mm | Part Number        | Each Price |
|-------|---------------------|--------------------|------------|
| 14/20 | 100                 | <b>ML-870-700</b>  | \$134.16   |
| 19/22 | 100                 | <b>ML-870-702</b>  | 138.86     |
| 24/40 | 200                 | <b>LG-6115-100</b> | 173.77     |
| 24/40 | 250                 | <b>LG-6115-102</b> | 182.14     |
| 24/40 | 300                 | <b>LG-6115-104</b> | 186.01     |
| 24/40 | 400                 | <b>LG-6115-106</b> | 197.10     |
| 29/42 | 200                 | <b>LG-6115-120</b> | 176.23     |
| 29/42 | 250                 | <b>LG-6115-122</b> | 184.62     |
| 29/42 | 400                 | <b>LG-6115-126</b> | 199.60     |



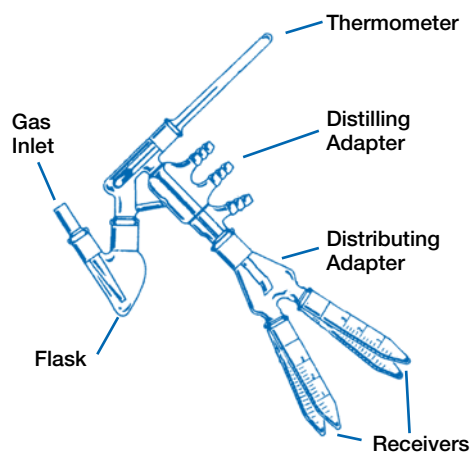
**ML-870  
LG-6115**


**LG-6657**

### Distilling Head, Vacuum

Apparatus includes a pear-shaped 50mL distilling flask, a three way adapter for a 10/18 thermometer with a 25 or 50mm immersion, and a 110mm Liebig condenser. Complete apparatus also includes a 105° vacuum adapter and a 25mL Erlenmeyer flask. Joints are a 14/20 except for 10/18 thermometer joint on *ML-310* adapter.

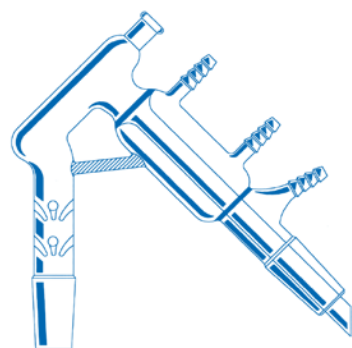
| Supplied          | Part Number        | Each Price |
|-------------------|--------------------|------------|
| Complete          | <b>LG-6657-100</b> | \$152.40   |
| Distilling Flask  | <b>ML-1160-718</b> | 17.25      |
| Erlenmeyer Flask  | <b>ML-1230-706</b> | 15.73      |
| Liebig Condenser  | <b>ML-560-700</b>  | 53.08      |
| Three-way Adapter | <b>ML-310-700</b>  | 36.04      |
| Vacuum Adapter    | <b>ML-390-700</b>  | 36.66      |


**ML-905**

### Distilling Head, Short Path

Distilling portion, condenser, and vacuum connection are sealed very close to reduce travel path of distillate.

| Supplied                                  | Part Number        | Each Price |
|-------------------------------------------|--------------------|------------|
| Complete Unit                             | <b>ML-905-700</b>  | \$397.24   |
| Distilling Head Only                      | <b>ML-905-702</b>  | 131.24     |
| Distributing Adapter Only 12/18 Joints    | <b>ML-905-704</b>  | 97.68      |
| Receiver, 3mL in 0.2mL, Only 12/18 Joints | <b>ML-905-706</b>  | 24.01      |
| Thermometer, -10°C to 250°C, 10/18 Joint  | <b>ML-905-800</b>  | 41.74      |
| Gas Inlet Adapter, Only                   | <b>ML-178-700</b>  | 13.43      |
| Distilling Flask, 10mL, 14/20 Joint       | <b>ML-1170-734</b> | 34.71      |


**LG-6316**

### Distilling Head, Short Path

Vigreux indentations used in bottom portion of stem to improve efficiency on this short path still head. Used where small quantities need to be kept to a minimum.

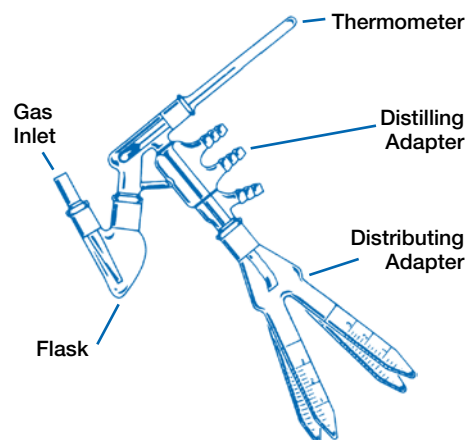
| Lower Inner<br>\$ Joint | Top<br>Thermometer<br>\$ Joint | Part Number        | Each Price |
|-------------------------|--------------------------------|--------------------|------------|
| 14/20                   | 10/18                          | <b>LG-6316-102</b> | \$151.87   |
| 24/40                   | 10/30                          | <b>LG-6316-104</b> | 180.79     |
| 24/40                   | 14/20                          | <b>LG-6316-106</b> | 180.79     |
| 29/26                   | 10/30                          | <b>LG-6316-108</b> | 186.81     |
| 29/42                   | 10/30                          | <b>LG-6316-110</b> | 186.81     |



### Distilling Head, Short Path

Apparatus is similar to *ML-905*, except the distributing adapter tubes are not separable and are graduated to 3mL in 2/10mL subdivisions.

| Supplied                                  | Part Number        | Each Price |
|-------------------------------------------|--------------------|------------|
| Complete                                  | <b>ML-906-700</b>  | \$321.60   |
| Distributing Adapter and Receivers, 14/20 | <b>ML-906-704</b>  | 115.71     |
| Distilling Head Only                      | <b>ML-905-702</b>  | 131.24     |
| Thermometer, -10°C to 250°C, 10/18 joint  | <b>ML-905-800</b>  | 41.74      |
| Gas Inlet Adapter, Only                   | <b>ML-178-700</b>  | 13.43      |
| Distilling Flask, 10mL, 14/20 joints      | <b>ML-1170-734</b> | 34.71      |

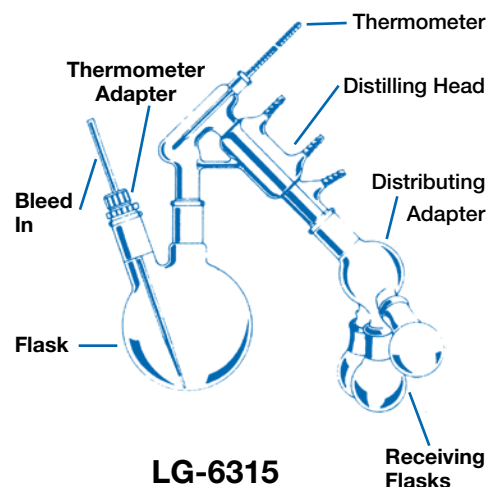


**ML-906**

### Distilling Head, Short Path

Product loss is minimized by compact design. The thermometer bulb and stem serve as the column packing. With a 10/18 outer joint to accept thermometers calibrated for 75mm immersion. The distributing adapter consists of a single 24/40 outer joint and three 24/40 inner joints to accept three 50mL round bottom receivers. The receivers are held in place with *LG-1004-108* plastic clamps (supplied).

| Supplied                                          | Part Number        | Each Price |
|---------------------------------------------------|--------------------|------------|
| Complete                                          | <b>LG-6315-098</b> | \$461.37   |
| Distilling Head Only                              | <b>LG-6315-100</b> | 159.61     |
| Distributing Adapter Only                         | <b>LG-6315-102</b> | 140.74     |
| Flask, 2 Neck, 24/40                              | <b>LG-7291-234</b> | 55.81      |
| Adapter, Bleed-In                                 | <b>LK-181-100</b>  | 5.05       |
| Receiving Flask, 50mL, (3 Req'd)                  | <b>LG-7220-140</b> | 17.25      |
| Thermometer, -10° to +250° in 1°C, 75mm Immersion | <b>ML-1820-730</b> | 32.00      |
| Sz. 24 Plastic Clamps                             | <b>LG-1004-108</b> | 2.58       |
| Thermometer Adapter, 24/40                        | <b>LG-1453-106</b> | 20.00      |



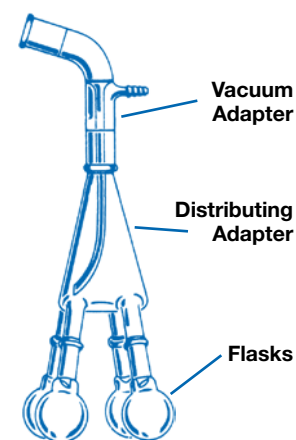
**LG-6315**

### Distilling Head, Multiple

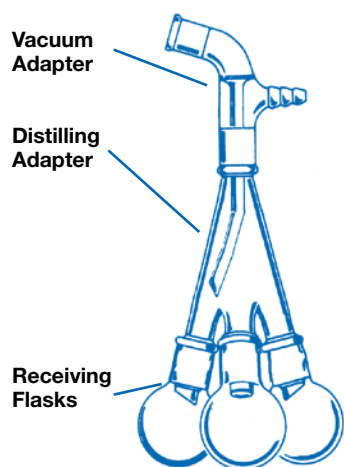
The vacuum adapter has the inlet at an angle of 105° to the delivery stem. The receiving flasks are 50mL with 24/40 outer joints. All pieces are connected using supplied plastic clamps.

| Supplied                        | Adapter<br>Joints | Receiver<br>Joints | Part Number        | Each Price |
|---------------------------------|-------------------|--------------------|--------------------|------------|
| Complete                        | 24/40             | 24/40              | <b>LG-6550-100</b> | \$287.35   |
| Complete                        | 29/42             | 24/40              | <b>LG-6550-102</b> | 321.86     |
| Distributing Adapter            | 24/40             | 24/40              | <b>LG-6550-140</b> | 166.32     |
| Distributing Adapter            | 29/42             | 24/40              | <b>LG-6550-142</b> | 196.71     |
| Vacuum Adapter                  | 24/40             |                    | <b>LG-6550-110</b> | 58.82      |
| Vacuum Adapter                  | 29/42             |                    | <b>LG-6550-112</b> | 65.98      |
| Receiving Flask, 50mL (4 Req'd) |                   | 24/40              | <b>LG-7220-140</b> | 17.25      |

Note: For replacement clamps see *LG-1004-108* (size 24) and *LG-1004-110* (size 29).



**LG-6550**

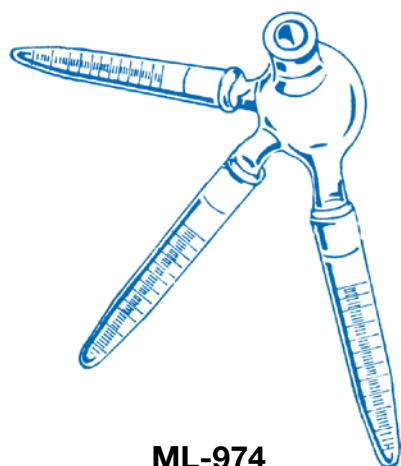

**ML-970**

### Distilling Head, Receiver, Multiple

Complete unit consists of 105° vacuum adapter, distributing adapter and four 15mL flasks with outer joints. Each flask can be positioned under the delivery stem by rotating the distributing adapter. All pieces are connected using supplied plastic clamps (LG-1004).

| Supplied                       | Vacuum Adapter Inlet<br>\$ Joint | Receiver<br>\$ Joint | Part Number        | Each Price |
|--------------------------------|----------------------------------|----------------------|--------------------|------------|
| Complete                       | 14/20                            | 14/20                | <b>ML-970-700</b>  | \$199.65   |
| Complete                       | 19/22                            | 19/22                | <b>ML-970-702</b>  | 216.85     |
| Distributing Adapter           | 14/20                            | 14/20                | <b>ML-970-720</b>  | 102.94     |
| Distributing Adapter           | 19/22                            | 19/22                | <b>ML-970-724</b>  | 113.65     |
| Vacuum Adapter                 | 14/20                            |                      | <b>ML-970-710</b>  | 38.82      |
| Vacuum Adapter                 | 19/22                            |                      | <b>ML-970-722</b>  | 45.31      |
| 15mL Receiver Flasks (4 Req'd) | 14/20                            |                      | <b>ML-1110-710</b> | 16.90      |
| 15mL Receiver Flasks (4 Req'd) | 19/22                            |                      | <b>ML-1110-760</b> | 17.02      |

*Note: For replacement clamps see LG-1004-104 (size 14) and LG-1004-106 (size 19)*


**ML-974**

### Distilling Head, Distillation, Receiver

Consists of an adapter and three graduated receiving tubes. The inlet joint is a outer joint. The three receiver joints are inner joints of the same size. The angle between the center lines of the condenser and receivers causes the distillate to drop directly into the receivers. Receiving tubes are graduated to 12mL (0 to 2mL in 1/10mL; 2 to 12mL in 2/10mL). Receiver tops have outer joints. The necessary clamps (LG-1004) are supplied with the complete apparatus.

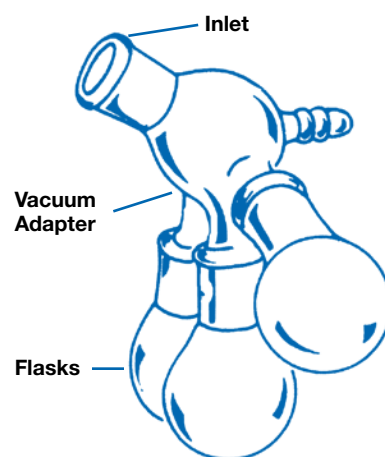
| Supplied                      | \$ Inner Joint | Part Number       | Each Price |
|-------------------------------|----------------|-------------------|------------|
| Complete                      | 14/20          | <b>ML-974-700</b> | \$159.10   |
| Complete                      | 19/22          | <b>ML-974-800</b> | 161.51     |
| Adapter Only                  | 14/20          | <b>ML-974-702</b> | 89.54      |
| Adapter Only                  | 19/22          | <b>ML-974-802</b> | 90.87      |
| Receiver Tubes Only (3 Req'd) | 14/20          | <b>ML-920-700</b> | 30.13      |
| Receiver Tubes Only (3 Req'd) | 19/22          | <b>ML-920-702</b> | 33.75      |

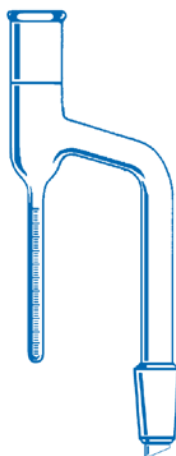
*Note: For use with short path distillation head. Replacement clamps see LG-1004-104 (size 14) and LG-1004-106 (size 19)*

**Distilling Head, Receiver**

Consists of an adapter and three receiving flasks. The inlet end of the adapter has a outer joint, three 14/20 inner joint outlets and a hose connection for attachment to a vacuum source. These outlets are 45° apart and so located that the drip of the tip of the joint of an *ML-560* condenser can discharge into a flask when the receiver is connected to the condenser. By turning the adapter each flask can be selected to receive distillate. Flasks are connected using *LG-1004* plastic clamps (supplied).

| Supplied                          | Part Number        | Each Price |
|-----------------------------------|--------------------|------------|
| Complete w/14/20 Inlet            | <b>ML-975-700</b>  | \$137.04   |
| Complete w/19/22 Inlet            | <b>ML-975-750</b>  | 141.87     |
| Vacuum Adapter Only (14/20 Inlet) | <b>ML-975-710</b>  | 85.57      |
| Vacuum Adapter Only (19/22 Inlet) | <b>ML-975-760</b>  | 88.58      |
| 15mL Flask, 14/20 (3 Req'd)       | <b>ML-1110-710</b> | 16.90      |
| Plastic Clamp (3 Req'd)           | <b>LG-1004-104</b> | 2.39       |

**ML-975**


**LG-9130**

**LG-9095**

**LG-9140**
**Distilling Receiver, Moisture, Dean-Stark**

Calibrated to contain at 20°C. For determination of water in various materials by distillation with an immiscible solvent. May be used for ASTM Method D95 and other similar ASTM methods. With inner joint for vapor tube connection to distilling flask and a outer joint of the same size for connection to condenser.

| Capacity<br>mL | Subdivision<br>mL        | Joint | Part<br>Number     | Each<br>Price |
|----------------|--------------------------|-------|--------------------|---------------|
| 10             | 0-2 in 1/10, 2-10 in 1/5 | 24/40 | <b>LG-9130-100</b> | \$93.51       |
| 25             | 0-2 in 1/10, 2-25 in 1/5 | 24/40 | <b>LG-9130-102</b> | 95.94         |
| 10             | 0-2 in 1/10, 2-10 in 1/5 | 29/42 | <b>LG-9130-110</b> | 95.45         |
| 25             | 0-2 in 1/10, 2-25 in 1/5 | 29/42 | <b>LG-9130-112</b> | 97.85         |

**Distilling Receiver, Trap, Moisture, Bidwell-Sterling**

Calibrated to contain at 20°C. For determining moisture in samples by distilling with an immiscible liquid. Conforms with ASTM E123; ASTM D803, moisture in tall oils; ASTM D460, soap and soap products; ASTM D800 industrial metal cleaning compounds; ASTM D500, water and water-immiscible solvent in steam of sulfonated and sulfated oils. Also conforms with many methods of American Oil Chemists Society.

| Capacity<br>mL | Subdivision<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------|--------------------|---------------|
| 5              | 1/10              | 24/40 | <b>LG-9095-100</b> | \$78.83       |
| 10             | 1/10              | 24/40 | <b>LG-9095-102</b> | 81.23         |

**Distilling Receiver, Dean-Stark**

Provided with additional solvent return line which avoids recycling condensate to the flask.

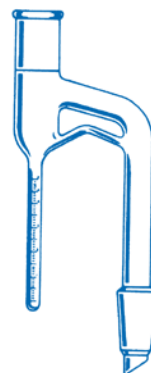
| Capacity<br>mL | Subdivision<br>mL        | Joint | Part<br>Number     | Each<br>Price |
|----------------|--------------------------|-------|--------------------|---------------|
| 10             | 0-2 in 1/10, 2-10 in 1/5 | 24/40 | <b>LG-9140-100</b> | \$103.72      |
| 25             | 0-2 in 1/10, 2-25 in 1/5 | 24/40 | <b>LG-9140-102</b> | 105.36        |
| 50             | 0-10 in 1/2, 10-50 in 1  | 24/40 | <b>LG-9140-104</b> | 126.29        |
| 10             | 0-2 in 1/10, 2-10 in 1/5 | 29/42 | <b>LG-9140-110</b> | 106.75        |
| 25             | 0-2 in 1/10, 2-25 in 1/5 | 29/42 | <b>LG-9140-112</b> | 112.75        |
| 50             | 0-10 in 1/2, 10-50 in 1  | 29/42 | <b>LG-9140-114</b> | 128.34        |

### Distilling Receiver, Trap, Moisture, Bidwell-Sterling

Features a connection between top of vapor tube and graduated tube. This construction allows excess solvent to return to the flask with minimal chance of return of condensed moisture. (ASTM D4006)

| Capacity<br>mL | Subdivision<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------|--------------------|---------------|
| 5              | 1/20              | 24/40 | <b>LG-9100-098</b> | \$126.10      |
| 5              | 1/10              | 24/40 | <b>LG-9100-100</b> | 100.47        |
| 10             | 1/10              | 24/40 | <b>LG-9100-102</b> | 117.25        |

Replaces LX4444



**LG-9100**

### Distilling Receiver, Crank Case Oil

For determining dilution in used gasoline oil by ASTM D322 Method. Supplied with 24/40 inner and outer joints.

| Capacity<br>mL | Subdivision<br>mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|---------------|
| 5              | 1/10              | <b>LG-9110-100</b> | \$100.47      |
| 12.5           | 1/10              | <b>LG-9110-102</b> | 117.25        |

Replaces LX4448

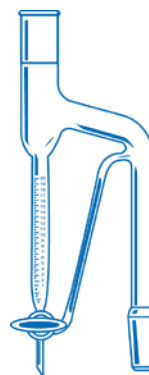


**LG-9110**

### Distilling Receiver, Crank Case Oil Dilution

Calibrated to contain at 20°C. For testing the dilution of crank case oils where the fuel has been gasoline. Supplied with 2mm stopcock.

| Capacity<br>mL | Subdivision<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------|--------------------|---------------|
| 12.5           | 1/10              | 24/40 | <b>LG-9115-100</b> | \$124.33      |
| 12.5           | 1/10              | 29/42 | <b>LG-9115-110</b> | 127.50        |

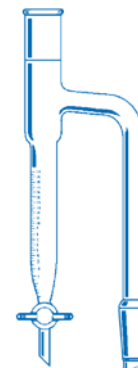


**LG-9115**

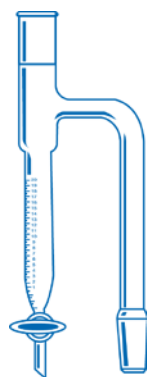
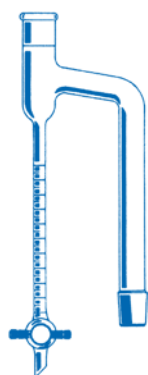
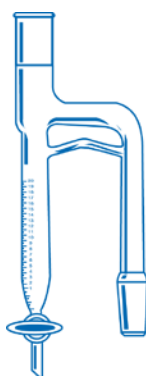
### Distilling Receiver, Trap, Moisture, Barrett

Calibrated to contain at 20°C. For determination of water in various materials by distillation with a solvent that is not miscible with water. With inner joint for connection to a distilling flask and a outer joint of the same size to connect to the condenser. Supplied with 2mm PTFE stopcock.

| Capacity<br>mL | Subdivision<br>mL         | Joint | Part<br>Number      | Each<br>Price |
|----------------|---------------------------|-------|---------------------|---------------|
| 10             | 1/10                      | 24/40 | <b>LG-9076T-100</b> | \$142.22      |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 24/40 | <b>LG-9076T-102</b> | 150.65        |
| 10             | 1/10                      | 29/42 | <b>LG-9076T-110</b> | 151.02        |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 29/42 | <b>LG-9076T-112</b> | 163.91        |



**LG-9076T**


**LG-9075**

**ML-933T**

**LG-9080**

**LG-9081T**

**Distilling Receiver, Moisture Trap, Barrett**

Calibrated to contain at 20°C. For determination of water in various materials by distillation with a solvent that is not miscible with water. With inner member for connection to distilling flask and a outer joint of the same size to connect the condenser. Supplied with 2mm stopcock.

| Capacity<br>mL | Subdivision<br>mL         | Joint | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|-------|--------------------|---------------|
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 24/40 | <b>LG-9075-102</b> | \$138.61      |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 29/42 | <b>LG-9075-112</b> | 142.09        |

**Distilling Receiver, Graduated, PTFE Stopcock**

Both joints are the same size. Tube portion is graduated from 0 to 2mL in 1/5mL subdivisions. Supplied with 2mm PTFE stopcock.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 2              | 14/20 | <b>ML-933T-700</b> | \$125.35      |
| 2              | 19/22 | <b>ML-933T-702</b> | 130.18        |

**Distilling Receiver, Moisture Trap, Barrett**

Addition of a connection between top of vapor tube and graduated tube. This construction allows excess solvent to return to the flask with minimal chance of return of condensate. Stopcock has a glass plug with a 2mm bore.

| Capacity<br>mL | Subdivision<br>mL         | Joint | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|-------|--------------------|---------------|
| 10             | 1/10                      | 24/40 | <b>LG-9080-100</b> | \$139.80      |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 24/40 | <b>LG-9080-102</b> | 147.04        |
| 10             | 1/10                      | 29/42 | <b>LG-9080-110</b> | 160.45        |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 29/42 | <b>LG-9080-112</b> | 171.05        |

**Distilling Receiver, Moisture Trap, Barrett**

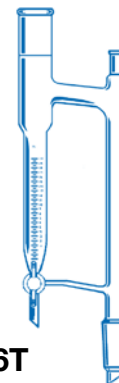
Design allows excess solvent to return to the boiling flask which minimizes the chance of return of condensate. Return condensed solvent line is just above graduated tube. Stopcock has a PTFE plug with a 2mm bore.

| Capacity<br>mL | Subdivision<br>mL         | Joint | Part<br>Number      | Each<br>Price |
|----------------|---------------------------|-------|---------------------|---------------|
| 10             | 1/10                      | 24/40 | <b>LG-9081T-100</b> | \$159.53      |
| 20             | 0-3 in 2/10, 3-20 in 5/10 | 24/40 | <b>LG-9081T-102</b> | 167.92        |
| 10             | 1/10                      | 29/42 | <b>LG-9081T-110</b> | 149.44        |
| 20             | 0-3 in 2-10, 3-20 in 5/10 | 29/42 | <b>LG-9081T-112</b> | 156.70        |

### Distilling Receiver, Trap, Moisture, Recycling, w/Thermometer Joint

Supplied with a 10/30 joint to accommodate a 75mm immersion thermometer.

| Capacity mL | Subdivision mL          | Joint | Part Number         | Each Price |
|-------------|-------------------------|-------|---------------------|------------|
| 20          | 0-3 in 1/5, 3-20 in 1/2 | 24/40 | <b>LG-9146T-100</b> | \$269.02   |
| 20          | 0-3 in 1/5, 3-20 in 1/2 | 29/42 | <b>LG-9146T-200</b> | 273.97     |



**LG-9146T**

### Distilling Receiver, Graduated

Used between condenser and receiver during vacuum distillation. Design allows placement and removal of product receiver without interrupting distillation. Unit has outer joint at inlet and a inner joint of same size at outlet.

| Capacity mL | Joint | Subdivision mL | Part Number        | Each Price |
|-------------|-------|----------------|--------------------|------------|
| 50          | 24/40 | 1              | <b>LG-6440-100</b> | \$414.69   |
| 50          | 29/42 | 1              | <b>LG-6440-110</b> | 419.05     |
| 50          | 35/25 | 1              | <b>LG-6440-120</b> | 429.47     |
| 100         | 24/40 | 2              | <b>LG-6440-102</b> | 438.04     |
| 100         | 29/42 | 2              | <b>LG-6440-112</b> | 442.42     |
| 100         | 35/25 | 2              | <b>LG-6440-122</b> | 452.88     |
| 250         | 24/40 | 2              | <b>LG-6440-104</b> | 540.23     |
| 250         | 29/42 | 2              | <b>LG-6440-114</b> | 544.59     |
| 250         | 35/25 | 2              | <b>LG-6440-124</b> | 554.70     |
| 500         | 24/40 | 5              | <b>LG-6440-106</b> | 669.53     |
| 500         | 29/42 | 5              | <b>LG-6440-116</b> | 672.66     |
| 500         | 35/25 | 5              | <b>LG-6440-126</b> | 684.35     |



**LG-6440**

### Distilling Receiver, PTFE Plug, Graduated

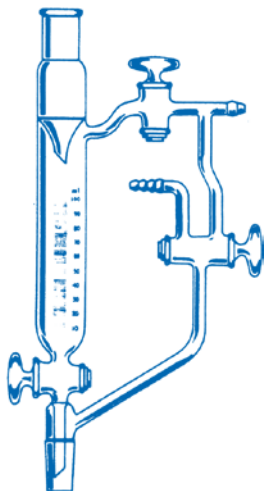
Same as *LG-6440* except with PTFE plugs.

| Capacity mL | Joint | Part Number         | Each Price |
|-------------|-------|---------------------|------------|
| 50          | 24/40 | <b>LG-6440T-100</b> | \$456.40   |
| 50          | 29/42 | <b>LG-6440T-110</b> | 461.07     |
| 100         | 24/40 | <b>LG-6440T-102</b> | 503.21     |
| 100         | 29/42 | <b>LG-6440T-112</b> | 507.89     |
| 250         | 24/40 | <b>LG-6440T-104</b> | 614.38     |
| 250         | 29/42 | <b>LG-6440T-114</b> | 619.06     |
| 500         | 24/40 | <b>LG-6440T-106</b> | 748.94     |
| 500         | 29/42 | <b>LG-6440T-116</b> | 753.64     |



**LG-6440T**



**LG-6470****Distilling Receiver, Graduated**

With outer joint at the top and a inner joint of the same size at the bottom. Product differs from *LG-6440* by using a three-way stopcock for venting.

| Capacity<br>mL | Subdivision<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------|--------------------|---------------|
| 50             | 1                 | 24/40 | <b>LG-6470-100</b> | \$419.83      |
| 100            | 1                 | 24/40 | <b>LG-6470-102</b> | 467.25        |
| 250            | 2                 | 24/40 | <b>LG-6470-104</b> | 584.05        |
| 250            | 2                 | 29/42 | <b>LG-6470-106</b> | 598.66        |

**LG-6381T****Distilling Receiver, Graduated**

Receiver consists of a jacketed graduated tube with a coiled vent line enclosed in the jacket. It is a combined condenser and product receiver. Top inlet is 18/9 socket. Delivery tube has 18/9 ball connection. Supplied with 3/8" hose connections.

| Capacity<br>mL | Subdivision<br>mL | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------------------|------------------|---------------------|---------------|
| 50             | 1                 | 2                | <b>LG-6381T-100</b> | \$625.12      |
| 100            | 1                 | 2                | <b>LG-6381T-102</b> | 654.73        |
| 250            | 2                 | 3                | <b>LG-6381T-104</b> | 741.23        |
| 500            | 5                 | 4                | <b>LG-6381T-106</b> | 812.56        |
| 1000           | 10                | 6                | <b>LG-6381T-108</b> | 975.37        |

*Note: Other joint sizes available upon request.*

### Drying Ampul, Flat Bottom

Intended for use in lyophilizing apparatus. Stems made from 10mm O.D. tubing. Sold in packages of 12.

| Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| 25             | <b>LG-6760-114</b> | \$6.45        |
| 50             | <b>LG-6760-116</b> | 7.52          |
| 100            | <b>LG-6760-118</b> | 9.04          |



**LG-6760**

### Drying Ampul, Round Bottom

For use in lyophilizing apparatus. Stems made from 10mm O.D. tubing. Sold in packages of 12.

| Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| 20             | <b>LG-6770-112</b> | \$6.45        |
| 25             | <b>LG-6770-114</b> | 6.67          |
| 50             | <b>LG-6770-116</b> | 6.96          |
| 100            | <b>LG-6770-118</b> | 9.19          |



**LG-6770**

### Drying Apparatus, Tube, Drying, Straight

With inner joint at bottom, a outer joint of the same size at the top, and a bulb just above the bottom joint.

| Joint | Overall Length<br>mm | Part<br>Number     | Each<br>Price |
|-------|----------------------|--------------------|---------------|
| 14/20 | 125                  | <b>ML-1840-700</b> | \$25.30       |
| 19/22 | 125                  | <b>ML-1840-702</b> | 30.26         |

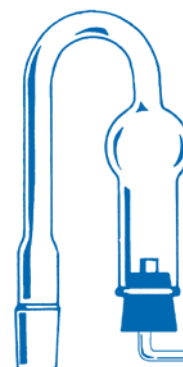


**ML-1840**

### Drying Apparatus, Tube, Drying, U-Shaped

"U" shaped to avoid desiccant contact with reaction. Supplied with size #2 rubber stopper and bent inlet tube.

| Joint | Part<br>Number     | Each<br>Price |
|-------|--------------------|---------------|
| 14/20 | <b>ML-1855-700</b> | \$27.81       |
| 19/22 | <b>ML-1855-702</b> | 28.72         |
| 24/40 | <b>LG-6790-102</b> | 34.82         |
| 29/42 | <b>LG-6790-104</b> | 36.28         |



**ML-1855**  
**LG-6790**

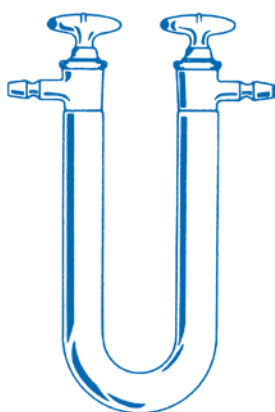


**ML-1850**

#### Drying Apparatus, Tube, Drying, Bent

Angled at 75° to avoid desiccant contact with reactions. Unit is supplied with size #2 rubber stopper having a short length for an air inlet.

| Joint | Part Number        | Each Price |
|-------|--------------------|------------|
| 14/20 | <b>ML-1850-700</b> | \$24.42    |
| 19/22 | <b>ML-1850-702</b> | 26.67      |

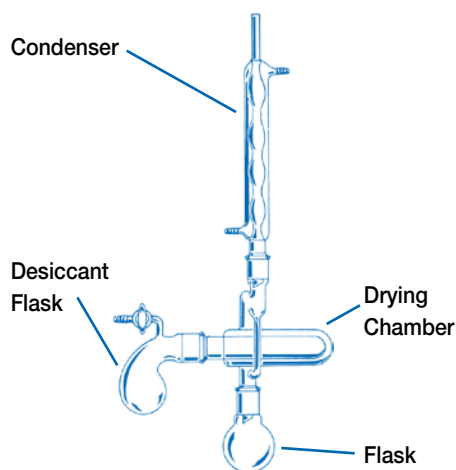


**LG-2170**

#### Drying Apparatus, Absorption or Drying Tube, Schwartz

A U-shaped tube with both ends closed by 14/20 joint stoppers. With side hose connections located at midpoint of each neck, and with a hole in each stopper coinciding with the bore of the side tube. Location of hole in the stopper coincides with a mark on stopper handle.

| Length mm | Joint | Part Number        | Each Price |
|-----------|-------|--------------------|------------|
| 100       | 14/20 | <b>LG-2170-100</b> | \$97.21    |
| 150       | 14/20 | <b>LG-2170-102</b> | 90.40      |



**LG-6850**

#### Drying Apparatus, Vacuum, Abderhalden

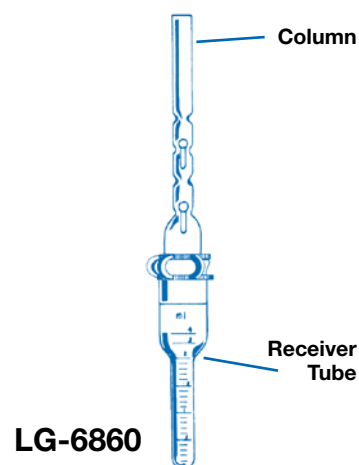
There is a return tube for the condensate which bypasses the drying chamber, the condenser is an Allihn type, and the desiccant is in a flask-shaped container. Joints of the 250mL boiling flask, and the condenser to the chamber are 24/40, while the chamber and desiccant flask are joined by a 40/35.

| Supplied               | Part Number        | Each Price |
|------------------------|--------------------|------------|
| Complete               | <b>LG-6850-100</b> | \$335.55   |
| Drying Chamber Only    | <b>LG-6850-102</b> | 160.29     |
| Desiccant Flask Only   | <b>LG-6850-104</b> | 90.91      |
| Condenser Only, Allihn | <b>LG-4660-104</b> | 82.31      |
| Flask Only, 250mL      | <b>LG-7220-148</b> | 23.29      |

### Evaporator Concentrator

For microscale concentration of volumes contained within receiver tube. Transfer is eliminated avoiding loss of analyte. The 1mL size is graduated in 1/10mL subdivisions and the 4mL with 1/10mL subdivisions from 0 to 2mL. Single volume graduations are at the 3mL and 4mL level. Supplied with *LG-1004-106* (size 19)

| Supplied      | Column No. of Sections | Tube Capacity, mL | Joint | Part Number        | Each Price |
|---------------|------------------------|-------------------|-------|--------------------|------------|
| Complete      | 1                      | 4                 | 19/22 | <b>LG-6860-200</b> | \$115.80   |
| Complete      | 2                      | 4                 | 19/22 | <b>LG-6860-202</b> | 131.37     |
| Complete      | 3                      | 4                 | 19/22 | <b>LG-6860-204</b> | 152.88     |
| Column Only   | 1                      |                   | 19/22 | <b>LG-6860-210</b> | 82.03      |
| Column Only   | 2                      |                   | 19/22 | <b>LG-6860-212</b> | 99.42      |
| Column Only   | 3                      |                   | 19/22 | <b>LG-6860-214</b> | 123.94     |
| Receiver Only |                        | 4                 | 19/22 | <b>LG-6870-102</b> | 35.49      |



**LG-6860**

### Evaporator Concentrator

Similar to *LG-6860* but with an open style column to keep flooding to a minimum.

| Supplied      | Column No. of Sections | Tube Capacity, mL | Joint | Part Number        | Each Price |
|---------------|------------------------|-------------------|-------|--------------------|------------|
| Complete      | 3                      | 4                 | 19/22 | <b>LG-6862-200</b> | \$84.15    |
| Column Only   | 3                      |                   | 19/22 | <b>LG-6862-210</b> | 51.53      |
| Receiver Tube |                        | 4                 | 19/22 | <b>LG-6870-102</b> | 35.49      |

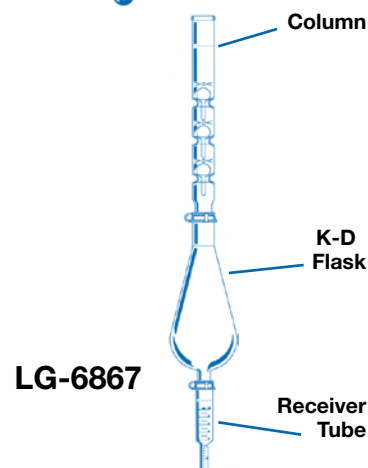


**LG-6862**

### Evaporator Concentrator, Kuderna-Danish

Kuderna-Danish supplied with clamps. All flasks have 24/40 outer top joint and 19/22 inner lower joint. Supplied with one each *LG-1004-106* and *LG-1004-108* Clamp.

| Supplied    | Flask Capacity mL | Lower Joint | Receiver Capacity mL | Column No. of Sections | Part Number        | Each Price |
|-------------|-------------------|-------------|----------------------|------------------------|--------------------|------------|
| Complete    | 250               | 19/22       | 10                   |                        | <b>LG-6867-102</b> | \$171.06   |
| Complete    | 500               | 19/22       | 15                   |                        | <b>LG-6867-104</b> | 176.89     |
| Flask Only  | 250               | 19/22       |                      |                        | <b>LG-6867-109</b> | 45.92      |
| Flask Only  | 500               | 19/22       |                      |                        | <b>LG-6867-110</b> | 50.28      |
| Column Only |                   | 19/22       |                      | 2                      | <b>LG-5850-098</b> | 85.24      |
| Column Only |                   | 19/22       |                      | 3                      | <b>LG-5850-100</b> | 81.96      |
| Column Only |                   | 19/22       |                      | 6                      | <b>LG-5850-102</b> | 118.50     |



**LG-6867**

### Evaporator Concentrator, Receiver Tube Only

Receiver tubes for *LG-6860*, *6862* and *6867* concentrators.

| Capacity mL | Subdivision mL            | Joint | Part Number        | Each Price |
|-------------|---------------------------|-------|--------------------|------------|
| 4           | 0-2 in 1/10, Above 2 in 1 | 19/22 | <b>LG-6870-102</b> | \$35.49    |
| 10          | 0-1 in 1/10, Above 1 in 1 | 19/22 | <b>LG-6870-106</b> | 36.47      |
| 25          | 0-2 in 1/10, Above 2 in 1 | 19/22 | <b>LG-6870-110</b> | 42.30      |



**LG-6870**



**LG-17502**  
**RE-500 shown with**  
**Style "A" Glassware**



**LG-17502**  
**RE-540 shown with**  
**Style "B" Glassware**



**LG-17502**  
**RE-200 shown with**  
**Style "C" Glassware**

### Rotary Evaporator Systems, Yamato

The Yamato series RE-200, 500 & 540 rotary evaporator units can be configured to your needs. Choose the right evaporator unit, water bath and glassware set to meet your requirements.

RE-500 series Rotary Evaporators provides a digital display of the rotational speed for greater accuracy and control. The manual lift is controlled by a simple knob adjustment, simply turn and lift. The control knob offers manual adjustment of the rotational speed from 20 to 180 rpm.

Power Requirements: 115VAC, 50/60Hz, 12A

RE-540 series Rotary Evaporators offer a digital display for the rotational speed and a motorized lift that allows you to gently raise and lower the evaporation flask into the water bath just a touch of a button.

Power Requirements: 115VAC, 50/60Hz, 13A

RE-200 series Rotary Evaporators are ideal for reliable performance at an economical price. A control knob offers manual adjustment of rotational speed from 20 to 180 rpm.

Power Requirements: 115VAC, 50/60Hz, 7A

The glassware is offered in three standard sets: "A" -with diagonal spiral condenser, "B" -with vertical spiral condenser and "C" -with refrigerant (Dewar style) condenser. Each glassware set includes one condenser, a 1 liter evaporation flask, a 1 liter receiving flask, inlet feed tube/stopcock, four-way connector ("B" and "C" condensers), clamps and an adjustable steam duct.

| Supplied                      | Capacity<br>Liters | Number of<br>Revolutions | Part<br>Number      | Each<br>Price |
|-------------------------------|--------------------|--------------------------|---------------------|---------------|
| Rotary Evaporator Unit RE-200 |                    | 20-180                   | <b>LG-17502-100</b> | \$1,096.00    |
| Rotary Evaporator Unit RE-500 |                    | 20-180                   | <b>LG-17502-104</b> | 1,940.00      |
| Rotary Evaporator Unit RE-540 |                    | 20-180                   | <b>LG-17502-106</b> | 2,440.00      |
| Water Bath BM-100             | 3.7                |                          | <b>LG-17530-100</b> | 264.00        |
| Water Bath BM-200             | 7.0                |                          | <b>LG-17530-104</b> | 390.00        |
| Water Bath BM-400             | 7.0                |                          | <b>LG-17530-108</b> | 822.80        |
| Glassware Set "A"             |                    |                          | <b>LG-17512-100</b> | 808.14        |
| Glassware Set "B"             |                    |                          | <b>LG-17512-102</b> | 1,085.17      |
| Glassware Set "C"             |                    |                          | <b>LG-17512-104</b> | 994.35        |

#### Replacement Parts

|                                     |                     |        |
|-------------------------------------|---------------------|--------|
| "A" Condenser Only                  | <b>LG-17515-100</b> | 498.52 |
| "B" Condenser Only                  | <b>LG-17515-102</b> | 395.22 |
| "C" Condenser Only                  | <b>LG-17515-104</b> | 467.62 |
| Evaporation Flask, 1000mL           | <b>LG-17515-110</b> | 72.37  |
| Evaporation Flask, 2000mL           | <b>LG-17515-112</b> | 123.49 |
| Receiving Flask, 1000mL             | <b>LG-17515-114</b> | 59.50  |
| "A" Inlet Feed Tube                 | <b>LG-17515-120</b> | 80.61  |
| "B" and "C" Inlet Feed Tube         | <b>LG-17515-122</b> | 81.29  |
| Steam Duct                          | <b>LG-17515-130</b> | 104.65 |
| Condenser Connector for "B" and "C" | <b>LG-17515-140</b> | 285.31 |

**Rotary Evaporator Systems, Yamato NEW**

The Yamato series RE-300, 600 & 800 rotary evaporator units can be configured to your needs. Choose the right evaporator unit, water bath and glassware set to meet your requirements.

**RE300 Features:**

- Motorized lift
- Feedback control motor
- Voltage-sensing power supply
- Digital setting and rpm display
- Stable rotation

**RE600/800 Features:**

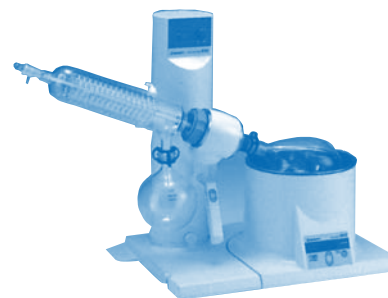
- Motorized lift
- Equipped with several operation modes, such as:
  - Preset Mode
  - Timer Mode
  - Progressive Mode
  - Customer-Programmed Mode
- One-touch operation of storing and readout of operating conditions
- Voltage-sensing power supply

**RE800 Features:**

- Automatic distillation
- Continuous bath control
- Data on 53 solvents installed as default

The glassware is offered in three standard sets: "A" -with diagonal spiral condenser, "B" -with vertical spiral condenser and "C" -with refrigerant (Dewar style) condenser. Each glassware set includes one condenser, a 1 liter evaporation flask, a 1 liter receiving flask, inlet feed tube/stopcock, four-way connector ("B" and "C" condensers), clamps and an adjustable steam duct.

| Supplied                      | Capacity<br>Liters | Number of<br>Revolutions | Part<br>Number      | Each<br>Price |
|-------------------------------|--------------------|--------------------------|---------------------|---------------|
| Rotary Evaporator Unit RE-300 |                    | 10-250                   | <b>LG-17600-100</b> | \$1,646.00    |
| Rotary Evaporator Unit RE-600 |                    | 10-250                   | <b>LG-17600-102</b> | 4,388.00      |
| Rotary Evaporator Unit RE-800 |                    | 10-250                   | <b>LG-17600-104</b> | 4,481.00      |
| Water Bath BM-500             | 4.0                |                          | <b>LG-17605-100</b> | 506.00        |
| Glassware Set "A"             |                    |                          | <b>LG-17610-100</b> | 503.00        |
| Glassware Set "B"             |                    |                          | <b>LG-17610-102</b> | 871.00        |
| Glassware Set "C"             |                    |                          | <b>LG-17610-104</b> | 860.00        |

**NEW**

**LG-17600**  
**RE-300 shown with**  
**Style "A" Glassware**



**LG-17600**  
**RE-600 shown with**  
**Style "B" Glassware**



**LG-17600**  
**RE-800 shown with**  
**Style "C" Glassware**

Available  
with Safety  
or Nylon  
Coating



**LG-7245  
ML-1155**

Nylon  
Coated



**LG-7240N**

### Rotary Evaporator, Flask, Recovery

Upper portion of flask has gradual taper making it easier to remove reaction products. Lower hemisphere fits comparable sized heating mantles. Recommended for use with rotary evaporators.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 10             | 14/20 | <b>ML-1155-700</b> | \$18.07       |
| 10             | 19/22 | <b>ML-1155-709</b> | 17.86         |
| 25             | 14/20 | <b>ML-1155-702</b> | 17.73         |
| 25             | 19/22 | <b>ML-1155-710</b> | 17.86         |
| 25             | 24/40 | <b>LG-7245-098</b> | 19.50         |
| 50             | 14/20 | <b>ML-1155-704</b> | 17.73         |
| 50             | 19/22 | <b>ML-1155-712</b> | 17.86         |
| 50             | 24/25 | <b>ML-1155-720</b> | 23.25         |
| 50             | 29/26 | <b>ML-1155-730</b> | 24.35         |
| 50             | 24/40 | <b>LG-7245-100</b> | 22.58         |
| 100            | 14/20 | <b>ML-1155-706</b> | 18.44         |
| 100            | 19/22 | <b>ML-1155-714</b> | 18.55         |
| 100            | 24/25 | <b>ML-1155-722</b> | 23.37         |
| 100            | 29/26 | <b>ML-1155-732</b> | 24.72         |
| 100            | 24/40 | <b>LG-7245-102</b> | 22.93         |
| 100            | 29/42 | <b>LG-7245-120</b> | 24.72         |
| 200            | 14/20 | <b>ML-1155-707</b> | 23.88         |
| 200            | 19/22 | <b>ML-1155-716</b> | 24.11         |
| 200            | 24/25 | <b>ML-1155-724</b> | 31.82         |
| 200            | 24/40 | <b>LG-7245-104</b> | 31.21         |
| 200            | 29/26 | <b>ML-1155-734</b> | 33.26         |
| 200            | 29/42 | <b>LG-7245-122</b> | 32.63         |
| 500            | 14/20 | <b>ML-1155-708</b> | 30.64         |
| 500            | 19/22 | <b>ML-1155-718</b> | 30.99         |
| 500            | 24/25 | <b>ML-1155-726</b> | 45.80         |
| 500            | 29/26 | <b>ML-1155-736</b> | 47.48         |
| 500            | 24/40 | <b>LG-7245-106</b> | 44.93         |
| 500            | 29/42 | <b>LG-7245-124</b> | 47.48         |
| 1000           | 24/25 | <b>ML-1155-728</b> | 46.91         |
| 1000           | 29/26 | <b>ML-1155-738</b> | 59.55         |
| 1000           | 24/40 | <b>LG-7245-108</b> | 56.75         |
| 1000           | 29/42 | <b>LG-7245-128</b> | 58.42         |
| 2000           | 24/40 | <b>LG-7245-110</b> | 79.53         |
| 2000           | 29/42 | <b>LG-7245-130</b> | 81.00         |

*Available with socket joints upon request.*

### Rotary Evaporator, Flask, Nylon Coating

Round bottom flask with nylon safety coating.

| Capacity<br>mL | Joint | Part<br>Number      | Each<br>Price |
|----------------|-------|---------------------|---------------|
| 500            | 35/20 | <b>LG-7240N-114</b> | \$90.40       |
| 1000           | 35/20 | <b>LG-7240N-116</b> | 98.75         |
| 2000           | 35/20 | <b>LG-7240N-117</b> | 149.30        |
| 3000           | 35/20 | <b>LG-7240N-118</b> | 246.86        |



### Evaporator Trap, Bump Adapter

With a frit sealed between the outer upper joint and the lower inner joint this adapter prevents the contents in the flask from entering into the condenser when “bumping” occurs. All traps have a 24/40 top outer joint.

| Frit Porosity | Lower ⚗ Joint | Part Number        | Each Price |
|---------------|---------------|--------------------|------------|
| Extra Coarse  | 14/20         | <b>LG-6877-100</b> | \$62.61    |
| Extra Coarse  | 24/40         | <b>LG-6877-102</b> | 64.96      |
| Extra Coarse  | 29/42         | <b>LG-6877-106</b> | 67.33      |
| Medium        | 14/20         | <b>LG-6877-200</b> | 62.61      |
| Medium        | 24/40         | <b>LG-6877-202</b> | 64.96      |
| Medium        | 29/42         | <b>LG-6877-206</b> | 67.33      |



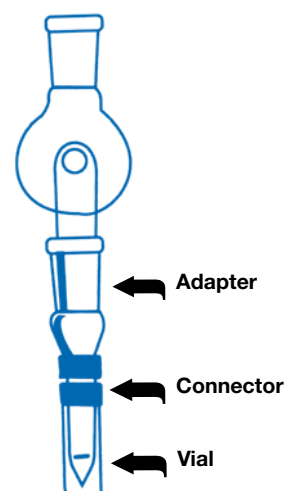
**LG-6877**

### Evaporator Trap, Adapter, Vial

Adapter has a top outer joint of the listed size and a 20-400 G.P.I. thread on the bottom. A PTFE lined, polypropylene double threaded connector attaches a standard laboratory vial to the adapter.

*Note: The glass adapter and double threaded connections must be ordered separately.*

| Description        | To Fit Vials With G.P.I. Thread Size | ⚗ Joint | Part Number        | Each Price |
|--------------------|--------------------------------------|---------|--------------------|------------|
| Glass Adapter Only |                                      | 24/40   | <b>LG 6879-120</b> | \$32.26    |
| Glass Adapter Only |                                      | 29/26   | <b>LG-6879-122</b> | 47.44      |
| Glass Adapter Only |                                      | 29/42   | <b>LG-6879-126</b> | 36.00      |
| Connector          | 13-425-20-400                        |         | <b>LG-6879-110</b> | 10.35      |
| Connector          | 15-425-20-400                        |         | <b>LG-6879-111</b> | 11.30      |
| Connector          | 18-425-20-400                        |         | <b>LG-6879-113</b> | 12.20      |
| Connector          | 20-400-20-400                        |         | <b>LG-6879-112</b> | 12.64      |
| Connector          | 22-400-20-400                        |         | <b>LG-6879-114</b> | 13.00      |
| Connector          | 24-400-20-400                        |         | <b>LG-6879-116</b> | 17.09      |



**LG-6879**

### Evaporator Trap, Rotary

Reduces foam carry-over in rotary evaporators. Trap is used between vapor duct tube and evaporator flask. The upper part of trap has a outer joint.

| Capacity mL | Upper ⚗ Joint | Lower ⚗ Joint | Part Number        | Each Price |
|-------------|---------------|---------------|--------------------|------------|
| 100         | 24/40         | 14/20         | <b>LG-6880-100</b> | \$81.23    |
| 100         | 24/40         | 19/22         | <b>LG-6880-102</b> | 81.51      |
| 100         | 24/40         | 24/40         | <b>LG-6880-104</b> | 81.82      |
| 100         | 29/26         | 29/26         | <b>LG-6880-105</b> | 83.40      |
| 250         | 24/40         | 14/20         | <b>LG-6880-106</b> | 81.82      |
| 250         | 24/40         | 19/22         | <b>LG-6880-108</b> | 83.59      |
| 250         | 24/40         | 24/40         | <b>LG-6880-110</b> | 83.95      |
| 250         | 29/26         | 29/26         | <b>LG-6880-114</b> | 86.53      |
| 250         | 24/40         | 29/26         | <b>LG-6880-115</b> | 86.77      |
| 500         | 24/40         | 24/40         | <b>LG-6880-116</b> | 86.77      |
| 500         | 24/40         | 29/26         | <b>LG-6880-117</b> | 88.21      |
| 500         | 29/26         | 29/26         | <b>LG-6880-118</b> | 89.56      |
| 1000        | 24/40         | 29/42         | <b>LG-6880-120</b> | 89.54      |



**LG-6880**

**LG-6881****LG-6880A****LG-6883****Evaporator Trap, Rotary**

Base of inner tube has two 3mm openings to allow drain-back of foam condensate to the evaporator flask.

| Capacity<br>mL | Upper<br>\$ Joint | Lower<br>\$ Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 100            | 24/40             | 14/20             | <b>LG-6881-100</b> | \$83.59       |
| 100            | 24/40             | 19/22             | <b>LG-6881-102</b> | 85.42         |
| 100            | 24/40             | 24/40             | <b>LG-6881-104</b> | 84.18         |
| 100            | 29/26             | 29/26             | <b>LG-6881-105</b> | 85.81         |
| 250            | 24/40             | 14/20             | <b>LG-6881-106</b> | 86.04         |
| 250            | 24/40             | 19/22             | <b>LG-6881-108</b> | 87.70         |
| 250            | 24/40             | 24/40             | <b>LG-6881-110</b> | 86.31         |
| 250            | 29/26             | 29/26             | <b>LG-6881-111</b> | 87.45         |
| 250            | 24/40             | 29/26             | <b>LG-6881-115</b> | 89.17         |
| 500            | 24/40             | 19/22             | <b>LG-6881-114</b> | 89.19         |
| 500            | 24/40             | 24/40             | <b>LG-6881-116</b> | 89.17         |
| 500            | 24/40             | 29/26             | <b>LG-6881-117</b> | 90.64         |
| 500            | 29/26             | 29/26             | <b>LG-6881-119</b> | 90.05         |
| 1000           | 24/40             | 24/40             | <b>LG-6881-118</b> | 91.67         |
| 1000           | 24/40             | 29/42             | <b>LG-6881-120</b> | 91.97         |

**Evaporator Trap, Rotary, Modified**

Similar to *LG-6880* except inner vapor tube is sealed to top of trap to prevent entry into condenser. All top joints are 24/40.

| Capacity<br>mL | Lower<br>\$ Joint | Part<br>Number      | Each<br>Price |
|----------------|-------------------|---------------------|---------------|
| 100            | 14/20             | <b>LG-6880A-100</b> | \$83.10       |
| 100            | 24/40             | <b>LG-6880A-102</b> | 84.20         |
| 250            | 14/20             | <b>LG-6880A-104</b> | 84.60         |
| 250            | 24/40             | <b>LG-6880A-106</b> | 87.40         |
| 250            | 29/42             | <b>LG-6880A-108</b> | 87.90         |
| 500            | 14/20             | <b>LG-6880A-110</b> | 85.00         |
| 500            | 24/40             | <b>LG-6880A-112</b> | 87.40         |
| 500            | 29/42             | <b>LG-6880A-114</b> | 87.90         |

**Evaporator Trap, Rotary**

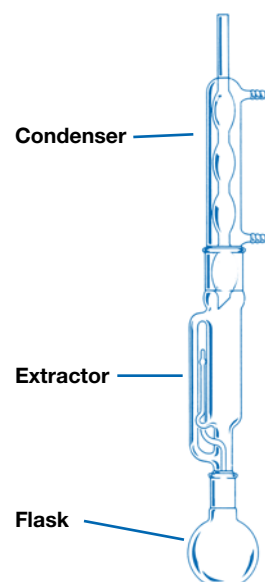
Improved design returns condensate to evaporator flask. Pear shaped flask slope is similar to rotary evaporator angle.

| Capacity<br>mL | Upper<br>\$ Joint | Lower<br>\$ Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|--------------------|---------------|
| 250            | 24/40             | 14/20             | <b>LG-6883-100</b> | \$52.27       |
| 250            | 24/40             | 19/22             | <b>LG-6883-102</b> | 53.37         |
| 250            | 24/40             | 24/40             | <b>LG-6883-104</b> | 53.80         |

### Extraction Apparatus, Soxhlet

Complete units supplied with flat bottom flask, extraction tube and Allihn condenser, see LG-7070 for thimble.

| Supplied       | Extractor Capacity to Top of Siphon mL | Thimble O.D. x Length mm | Extractor & Connector ♂ Joints | Flask Capacity mL | Flask Joint | Part Number        | Each Price |
|----------------|----------------------------------------|--------------------------|--------------------------------|-------------------|-------------|--------------------|------------|
| Complete       | 50                                     | 25 x 85                  | 34/45                          | 125               | 24/40       | <b>LG-6900-100</b> | \$209.35   |
| Complete       | 85                                     | 35 x 90                  | 45/50                          | 250               | 24/40       | <b>LG-6900-104</b> | 240.40     |
| Complete       | 200                                    | 45 x 130                 | 55/50                          | 500               | 24/40       | <b>LG-6900-108</b> | 280.40     |
| Condenser Only |                                        |                          | 34/45                          |                   |             | <b>LG-6900-110</b> | 84.36      |
| Condenser Only |                                        |                          | 45/50                          |                   |             | <b>LG-6900-114</b> | 99.32      |
| Condenser Only |                                        |                          | 55/50                          |                   |             | <b>LG-6900-118</b> | 122.92     |
| Extractor Only | 50                                     | 25 x 85                  | 34/45                          |                   |             | <b>LG-6900-120</b> | 108.78     |
| Extractor Only | 85                                     | 35 x 90                  | 45/50                          |                   |             | <b>LG-6900-124</b> | 131.24     |
| Extractor Only | 200                                    | 45 x 130                 | 55/50                          |                   |             | <b>LG-6900-128</b> | 148.25     |
| Flask Only     | 125                                    |                          |                                |                   | 24/40       | <b>LG-7230-102</b> | 24.23      |
| Flask Only     | 250                                    |                          |                                |                   | 24/40       | <b>LG-7230-104</b> | 24.23      |
| Flask Only     | 500                                    |                          |                                |                   | 24/40       | <b>LG-7230-108</b> | 28.74      |



**LG-6900**

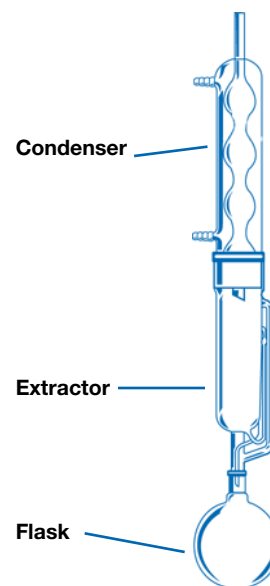
### Extraction Apparatus, Soxhlet, Extra Large

Similar to LG-6900, except of larger capacity and with a round bottom flask.

| Supplied       | Approx ID of Extractor | Extractor Capacity to top of Siphon mL | Part Number        | Each Price |
|----------------|------------------------|----------------------------------------|--------------------|------------|
| Complete       | 70mm ID                | 500                                    | <b>LG-6910-100</b> | \$525.27   |
| Components     | Approx ID of Extractor | ♂ Joint                                | Part Number        | Each Price |
| Condenser Only | for 70mm ID            | 71/60                                  | <b>LG-6910-106</b> | \$224.85   |
| Extractor Only | for 70mm ID            | 71/60                                  | <b>LG-6910-112</b> | 280.32     |
| Flask Only     | 1000mL                 | 29/42                                  | <b>LG-7220-184</b> | 33.05      |

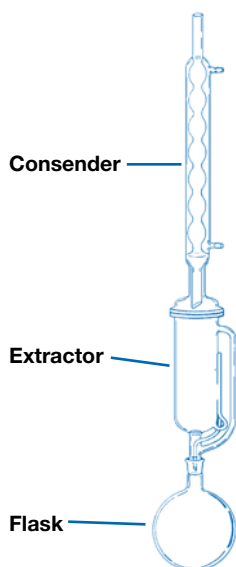
  

| Supplied       | Approx ID of Extractor | Extractor Capacity to top of Siphon mL | Part Number        | Each Price |
|----------------|------------------------|----------------------------------------|--------------------|------------|
| Complete       | 100mm ID               | 1500                                   | <b>LG-6910-102</b> | \$1,124.30 |
| Components     | Approx ID of Extractor | ♂ Joint                                | Part Number        | Each Price |
| Condenser Only | for 100mm ID           | 103/60                                 | <b>LG-6910-108</b> | \$435.12   |
| Extractor Only | for 100mm ID           | 103/60                                 | <b>LG-6910-114</b> | 662.90     |
| Flask Only     | 3000mL                 | 29/42                                  | <b>LG-7220-188</b> | 83.66      |



**LG-6910**

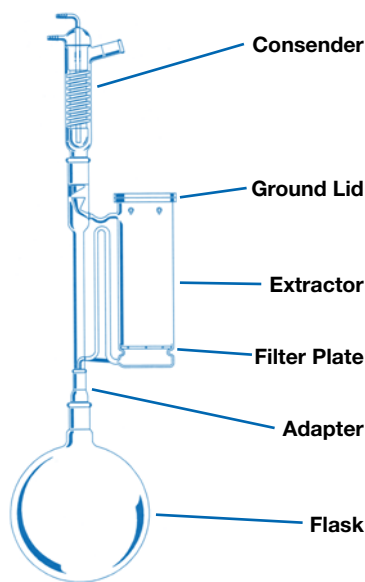
NOTE: See LG-7070 for thimbles.

**LG-6911****Extraction Apparatus, Soxhlet, Extra Large**

Extractor has been redesigned to eliminate large diameter joints from the extractor body and the condenser. These larger volume extractors are supplied with *LG-1023* flat flanges to reduce mass and make assembly/disassembly easier.

*Note: Clamp to be ordered separately.*

| Supplied       | Approx.<br>I.D.<br>Extractor<br>mm | Extractor<br>Capac.<br>to Top of<br>Siphon<br>mL | Flask<br>Capacity<br>mL | Flask<br>Joints | Part<br>Number     | Each<br>Price |
|----------------|------------------------------------|--------------------------------------------------|-------------------------|-----------------|--------------------|---------------|
| Complete       | 145                                | 5000                                             | 12000                   | 55/50           | <b>LG-6911-104</b> | \$1,745.28    |
| Condenser Only | 145                                |                                                  |                         |                 | <b>LG-6911-110</b> | 521.89        |
| Extractor Only | 145                                | 5000                                             |                         |                 | <b>LG-6911-116</b> | 1,019.57      |
| Flask Only     |                                    |                                                  | 12000                   | 55/50           | <b>LG-7220-270</b> | 205.78        |
| Clamp Only     |                                    |                                                  |                         |                 | <b>LG-7316-108</b> | 149.81        |

**LG-6920****Extraction Apparatus, Soxhlet**

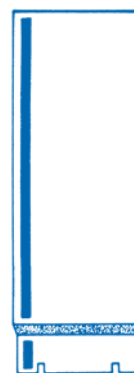
A modified design, large capacity Soxhlet extraction apparatus. Capacity to top of siphon tube is 2200mL. The wide mouth opening provides easier charging and sample removal. The large area at the filter plate provides rapid drainage of the solvent. Bulky solids may be placed directly on a fiber glass mat (not supplied) on top of the filter plate. Fine materials should be placed in a cloth bag on top of the filter plate. Approximate overall height of the assembled unit is 915mm.

| Supplied                                    | Part<br>Number     | Each<br>Price |
|---------------------------------------------|--------------------|---------------|
| Complete                                    | <b>LG-6920-100</b> | \$1,403.12    |
| Extractor Only, 45/50                       | <b>LG-6920-110</b> | 954.27        |
| Ground Lid Only                             | <b>LG-6920-112</b> | 83.50         |
| Filter Plate Only                           | <b>LG-6920-114</b> | 67.11         |
| Friedrich Condenser Only, 45/50             | <b>LG-4890-104</b> | 180.20        |
| Adapter, Straight, 29/42 Outer, 45/50 Inner | <b>LG-1190-202</b> | 49.77         |
| Flask, 5000mL, 45/50                        | <b>LG-7220-248</b> | 106.40        |

**Extraction Apparatus, Thimble, with Fritted Disc**

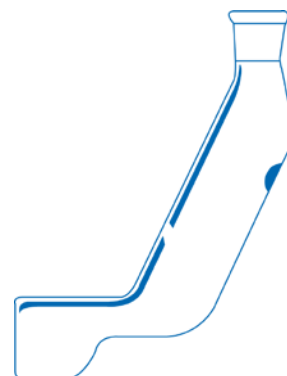
For use when an all glass thimble is necessary or desirable due to the reagents or sample being used. LG-7070 is for use with LG-6900 and LG-6910 extraction apparatus.

| Approx.<br>Body<br>O.D. x H<br>mm | Approx.<br>Diameter<br>of Disc<br>mm | Disc<br>Porosity | Part<br>Number     | Each<br>Price |
|-----------------------------------|--------------------------------------|------------------|--------------------|---------------|
| 25 x 85                           | 20                                   | Extra Coarse     | <b>LG-7070-100</b> | \$37.24       |
| 35 x 90                           | 30                                   | Extra Coarse     | <b>LG-7070-102</b> | 38.08         |
| 45 x 130                          | 40                                   | Extra Coarse     | <b>LG-7070-104</b> | 39.37         |
| 57 x 150                          | 50                                   | Extra Coarse     | <b>LG-7070-106</b> | 54.50         |
| 25 x 85                           | 20                                   | Coarse           | <b>LG-7070-110</b> | 37.24         |
| 35 x 90                           | 30                                   | Coarse           | <b>LG-7070-112</b> | 38.08         |
| 45 x 130                          | 40                                   | Coarse           | <b>LG-7070-114</b> | 39.37         |
| 57 x 150                          | 50                                   | Coarse           | <b>LG-7070-116</b> | 58.11         |
| 25 x 85                           | 20                                   | Medium           | <b>LG-7070-120</b> | 38.68         |
| 35 x 90                           | 30                                   | Medium           | <b>LG-7070-122</b> | 39.39         |
| 45 x 130                          | 40                                   | Medium           | <b>LG-7070-124</b> | 47.96         |
| 57 x 150                          | 50                                   | Medium           | <b>LG-7070-126</b> | 58.11         |

**LG-7070****Extraction Apparatus, Fat Extraction Flask, AOAC**

For the extraction of fat milk products. Top is tooled to accept rubber stoppers. Reference AOAC 989.05 for fat milk supplied without stopper.

| Body<br>O.D.<br>mm | Capacity<br>mL | Accepts<br>Stopper<br>Size | Part<br>Number     | Each<br>Price |
|--------------------|----------------|----------------------------|--------------------|---------------|
| 35                 | 110            | 1                          | <b>LG-6912-100</b> | \$53.15       |
| 48                 | 260            | 2                          | <b>LG-6912-102</b> | 82.50         |

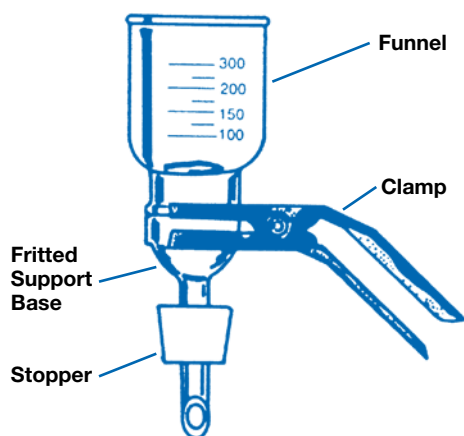
**LG-6912****Extraction Apparatus, Siphon, ASTM**

Extraction cup and siphon tube fit within 400mL flask. A block-tin condenser fits within the flask and the extraction cup with siphon tube is suspended with wire from the condenser.

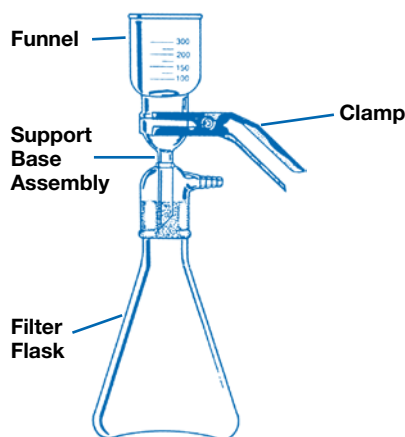
*Reference: ASTM D297 Methods for Rubber Products; ASTM D305 Test Method for Solvent-Extractable Material in Black Pigments.*

| Siphon Cup<br>Dimension<br>mm | Overall<br>Diameter<br>of Cup and<br>Siphon Tube<br>mm | Part<br>Number     | Each<br>Price |
|-------------------------------|--------------------------------------------------------|--------------------|---------------|
| 24 x 62                       | 30                                                     | <b>LG-6914-100</b> | \$50.37       |
| 30 x 70                       | 35                                                     | <b>LG-6914-102</b> | 52.66         |

**LG-6914**



**BP-1755**



**BP-1825**

### Filtration, FILTERWARE® 47mm and 90mm Glassware

Funnel, support base, clamp and silicone stopper assembly for FILTERWARE® filtration system, with coarse frit sealed in.

| Supplied                                          | Part Number        | Each Price |
|---------------------------------------------------|--------------------|------------|
| <i>Complete</i>                                   |                    |            |
| Funnel/Glass Frit Support Assemblies, 47mm        | <b>BP-1755-000</b> | \$157.31   |
| Funnel/Glass Frit Support Assemblies, 90mm        | <b>BP-1755-090</b> | 384.10     |
| <i>Components</i>                                 |                    |            |
| Funnel, Graduated, 300mL, 47mm                    | <b>BP-1751-000</b> | 47.93      |
| Funnel, Graduated, 1000mL, 90mm                   | <b>BP-1781-090</b> | 113.93     |
| Fritted Glass Support Base, 47mm                  | <b>BP-1752-001</b> | 69.60      |
| Fritted Glass Support Base, 90mm                  | <b>BP-1752-091</b> | 192.66     |
| Aluminum Clamp, 47mm                              | <b>BP-1753-000</b> | 59.58      |
| Aluminum Clamp, 90mm                              | <b>BP-1753-090</b> | 86.37      |
| #8 Silicone Stopper for 1000mL Flask, 9/16" hole  | <b>BP-1763-000</b> | 14.12      |
| #9 Silicone Stopper for 2000mL Flask, 9/16" hole  | <b>BP-1763-002</b> | 14.94      |
| #12 Silicone Stopper for 4000mL Flask, 9/16" hole | <b>BP-1763-004</b> | 18.01      |

### Filtration, FILTERWARE® All-Glass Apparatus, 47mm and 90mm

With a choice of 47mm or 90mm microfiltration glassware, consisting of an All-glass filter apparatus with a 40/35 glass joint connecting the filter support base to the filter flask.

The components of FILTERWARE® 47mm microfiltration glassware are interchangeable with the corresponding components of 47mm filtration glassware, and can be used with filtering manifolds.

Analysis of Particulate or Bacterial Contamination

General Laboratory Microfiltration

HPLC Mobile Phase Filtration.

| Supplied                                             | Part Number        | Each Price |
|------------------------------------------------------|--------------------|------------|
| <i>Complete</i>                                      |                    |            |
| Filter Apparatus, 47mm, 300mL Funnel, 1 liter Flask  | <b>BP-1825-000</b> | \$319.10   |
| Filter Apparatus, 47mm, 500mL Funnel, 2 liter Flask  | <b>BP-1825-002</b> | 404.20     |
| Filter Apparatus, 47mm, 1000mL Funnel, 4 liter Flask | <b>BP-1825-004</b> | 441.30     |
| Filter Apparatus, 90mm, 1000mL Funnel, 4 liter Flask | <b>BP-1825-090</b> | 680.60     |
| <i>Components</i>                                    |                    |            |
| Aluminum Clamp, 47mm                                 | <b>BP-1753-000</b> | 59.58      |
| Aluminum Clamp, 90mm                                 | <b>BP-1753-090</b> | 86.37      |
| Filter Flask, 1000mL, 40/35 inner                    | <b>BP-1827-000</b> | 96.02      |
| Filter Flask, 2000mL, 40/35 inner                    | <b>BP-1827-002</b> | 156.83     |
| Filter Flask, 4000mL, 40/35 inner                    | <b>BP-1827-004</b> | 179.05     |
| Funnel, Graduated, 300mL, 47mm                       | <b>BP-1751-000</b> | 47.93      |
| Funnel, Graduated, 500mL, 47mm                       | <b>BP-1771-000</b> | 81.21      |
| Funnel, Graduated, 1000mL, 47mm                      | <b>BP-1781-000</b> | 97.87      |
| Funnel, Graduated, 2000mL, 47mm                      | <b>BP-1828-000</b> | 160.70     |
| Funnel, Graduated, 1000mL, 90mm                      | <b>BP-1781-090</b> | 113.93     |
| Funnel, Graduated, 2000mL, 90mm                      | <b>BP-1781-092</b> | 226.82     |
| Fritted Glass Support Base, 47mm, 40/35              | <b>BP-1826-000</b> | 150.23     |
| Fritted Glass Support Base, 90mm, 40/35              | <b>BP-1826-090</b> | 392.71     |

Available in any combination of flask, funnel and base above.

**Filtration, Filterware™ 47mm and 90mm Microfiltration Glassware**

Heavy wall filter flask used with *BP-1755*. Supplied with #2 hose connection and with silicone stopper with  $\frac{9}{16}$ " hole. 1000mL has  $\frac{3}{8}$ " hose connection, 2000mL and 4000mL have  $\frac{1}{2}$ " hose connections.

| Capacity<br>mL | Supplied with        | Part<br>Number     | Each<br>Price |
|----------------|----------------------|--------------------|---------------|
| 1000mL         | #8 Silicone Stopper  | <b>BP-1760-000</b> | \$44.08       |
| 2000mL         | #9 Silicone Stopper  | <b>BP-1760-002</b> | 74.56         |
| 4000mL         | #12 Silicone Stopper | <b>BP-1760-004</b> | 108.51        |



**BP-1760**

**Filtration, Flask, Heavy Wall**

With side hose connection and outer joint. Supplied with  $\frac{3}{8}$ " hose connection.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 125            | 24/40 | <b>LG-7800-100</b> | \$56.16       |
| 250            | 24/40 | <b>LG-7800-102</b> | 64.84         |
| 500            | 24/40 | <b>LG-7800-104</b> | 73.51         |
| 500            | 29/42 | <b>LG-7800-110</b> | 76.28         |
| 1000           | 24/40 | <b>LG-7800-106</b> | 96.17         |
| 1000           | 29/42 | <b>LG-7800-112</b> | 98.83         |
| 2000           | 29/42 | <b>LG-7800-114</b> | 128.24        |



**LG-7800**

**Filtration, PYREX® Brand, Flask, Heavy Wall, Tubulation, Graduated**

These flasks, with tubulation, are blown in special molds, in shapes designed to give maximum mechanical strength. For convenience, the flasks are graduated to show approximate capacity. The neck finish affords an excellent fit for rubber stoppers. Tubulation O.D. on sizes up to 1000mL is 10mm. Tubulation O.D. for 2000mL and 4000mL is 12.5mm.

| Capacity<br>mL | Grad.<br>Range<br>mL | Grad.<br>Interval<br>mL | Rubber<br>Stopper<br>No. | Approx.<br>O.D. x H<br>mm | Part<br>Number    | Each<br>Price |
|----------------|----------------------|-------------------------|--------------------------|---------------------------|-------------------|---------------|
| 250            | 75-250               | 25                      | 6                        | 84 x 146                  | <b>C-5340-250</b> | \$14.81       |
| 500            | 150-500              | 50                      | 7                        | 106 x 184                 | <b>C-5340-500</b> | 19.01         |
| 1000           | 300-1000             | 50                      | 8                        | 137 x 238                 | <b>C-5340-1L</b>  | 40.15         |
| 2000           | 600-2000             | 200                     | 9                        | 168 x 292                 | <b>C-5340-2L</b>  | 79.74         |
| 4000           | 1500-4000            | 500                     | 12                       | 198 x 356                 | <b>C-5340-4L</b>  | 117.14        |

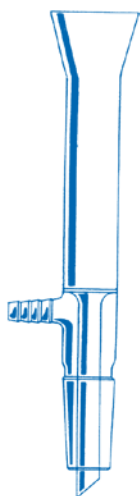


**C-5340**





**C-5360**



**LG-1275  
ML-265**



**LG-6877**



**LG-7152**

### Filtration, PYREX® Brand, Flask, Micro, Tubulation

These small filtering flasks are recommended for microchemical use. All flasks have permanent white enamel marking spots.

| Capacity<br>mL | Tubl.<br>O.D.<br>mm | Rubber<br>Stopper<br>No. | Approx.<br>O.D. x H<br>mm | Part<br>Number    | Each<br>Price |
|----------------|---------------------|--------------------------|---------------------------|-------------------|---------------|
| 25             | 8                   | 3                        | 40 x 75                   | <b>C-5360-25</b>  | \$18.38       |
| 50             | 8                   | 4                        | 51 x 85                   | <b>C-5360-50</b>  | 18.54         |
| 125            | 10                  | 5                        | 70 x 110                  | <b>C-5360-125</b> | 19.35         |

### Filtration, Adapter, Vacuum

Adapter for reduced pressure filtration using plain stem Buchner funnels. Top is tooled to accept special neoprene collar for funnels up to 3000mL capacity. Funnel sets in collar for vacuum seal and is easy to remove.

| Joint | Hose<br>Connection<br>O.D. Inches | LG-1275C<br>Collar<br>Code | Max. Funnel<br>Size | Part<br>Number     | Each<br>Price |
|-------|-----------------------------------|----------------------------|---------------------|--------------------|---------------|
| 14/20 | $\frac{5}{16}$                    | -100                       | 15mL                | <b>ML-265-700</b>  | \$46.40       |
| 19/22 | $\frac{5}{16}$                    | -100                       | 60mL                | <b>ML-265-702</b>  | 48.20         |
| 24/40 | $\frac{3}{8}$                     | -102                       | 600mL               | <b>LG-1275-100</b> | 56.65         |
| 29/42 | $\frac{3}{8}$                     | -104                       | 3000mL              | <b>LG-1275-102</b> | 64.47         |

### Filtration, Adapter, w/Frit

With frit sealed between the upper joint and the lower joint. This adapter prevents the contents in the flask from entering into the condenser when "bumping" occurs. All traps have a 24/40 outer joint at the top.

| Lower<br>Joint | Frit<br>Porosity | Part<br>Number     | Each<br>Price |
|----------------|------------------|--------------------|---------------|
| 14/20          | Extra Coarse     | <b>LG-6877-100</b> | \$62.61       |
| 24/40          | Extra Coarse     | <b>LG-6877-102</b> | 64.96         |
| 29/42          | Extra Coarse     | <b>LG-6877-106</b> | 67.33         |
| 14/20          | Medium           | <b>LG-6877-200</b> | 62.61         |
| 24/40          | Medium           | <b>LG-6877-202</b> | 64.96         |
| 29/42          | Medium           | <b>LG-6877-206</b> | 67.33         |

### Filtration, Adapter, Fritted, w/Hose Connection

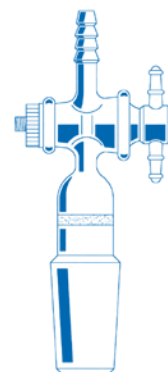
Adapter designed to prevent solids from being introduced into a reaction mixture through placement of extra coarse disc between hose connection and bottom inner joint.

| Joint | Hose Connection<br>Size Inches | Part<br>Number     | Each<br>Price |
|-------|--------------------------------|--------------------|---------------|
| 14/20 | $\frac{5}{16}$                 | <b>LG-7152-100</b> | \$27.26       |
| 19/22 | $\frac{5}{16}$                 | <b>LG-7152-102</b> | 28.12         |
| 24/40 | $\frac{3}{8}$                  | <b>LG-7152-104</b> | 28.87         |
| 29/42 | $\frac{3}{8}$                  | <b>LG-7152-108</b> | 29.43         |

### Filtration, Adapter, Fritted, w/PTFE Stopcock

Supplied with coarse porosity disc and  $\frac{3}{8}$ " hose connection. Stopcock has a PTFE plug with a 2mm bore.

| Joint | Part Number  | Each Price |
|-------|--------------|------------|
| 24/40 | LG-7151T-104 | \$71.00    |



LG-7151T

### Filtration, Tube, Filter, Straight

Tube length is 200mm with disc sealed-in at center. Intended for sealing to apparatus requiring filtration. Tube should not be heated too close to disc.

| Approx. O.D. of Tubing mm | Approx. Diameter of Disc mm | Disc Porosity | Part Number | Each Price |
|---------------------------|-----------------------------|---------------|-------------|------------|
| 13                        | 10                          | Coarse        | LG-7160-120 | \$23.93    |
| 25                        | 20                          | Coarse        | LG-7160-122 | 28.02      |
| 35                        | 30                          | Coarse        | LG-7160-124 | 31.63      |
| 45                        | 40                          | Coarse        | LG-7160-126 | 37.26      |
| 13                        | 10                          | Medium        | LG-7160-140 | 23.93      |
| 25                        | 20                          | Medium        | LG-7160-142 | 28.02      |
| 35                        | 30                          | Medium        | LG-7160-144 | 31.63      |
| 45                        | 40                          | Medium        | LG-7160-146 | 37.26      |
| 13                        | 10                          | Fine          | LG-7160-160 | 23.93      |
| 25                        | 20                          | Fine          | LG-7160-162 | 28.02      |
| 35                        | 30                          | Fine          | LG-7160-164 | 31.63      |
| 45                        | 40                          | Fine          | LG-7160-166 | 37.26      |



LG-7160

### Filtration, Crucible, Gooch, High Form

Unit has sealed-in fritted glass disc. Particularly suitable when precipitates will not be dried at temperatures above 110°C. May be used at higher temperatures.

| Capacity mL and Porosity | Approx. Diameter of Disc mm | Approx. Height mm | Part Number | Each Price |
|--------------------------|-----------------------------|-------------------|-------------|------------|
| 30 C                     | 30                          | 60                | LG-5470-100 | \$23.16    |
| 30 M                     | 30                          | 60                | LG-5470-102 | 23.16      |
| 30 F                     | 30                          | 60                | LG-5470-104 | 25.82      |
| 50 C                     | 40                          | 60                | LG-5470-106 | 30.46      |
| 50 M                     | 40                          | 60                | LG-5470-108 | 30.46      |

*Note: Avoid sudden temperature changes when heating or cooling.*



LG-5470



**LG-5480**

### Filtration, Crucible, Gooch, Low Form

Unit has sealed-in fritted glass disc. For analytical work involving precipitation, drying and weighing.

| Capacity<br>mL<br>and<br>Porosity | Approx.<br>Diameter<br>of Disc<br>mm | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|-----------------------------------|--------------------------------------|-------------------------|--------------------|---------------|
| 15 C                              | 20                                   | 44                      | <b>LG-5480-100</b> | \$22.39       |
| 15 M                              | 20                                   | 44                      | <b>LG-5480-102</b> | 22.39         |
| 15 F                              | 20                                   | 44                      | <b>LG-5480-104</b> | 22.39         |
| 30 C                              | 30                                   | 50                      | <b>LG-5480-106</b> | 24.25         |
| 30 M                              | 30                                   | 50                      | <b>LG-5480-108</b> | 24.25         |
| 30 F                              | 30                                   | 50                      | <b>LG-5480-110</b> | 23.79         |

*Note: Avoid sudden temperature changes when heating or cooling.*



**LG-7080**

### Filtration, Funnel, Filter, Buchner

With sealed-in fritted glass disc.

| Capacity<br>mL | Disc<br>Porosity | Approx.<br>Diameter<br>of Disc<br>mm | Approx.<br>Height<br>Above<br>Disc mm | Part<br>Number     | Each<br>Price |
|----------------|------------------|--------------------------------------|---------------------------------------|--------------------|---------------|
| 15             | Coarse           | 20                                   | 45                                    | <b>LG-7080-104</b> | \$30.50       |
| 15             | Medium           | 20                                   | 45                                    | <b>LG-7080-134</b> | 30.50         |
| 15             | Fine             | 20                                   | 45                                    | <b>LG-7080-164</b> | 30.50         |
| 30             | Coarse           | 30                                   | 45                                    | <b>LG-7080-106</b> | 34.42         |
| 30             | Medium           | 30                                   | 45                                    | <b>LG-7080-136</b> | 34.42         |
| 30             | Fine             | 30                                   | 45                                    | <b>LG-7080-166</b> | 34.42         |
| 60             | Coarse           | 40                                   | 50                                    | <b>LG-7080-108</b> | 37.95         |
| 60             | Medium           | 40                                   | 50                                    | <b>LG-7080-138</b> | 37.95         |
| 60             | Fine             | 40                                   | 50                                    | <b>LG-7080-168</b> | 37.95         |
| 150            | Coarse           | 60                                   | 60                                    | <b>LG-7080-110</b> | 69.05         |
| 150            | Medium           | 60                                   | 60                                    | <b>LG-7080-140</b> | 69.05         |
| 150            | Fine             | 60                                   | 60                                    | <b>LG-7080-170</b> | 69.05         |
| 350            | Coarse           | 80                                   | 80                                    | <b>LG-7080-112</b> | 94.00         |
| 350            | Medium           | 80                                   | 80                                    | <b>LG-7080-142</b> | 94.00         |
| 350            | Fine             | 80                                   | 80                                    | <b>LG-7080-172</b> | 94.00         |
| 600            | Coarse           | 90                                   | 90                                    | <b>LG-7080-114</b> | 109.29        |
| 600            | Medium           | 90                                   | 90                                    | <b>LG-7080-144</b> | 109.29        |
| 600            | Fine             | 90                                   | 90                                    | <b>LG-7080-174</b> | 109.29        |
| 2000           | Coarse           | 125                                  | 147                                   | <b>LG-7080-116</b> | 250.70        |
| 2000           | Medium           | 125                                  | 147                                   | <b>LG-7080-146</b> | 250.70        |
| 2000           | Fine             | 125                                  | 147                                   | <b>LG-7080-176</b> | 304.83        |
| 3000           | Coarse           | 150                                  | 157                                   | <b>LG-7080-118</b> | 347.90        |
| 3000           | Medium           | 150                                  | 157                                   | <b>LG-7080-148</b> | 347.90        |
| 3000           | Fine             | 150                                  | 157                                   | <b>LG-7080-178</b> | 365.20        |

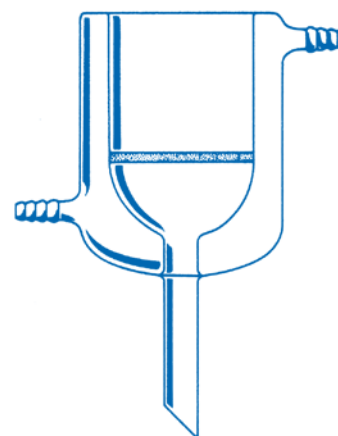
*Note: Available in other sizes upon request.*

### Filtration, Funnel, Filter, Buchner, Jacketed

With jacket enclosing entire funnel bowl and upper part of stem. Circulation of liquid through the jacket permits warming or cooling of funnel and contents during filtration.

| Capacity<br>mL | Disc<br>Porosity | Diameter<br>of Disc<br>mm | Approx.<br>Height<br>Above<br>Disc mm | Hose<br>Connection<br>Size Inches | Part<br>Number     | Each<br>Price |
|----------------|------------------|---------------------------|---------------------------------------|-----------------------------------|--------------------|---------------|
| 30             | Coarse           | 30                        | 45                                    | $\frac{3}{8}$                     | <b>LG-7110-100</b> | \$207.85      |
| 60             | Coarse           | 40                        | 50                                    | $\frac{3}{8}$                     | <b>LG-7110-102</b> | 241.96        |
| 60             | Medium           | 40                        | 50                                    | $\frac{3}{8}$                     | <b>LG-7110-112</b> | 241.96        |
| 150            | Coarse           | 60                        | 50                                    | $\frac{3}{8}$                     | <b>LG-7110-104</b> | 257.78        |
| 150            | Medium           | 60                        | 50                                    | $\frac{3}{8}$                     | <b>LG-7110-114</b> | 257.78        |
| 600            | Coarse           | 90                        | 90                                    | $\frac{1}{2}$                     | <b>LG-7110-106</b> | 344.82        |
| 600            | Medium           | 90                        | 90                                    | $\frac{1}{2}$                     | <b>LG-7110-116</b> | 344.82        |
| 600            | Fine             | 90                        | 90                                    | $\frac{1}{2}$                     | <b>LG-7110-126</b> | 382.17        |
| 2000           | Coarse           | 125                       | 147                                   | $\frac{1}{2}$                     | <b>LG-7110-108</b> | 599.54        |
| 2000           | Fine             | 125                       | 147                                   | $\frac{1}{2}$                     | <b>LG-7110-128</b> | 599.54        |

*Note: Any of the above funnels can be furnished with a joint below the bowl. Prices on request.*



**LG-7110**

### Filtration, Funnel, Filter, Buchner, Perforated Plate

With sealed-in perforated disc to support filter media. Pressure may be used but should not exceed 15 PSI.

| Size<br>mm | Height<br>Above<br>Plate mm | Total<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|------------|-----------------------------|-----------------------|--------------------|---------------|
| 42.5       | 50                          | 150                   | <b>LG-7085-100</b> | \$92.27       |
| 55         | 50                          | 154                   | <b>LG-7085-102</b> | 103.06        |
| 90         | 90                          | 230                   | <b>LG-7085-104</b> | 202.52        |



**LG-7085**



**LG-7120**  
**ML-1060**

**Filtration, Funnel, Filter, Buchner, with Vacuum Adapter**

With inner joint sealed to the stem with side hose connection just above the grinding. Recommended for use with *LG-7820* heavy wall filter flasks.

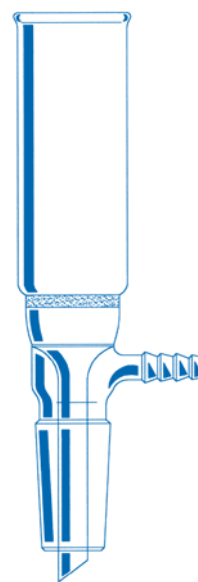
| Capacity<br>mL | Disc<br>Porosity | Approx.<br>Diameter<br>of Disc<br>mm | Joint | Part<br>Number     | Each<br>Price |
|----------------|------------------|--------------------------------------|-------|--------------------|---------------|
| 15             | Coarse           | 20                                   | 14/20 | <b>ML-1060-700</b> | \$62.07       |
| 15             | Medium           | 20                                   | 14/20 | <b>ML-1060-710</b> | 62.07         |
| 15             | Coarse           | 20                                   | 19/22 | <b>ML-1060-702</b> | 64.84         |
| 15             | Medium           | 20                                   | 19/22 | <b>ML-1060-712</b> | 64.84         |
| 15             | Coarse           | 20                                   | 24/40 | <b>LG-7120-100</b> | 90.15         |
| 15             | Medium           | 20                                   | 24/40 | <b>LG-7120-120</b> | 90.15         |
| 15             | Coarse           | 20                                   | 29/26 | <b>LG-7120-098</b> | 90.15         |
| 15             | Medium           | 20                                   | 29/26 | <b>LG-7120-118</b> | 90.15         |
| 30             | Coarse           | 30                                   | 14/20 | <b>ML-1060-704</b> | 65.33         |
| 30             | Medium           | 30                                   | 14/20 | <b>ML-1060-714</b> | 65.33         |
| 30             | Coarse           | 30                                   | 19/22 | <b>ML-1060-706</b> | 66.27         |
| 30             | Medium           | 30                                   | 19/22 | <b>ML-1060-716</b> | 66.27         |
| 30             | Coarse           | 30                                   | 24/40 | <b>LG-7120-102</b> | 95.68         |
| 30             | Medium           | 30                                   | 24/40 | <b>LG-7120-122</b> | 95.68         |
| 30             | Coarse           | 30                                   | 29/26 | <b>LG-7120-101</b> | 100.02        |
| 30             | Medium           | 30                                   | 29/26 | <b>LG-7120-121</b> | 100.02        |
| 60             | Coarse           | 40                                   | 14/20 | <b>ML-1060-708</b> | 66.90         |
| 60             | Medium           | 40                                   | 14/20 | <b>ML-1060-718</b> | 66.90         |
| 60             | Coarse           | 40                                   | 19/22 | <b>ML-1060-709</b> | 69.17         |
| 60             | Medium           | 40                                   | 19/22 | <b>ML-1060-719</b> | 69.17         |
| 60             | Coarse           | 40                                   | 24/40 | <b>LG-7120-103</b> | 99.32         |
| 60             | Medium           | 40                                   | 24/40 | <b>LG-7120-123</b> | 101.24        |
| 60             | Coarse           | 40                                   | 29/26 | <b>LG-7120-111</b> | 105.70        |
| 60             | Medium           | 40                                   | 29/26 | <b>LG-7120-131</b> | 105.70        |
| 60             | Coarse           | 40                                   | 29/42 | <b>LG-7120-104</b> | 81.80         |
| 60             | Medium           | 40                                   | 29/42 | <b>LG-7120-124</b> | 101.24        |
| 150            | Coarse           | 60                                   | 24/40 | <b>LG-7120-105</b> | 128.88        |
| 150            | Medium           | 60                                   | 24/40 | <b>LG-7120-125</b> | 131.37        |
| 150            | Coarse           | 60                                   | 29/26 | <b>LG-7120-112</b> | 135.95        |
| 150            | Medium           | 60                                   | 29/26 | <b>LG-7120-132</b> | 135.95        |
| 150            | Coarse           | 60                                   | 29/42 | <b>LG-7120-106</b> | 135.95        |
| 150            | Medium           | 60                                   | 29/42 | <b>LG-7120-126</b> | 135.95        |
| 350            | Coarse           | 80                                   | 24/40 | <b>LG-7120-107</b> | 153.68        |
| 350            | Medium           | 80                                   | 24/40 | <b>LG-7120-127</b> | 153.68        |
| 350            | Coarse           | 80                                   | 29/26 | <b>LG-7120-113</b> | 158.73        |
| 350            | Medium           | 80                                   | 29/26 | <b>LG-7120-133</b> | 158.73        |
| 350            | Coarse           | 80                                   | 29/42 | <b>LG-7120-108</b> | 158.73        |
| 350            | Medium           | 80                                   | 29/42 | <b>LG-7120-128</b> | 158.73        |
| 600            | Coarse           | 90                                   | 24/40 | <b>LG-7120-109</b> | 185.01        |
| 600            | Medium           | 90                                   | 24/40 | <b>LG-7120-129</b> | 185.01        |
| 600            | Coarse           | 90                                   | 29/26 | <b>LG-7120-114</b> | 190.45        |
| 600            | Medium           | 90                                   | 29/26 | <b>LG-7120-134</b> | 190.45        |
| 600            | Coarse           | 90                                   | 29/42 | <b>LG-7120-110</b> | 190.45        |
| 600            | Medium           | 90                                   | 29/42 | <b>LG-7120-130</b> | 190.45        |

### Filtration, Funnel, Column, Rapid Separation

Used where rapid separation is needed. Funnel has inner joint at the bottom, supplied with coarse frit.

| Disc Size mm | Joint | Height Above Disc Inches | Part Number        | Each Price |
|--------------|-------|--------------------------|--------------------|------------|
| 30           | 14/20 | 4                        | <b>LG-4537-100</b> | \$94.61    |
| 30           | 14/20 | 6                        | <b>LG-4537-102</b> | 100.75     |
| 40           | 14/20 | 4                        | <b>LG-4537-104</b> | 94.61      |
| 40           | 14/20 | 6                        | <b>LG-4537-106</b> | 111.82     |
| 30           | 24/40 | 4                        | <b>LG-4537-108</b> | 105.68     |
| 30           | 24/40 | 6                        | <b>LG-4537-110</b> | 111.82     |
| 30           | 24/40 | 8                        | <b>LG-4537-112</b> | 120.42     |
| 30           | 24/40 | 10                       | <b>LG-4537-114</b> | 129.02     |
| 30           | 24/40 | 12                       | <b>LG-4537-116</b> | 137.63     |
| 40           | 24/40 | 4                        | <b>LG-4537-118</b> | 105.68     |
| 40           | 24/40 | 6                        | <b>LG-4537-120</b> | 111.82     |
| 40           | 24/40 | 8                        | <b>LG-4537-122</b> | 120.42     |
| 40           | 24/40 | 10                       | <b>LG-4537-124</b> | 129.02     |
| 40           | 24/40 | 12                       | <b>LG-4537-126</b> | 137.63     |
| 60           | 24/40 | 4                        | <b>LG-4537-128</b> | 127.77     |
| 60           | 24/40 | 6                        | <b>LG-4537-130</b> | 138.84     |
| 60           | 24/40 | 8                        | <b>LG-4537-132</b> | 151.14     |
| 60           | 24/40 | 10                       | <b>LG-4537-134</b> | 163.40     |
| 60           | 24/40 | 12                       | <b>LG-4537-136</b> | 175.70     |
| 80           | 24/40 | 4                        | <b>LG-4537-138</b> | 162.19     |
| 80           | 24/40 | 6                        | <b>LG-4537-140</b> | 179.38     |
| 80           | 24/40 | 8                        | <b>LG-4537-142</b> | 195.36     |
| 80           | 24/40 | 10                       | <b>LG-4537-144</b> | 212.56     |
| 80           | 24/40 | 12                       | <b>LG-4537-146</b> | 228.54     |
| 90           | 24/40 | 8                        | <b>LG-4537-148</b> | 195.36     |

*Note: Available in other sizes upon request.*



**LG-4537**

### Filtration, Glass Discs, Fritted

Fritted disc used in manufacturing of laboratory glassware.

| Approx. Diameter mm | Disc Porosity | Part Number        | Each Price |
|---------------------|---------------|--------------------|------------|
| 5                   | Medium        | <b>LG-8675-180</b> | \$7.30     |
| 5                   | Coarse        | <b>LG-8675-140</b> | 7.30       |
| 20                  | Medium        | <b>LG-8675-192</b> | 3.69       |
| 20                  | Coarse        | <b>LG-8675-152</b> | 3.69       |
| 30                  | Medium        | <b>LG-8675-196</b> | 4.77       |
| 30                  | Coarse        | <b>LG-8675-156</b> | 4.98       |
| 40                  | Medium        | <b>LG-8675-198</b> | 7.31       |
| 40                  | Coarse        | <b>LG-8675-158</b> | 7.31       |
| 40                  | Extra Coarse  | <b>LG-8675-118</b> | 7.31       |
| 60                  | Medium        | <b>LG-8675-202</b> | 29.03      |
| 60                  | Coarse        | <b>LG-8675-162</b> | 30.11      |
| 60                  | Extra Coarse  | <b>LG-8675-122</b> | 29.58      |

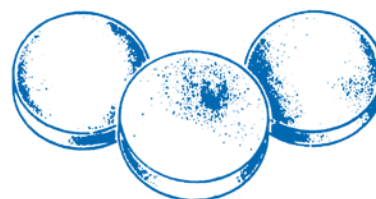
*Note: Available in other porosities and sizes upon request.*

*Fine = 4-5.5 microns*

*Coarse = 40-60 microns*

*Medium = 10-15 microns*

*Extra Coarse = 170-220 microns*



**LG-8675**



**LG-7220**  
**ML-1110**

### Flask, Round Bottom, Short Neck

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 2              | 14/20 | ML-1110-700    | \$19.79       |
| 2              | 19/22 | ML-1110-750    | 17.35         |
| 4              | 14/20 | ML-1110-702    | 19.79         |
| 4              | 19/22 | ML-1110-752    | 17.02         |
| 5              | 14/20 | ML-1110-704    | 16.36         |
| 5              | 19/22 | ML-1110-754    | 17.35         |
| 6              | 14/20 | ML-1110-706    | 17.23         |
| 6              | 19/22 | ML-1110-756    | 17.02         |
| 10             | 14/20 | ML-1110-708    | 16.90         |
| 10             | 19/22 | ML-1110-758    | 17.02         |
| 15             | 14/20 | ML-1110-710    | 16.90         |
| 15             | 19/22 | ML-1110-760    | 17.02         |
| 20             | 14/20 | ML-1110-712    | 17.23         |
| 20             | 19/22 | ML-1110-762    | 17.02         |
| 25             | 14/20 | ML-1110-714    | 16.90         |
| 25             | 19/22 | ML-1110-764    | 17.02         |
| 35             | 14/20 | ML-1110-716    | 17.23         |
| 35             | 19/22 | ML-1110-766    | 17.02         |
| 50             | 14/20 | ML-1110-718    | 16.90         |
| 50             | 19/22 | ML-1110-768    | 17.02         |
| 50             | 19/38 | LG-7220-120    | 17.25         |
| 50             | 24/40 | LG-7220-140    | 17.25         |
| 50             | 29/42 | LG-7220-170    | 20.85         |
| 65             | 14/20 | ML-1110-720    | 17.23         |
| 65             | 19/22 | ML-1110-770    | 17.02         |
| 100            | 14/20 | ML-1110-722    | 16.90         |
| 100            | 19/22 | ML-1110-772    | 17.02         |
| 100            | 19/38 | LG-7220-122    | 17.58         |
| 100            | 24/40 | LG-7220-142    | 17.25         |
| 100            | 29/42 | LG-7220-172    | 21.22         |
| 125            | 14/20 | ML-1110-724    | 18.54         |
| 125            | 19/22 | ML-1110-774    | 18.30         |
| 125            | 24/40 | LG-7220-144    | 21.22         |
| 125            | 29/26 | LG-7220-161    | 22.59         |
| 125            | 29/42 | LG-7220-174    | 22.10         |
| 200            | 14/20 | ML-1110-726    | 19.45         |
| 200            | 19/22 | ML-1110-776    | 19.95         |
| 200            | 24/40 | LG-7220-146    | 22.23         |
| 200            | 29/26 | LG-7220-162    | 24.03         |
| 200            | 29/42 | LG-7220-176    | 24.03         |
| 250            | 14/20 | ML-1110-728    | 20.62         |
| 250            | 19/22 | ML-1110-778    | 21.97         |
| 250            | 24/40 | LG-7220-148    | 23.29         |
| 250            | 29/26 | LG-7220-163    | 25.13         |
| 250            | 29/42 | LG-7220-178    | 24.65         |
| 300            | 14/20 | ML-1110-730    | 22.18         |
| 300            | 29/26 | LG-7220-164    | 26.87         |
| 300            | 24/40 | LG-7220-150    | 25.07         |
| 300            | 29/42 | LG-7220-180    | 26.79         |
| 500            | 14/20 | ML-1110-732    | 25.29         |

*Continued on next page*



**Flask, Round Bottom, Short Neck**

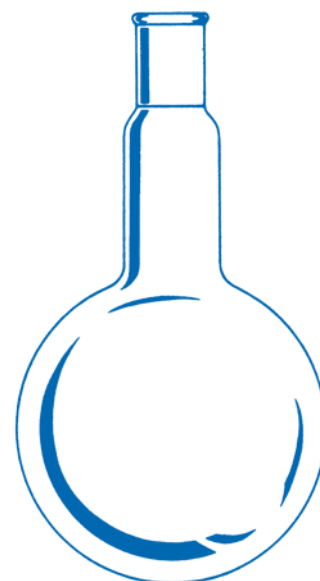
| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 500            | 19/22 | ML-1110-782    | \$25.67       |
| 500            | 24/40 | LG-7220-152    | 26.84         |
| 500            | 29/26 | LG-7220-165    | 28.08         |
| 500            | 29/42 | LG-7220-182    | 27.95         |
| 500            | 34/45 | LG-7220-200    | 33.85         |
| 500            | 45/50 | LG-7220-240    | 41.83         |
| 1000           | 24/40 | LG-7220-154    | 31.50         |
| 1000           | 29/26 | LG-7220-166    | 33.55         |
| 1000           | 29/42 | LG-7220-184    | 33.05         |
| 1000           | 34/45 | LG-7220-202    | 39.42         |
| 1000           | 45/50 | LG-7220-242    | 45.07         |
| 2000           | 24/40 | LG-7220-156    | 62.09         |
| 2000           | 29/42 | LG-7220-186    | 62.15         |
| 2000           | 45/50 | LG-7220-244    | 69.05         |
| 3000           | 24/40 | LG-7220-158    | 85.34         |
| 3000           | 29/26 | LG-7220-168    | 86.18         |
| 3000           | 29/42 | LG-7220-188    | 83.66         |
| 3000           | 34/45 | LG-7220-206    | 83.99         |
| 3000           | 45/50 | LG-7220-246    | 90.15         |
| 5000           | 24/40 | LG-7220-160    | 99.54         |
| 5000           | 29/42 | LG-7220-190    | 96.05         |
| 5000           | 45/50 | LG-7220-248    | 106.40        |
| 12000          | 45/50 | LG-7220-250    | 202.38        |
| 12000          | 55/50 | LG-7220-270    | 205.78        |
| 22000          | 45/50 | LG-7220-252    | 338.05        |
| 22000          | 55/50 | LG-7220-272    | 343.70        |
| 50000          | 55/50 | LG-7220-274    | 734.92        |
| 72000          | 55/50 | LG-7220-276    | 1,083.65      |



**LG-7220  
ML-1110**

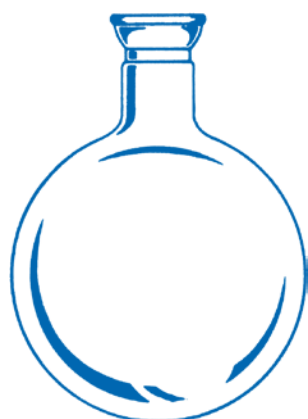
**Flask, Round Bottom, Long Neck**

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 10             | 14/20 | ML-1100-700    | \$19.03       |
| 25             | 14/20 | ML-1100-702    | 19.03         |
| 25             | 19/22 | ML-1100-712    | 19.40         |
| 50             | 14/20 | ML-1100-704    | 19.03         |
| 50             | 19/22 | ML-1100-714    | 19.40         |
| 50             | 24/40 | LG-7221-140    | 19.63         |
| 100            | 24/40 | LG-7221-142    | 19.63         |
| 125            | 24/40 | LG-7221-144    | 23.25         |
| 200            | 24/40 | LG-7221-146    | 24.85         |
| 250            | 24/40 | LG-7221-148    | 24.71         |
| 300            | 24/40 | LG-7221-150    | 26.79         |
| 500            | 24/40 | LG-7221-152    | 27.24         |
| 1000           | 24/40 | LG-7221-154    | 33.03         |
| 2000           | 24/40 | LG-7221-156    | 60.03         |
| 3000           | 24/40 | LG-7221-158    | 82.76         |
| 5000           | 24/40 | LG-7221-160    | 100.34        |



**LG-7221  
ML-1100**

*Note: Flasks with wide range of capacities and joints are available upon request.*


**LG-7240**

**Teflon**


**LG-7226**

**NEW**


**ML-1540**
**Flask, Round Bottom, Short Neck, Socket Joint**

| Capacity<br>mL | Socket Joint | Part<br>Number     | Each<br>Price |
|----------------|--------------|--------------------|---------------|
| 50             | 28/15        | <b>LG-7240-100</b> | \$21.24       |
| 50             | 35/25        | <b>LG-7240-120</b> | 24.56         |
| 100            | 28/15        | <b>LG-7240-102</b> | 25.30         |
| 100            | 35/25        | <b>LG-7240-122</b> | 25.30         |
| 250            | 28/15        | <b>LG-7240-108</b> | 25.66         |
| 250            | 35/25        | <b>LG-7240-128</b> | 25.66         |
| 500            | 28/15        | <b>LG-7240-112</b> | 26.03         |
| 500            | 35/25        | <b>LG-7240-132</b> | 28.69         |
| 1000           | 35/20        | <b>LG-7240-116</b> | 32.29         |
| 1000           | 35/25        | <b>LG-7240-134</b> | 36.74         |
| 2000           | 35/20        | <b>LG-7240-117</b> | 84.85         |
| 2000           | 35/25        | <b>LG-7240-136</b> | 84.83         |
| 3000           | 35/25        | <b>LG-7240-138</b> | 97.01         |
| 5000           | 35/25        | <b>LG-7240-140</b> | 104.97        |

**Flask, Round Bottom, PTFE**

Machine Finished, Inert and Usable to 280°C

| Capacity<br>mL | Socket Joint | Part<br>Number     | Each<br>Price |
|----------------|--------------|--------------------|---------------|
| 10             | 19/38        | <b>LG-7226-100</b> | \$28.05       |
| 25             | 24/40        | <b>LG-7226-102</b> | 43.50         |
| 50             | 24/40        | <b>LG-7226-104</b> | 59.00         |
| 50             | 29/42        | <b>LG-7226-106</b> | 59.90         |
| 100            | 29/42        | <b>LG-7226-108</b> | 91.90         |

**Heating Mantle, Micro, Spherical**

Soft, all glass fabric construction which supports the bottom half of flask. This allows full view of the contents of single or multi-neck flasks. Supplied with a separable 3 foot long 2-wire cord and locking connector.

| Flask<br>Capacity<br>mL | Wattage | Volts  | Part<br>Number     | Each<br>Price |
|-------------------------|---------|--------|--------------------|---------------|
| 5                       | 12      | 30 max | <b>ML-1540-700</b> | \$105.00      |
| 10                      | 20      | 30 max | <b>ML-1540-702</b> | 105.00        |
| 20                      | 27      | 60 max | <b>ML-1540-704</b> | 115.00        |
| 25                      | 30      | 60 max | <b>ML-1540-706</b> | 115.00        |
| 35                      | 35      | 60 max | <b>ML-1540-708</b> | 115.00        |

*Note: See LG-8920-100 for support.*

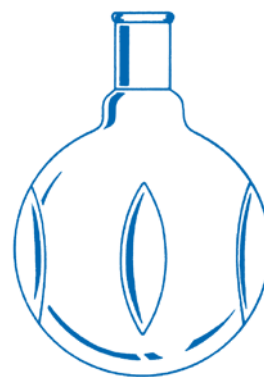
**Safety Coatings for your Flasks**

Protect your flasks with the industry's best safety coating. Whether it's a flask, bottle, condenser, column or evaporator products, Wilmad/Labglass has a coating for your needs. We supply PVC and Nylon coatings for safety protection from everyday breakage, implosion and air sensitive coating for UV protection. Delivery time on small quantities is 5 working days. When it comes to quality and delivery we can make your life simple and safer.

### Flask, Round Bottom, Indented, Morton Style

Indentations on flask wall promote better agitation of reaction mixture.

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 100            | 24/40 | LG-7540-100    | \$59.39       |
| 200            | 24/40 | LG-7540-102    | 61.97         |
| 250            | 24/40 | LG-7540-104    | 64.57         |
| 250            | 29/42 | LG-7540-122    | 65.84         |
| 500            | 24/40 | LG-7540-108    | 66.49         |
| 500            | 29/42 | LG-7540-126    | 67.78         |
| 1000           | 24/40 | LG-7540-110    | 83.60         |
| 2000           | 24/40 | LG-7540-112    | 99.42         |
| 2000           | 29/42 | LG-7540-130    | 100.71        |
| 5000           | 24/40 | LG-7540-116    | 138.16        |



LG-7540

### Flask, Flat Bottom, Short Neck

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 50             | 24/40 | LG-7230-100    | \$22.94       |
| 125            | 24/40 | LG-7230-102    | 24.23         |
| 250            | 24/40 | LG-7230-104    | 24.23         |
| 300            | 24/40 | LG-7230-106    | 24.94         |
| 500            | 24/40 | LG-7230-108    | 28.74         |
| 500            | 29/42 | LG-7230-120    | 30.00         |
| 1000           | 24/40 | LG-7230-110    | 45.31         |
| 1000           | 29/42 | LG-7230-122    | 47.73         |
| 2000           | 24/40 | LG-7230-112    | 78.10         |
| 2000           | 29/42 | LG-7230-123    | 79.78         |



LG-7230

#### Heavy Wall

The wall weight of the standard flask offered by Wilmad/LabGlass exceeds industry standards.

Our flasks are 25-30% heavier than the standard flask supplied by other competitors.

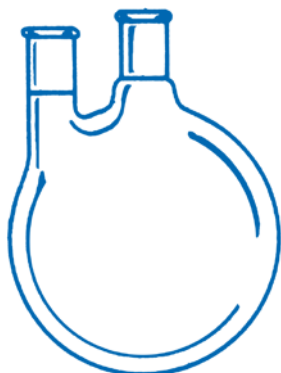
### Flask, Flat Bottom, Long Neck

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 250            | 24/40 | LG-7231-104    | \$30.70       |
| 500            | 24/40 | LG-7231-108    | 36.10         |
| 500            | 29/42 | LG-7231-120    | 37.60         |
| 1000           | 24/40 | LG-7231-110    | 42.40         |
| 1000           | 29/42 | LG-7231-122    | 43.90         |
| 2000           | 24/40 | LG-7231-114    | 70.30         |
| 2000           | 29/42 | LG-7231-126    | 71.80         |



LG-7231


**C-4060**

**LG-7270**

**LG-7290**
**Flask, PYREX®, Flat Bottom**

Flat bottom, long-neck, tooled mouth, Florence Boiling Flask.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Part<br>Number    | Each<br>Price |
|----------------|--------------------------|-------------------|---------------|
| 50             | 1                        | <b>C-4060-50</b>  | \$8.51        |
| 125            | 2                        | <b>C-4060-125</b> | 6.81          |
| 250            | 5                        | <b>C-4060-250</b> | 7.31          |
| 500            | 6                        | <b>C-4060-500</b> | 10.57         |
| 1000           | 8                        | <b>C-4060-1L</b>  | 13.20         |
| 2000           | 8                        | <b>C-4060-2L</b>  | 35.45         |
| 6000           | 11                       | <b>C-4060-6L</b>  | 82.74         |
| 12000*         | 11                       | <b>C-4060-12L</b> | 177.07        |

\*The 12000mL size has a short neck

**Flask, Round Bottom, Short Neck, Thermometer Well**

The well opening is tooled to take a No. 0 rubber stopper.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 100            | 24/40 | <b>LG-7270-132</b> | \$84.54       |
| 250            | 24/40 | <b>LG-7270-138</b> | 89.78         |
| 250            | 29/42 | <b>LG-7270-168</b> | 91.28         |
| 300            | 24/40 | <b>LG-7270-140</b> | 86.59         |
| 500            | 24/40 | <b>LG-7270-142</b> | 94.39         |
| 500            | 29/42 | <b>LG-7270-172</b> | 97.99         |
| 1000           | 24/40 | <b>LG-7270-144</b> | 108.24        |
| 1000           | 29/42 | <b>LG-7270-174</b> | 110.41        |
| 2000           | 24/40 | <b>LG-7270-146</b> | 166.00        |
| 2000           | 29/42 | <b>LG-7270-176</b> | 167.04        |
| 3000           | 24/40 | <b>LG-7270-148</b> | 188.10        |
| 3000           | 29/42 | <b>LG-7270-178</b> | 190.20        |
| 5000           | 24/40 | <b>LG-7270-150</b> | 220.60        |

**Flask, Round Bottom, Two-Neck**

Round bottom flask with two outer joints. Side neck is vertical 24/40 joint.

| Capacity<br>mL | Center<br>Joint | Part<br>Number     | Each<br>Price |
|----------------|-----------------|--------------------|---------------|
| 100            | 24/40           | <b>LG-7290-222</b> | \$56.16       |
| 200            | 24/40           | <b>LG-7290-230</b> | 57.34         |
| 250            | 24/40           | <b>LG-7290-234</b> | 56.89         |
| 500            | 24/40           | <b>LG-7290-246</b> | 58.82         |
| 500            | 29/42           | <b>LG-7290-248</b> | 59.55         |
| 500            | 34/45           | <b>LG-7290-250</b> | 62.19         |
| 1000           | 24/40           | <b>LG-7290-254</b> | 72.18         |
| 1000           | 29/42           | <b>LG-7290-256</b> | 72.80         |
| 1000           | 34/45           | <b>LG-7290-258</b> | 75.52         |
| 2000           | 24/40           | <b>LG-7290-262</b> | 99.44         |
| 2000           | 29/42           | <b>LG-7290-264</b> | 99.44         |
| 3000           | 24/40           | <b>LG-7290-270</b> | 104.27        |
| 5000           | 24/40           | <b>LG-7290-278</b> | 142.77        |
| 5000           | 45/50           | <b>LG-7290-284</b> | 145.00        |

Note: Other capacities and sizes available upon request.

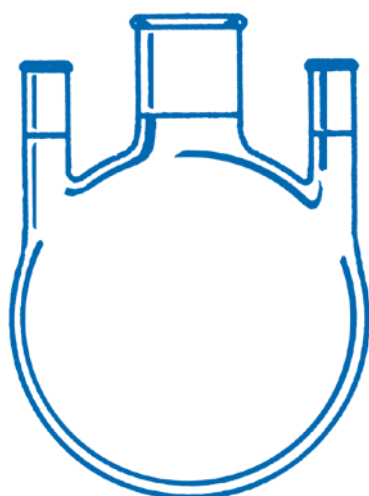
**Flask, Round Bottom, Two-Neck, Angled**

Center neck is vertical and side neck is at a 20° angle to the center neck.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joint | Part<br>Number | Each<br>Price |
|----------------|--------------------|------------------|----------------|---------------|
| 15             | 14/20              | 10/18            | ML-1120-700    | \$41.16       |
| 15             | 19/22              | 10/18            | ML-1120-702    | 42.42         |
| 15             | 14/20              | 14/20            | ML-1120-740    | 38.68         |
| 15             | 19/22              | 19/22            | ML-1120-782    | 40.13         |
| 25             | 14/20              | 10/18            | ML-1120-706    | 41.16         |
| 25             | 14/20              | 14/20            | ML-1120-746    | 38.68         |
| 25             | 19/22              | 14/20            | ML-1120-748    | 39.37         |
| 50             | 14/20              | 10/18            | ML-1120-712    | 41.16         |
| 50             | 19/22              | 10/18            | ML-1120-714    | 42.42         |
| 50             | 14/20              | 14/20            | ML-1120-752    | 37.95         |
| 50             | 19/22              | 14/20            | ML-1120-754    | 40.13         |
| 50             | 19/22              | 19/22            | ML-1120-794    | 40.13         |
| 100            | 14/20              | 10/18            | ML-1120-718    | 41.16         |
| 100            | 14/20              | 14/20            | ML-1120-758    | 37.95         |
| 100            | 19/22              | 14/20            | ML-1120-760    | 40.13         |
| 100            | 19/22              | 19/22            | ML-1120-800    | 40.13         |
| 100            | 24/40              | 10/30            | LG-7291-102    | 56.16         |
| 100            | 29/26              | 10/30            | LG-7291-103    | 58.82         |
| 100            | 24/40              | 24/40            | LG-7291-222    | 55.10         |
| 200            | 29/26              | 10/30            | LG-7291-113    | 59.55         |
| 250            | 14/20              | 14/20            | ML-1120-762    | 42.06         |
| 250            | 19/22              | 14/20            | ML-1120-764    | 42.79         |
| 250            | 19/22              | 19/22            | ML-1120-804    | 44.10         |
| 250            | 24/40              | 10/30            | LG-7291-114    | 56.89         |
| 250            | 29/26              | 10/30            | LG-7291-115    | 54.23         |
| 250            | 29/42              | 10/30            | LG-7291-116    | 54.23         |
| 250            | 24/40              | 24/40            | LG-7291-234    | 55.81         |
| 250            | 29/42              | 24/40            | LG-7291-236    | 57.49         |
| 300            | 24/40              | 24/40            | LG-7291-240    | 58.82         |
| 500            | 14/20              | 14/20            | ML-1120-766    | 44.23         |
| 500            | 24/40              | 10/30            | LG-7291-126    | 56.77         |
| 500            | 29/26              | 10/30            | LG-7291-127    | 59.55         |
| 500            | 29/42              | 10/30            | LG-7291-128    | 59.55         |
| 500            | 24/40              | 24/40            | LG-7291-246    | 57.71         |
| 1000           | 24/40              | 10/30            | LG-7291-134    | 68.21         |
| 1000           | 29/42              | 10/30            | LG-7291-136    | 72.80         |
| 1000           | 24/40              | 24/40            | LG-7291-254    | 70.81         |
| 1000           | 29/42              | 24/40            | LG-7291-256    | 72.80         |
| 2000           | 24/40              | 10/30            | LG-7291-142    | 93.55         |
| 2000           | 29/42              | 10/30            | LG-7291-144    | 95.96         |
| 2000           | 24/40              | 24/40            | LG-7291-262    | 99.44         |
| 2000           | 29/42              | 24/40            | LG-7291-270    | 102.08        |
| 3000           | 24/40              | 24/40            | LG-7291-264    | 112.27        |
| 3000           | 29/42              | 24/40            | LG-7291-272    | 113.52        |
| 5000           | 24/40              | 24/40            | LG-7291-278    | 122.36        |
| 5000           | 29/42              | 24/40            | LG-7291-280    | 124.74        |



**LG-7291  
ML-1120**


**LG-7330**

Available  
with Safety  
or Nylon  
Coating

**Flask, Round Bottom, Three-Neck**

All three necks are vertical. The two side necks are 180° apart.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 100            | 24/40              | 24/40             | <b>LG-7330-176</b> | \$78.02       |
| 200            | 24/40              | 24/40             | <b>LG-7330-180</b> | 79.53         |
| 250            | 24/40              | 24/40             | <b>LG-7330-182</b> | 78.02         |
| 250            | 29/26              | 29/26             | <b>LG-7330-183</b> | 81.31         |
| 300            | 24/40              | 24/40             | <b>LG-7330-184</b> | 81.47         |
| 500            | 24/40              | 24/40             | <b>LG-7330-186</b> | 79.92         |
| 500            | 29/26              | 29/26             | <b>LG-7330-187</b> | 84.73         |
| 500            | 29/42              | 24/40             | <b>LG-7330-188</b> | 83.52         |
| 500            | 29/42              | 29/42             | <b>LG-7330-218</b> | 81.94         |
| 500            | 34/45              | 24/40             | <b>LG-7330-190</b> | 83.95         |
| 500            | 45/50              | 24/40             | <b>LG-7330-192</b> | 88.15         |
| 1000           | 24/40              | 24/40             | <b>LG-7330-194</b> | 94.84         |
| 1000           | 29/26              | 29/26             | <b>LG-7330-195</b> | 102.33        |
| 1000           | 29/42              | 24/40             | <b>LG-7330-196</b> | 100.28        |
| 1000           | 29/42              | 29/42             | <b>LG-7330-224</b> | 100.39        |
| 1000           | 34/45              | 24/40             | <b>LG-7330-198</b> | 103.68        |
| 1000           | 45/50              | 24/40             | <b>LG-7330-200</b> | 105.15        |
| 1000           | 45/50              | 29/42             | <b>LG-7330-228</b> | 107.85        |
| 2000           | 24/40              | 24/40             | <b>LG-7330-202</b> | 147.84        |
| 2000           | 29/26              | 29/26             | <b>LG-7330-203</b> | 122.79        |
| 2000           | 29/42              | 24/40             | <b>LG-7330-204</b> | 118.97        |
| 2000           | 29/42              | 29/42             | <b>LG-7330-230</b> | 151.40        |
| 2000           | 34/45              | 24/40             | <b>LG-7330-206</b> | 125.76        |
| 2000           | 45/50              | 24/40             | <b>LG-7330-208</b> | 139.62        |
| 2000           | 45/50              | 29/42             | <b>LG-7330-234</b> | 141.72        |
| 3000           | 24/40              | 24/40             | <b>LG-7330-210</b> | 154.07        |
| 3000           | 29/42              | 24/40             | <b>LG-7330-212</b> | 155.40        |
| 3000           | 29/26              | 29/26             | <b>LG-7330-213</b> | 154.41        |
| 3000           | 29/42              | 29/42             | <b>LG-7330-236</b> | 156.87        |
| 3000           | 34/45              | 24/40             | <b>LG-7330-214</b> | 158.22        |
| 3000           | 45/50              | 24/40             | <b>LG-7330-216</b> | 162.39        |
| 3000           | 45/50              | 29/42             | <b>LG-7330-240</b> | 160.74        |
| 5000           | 24/40              | 24/40             | <b>LG-7330-242</b> | 171.17        |
| 5000           | 29/42              | 24/40             | <b>LG-7330-244</b> | 173.63        |
| 5000           | 29/26              | 29/26             | <b>LG-7330-245</b> | 173.14        |
| 5000           | 29/42              | 29/42             | <b>LG-7330-286</b> | 174.84        |
| 5000           | 34/45              | 24/40             | <b>LG-7330-246</b> | 177.29        |
| 5000           | 45/50              | 24/40             | <b>LG-7330-248</b> | 180.96        |
| 5000           | 45/50              | 29/42             | <b>LG-7330-290</b> | 183.41        |
| 5000           | 45/50              | 45/50             | <b>LG-7330-364</b> | 189.78        |
| 5000           | 55/50              | 24/40             | <b>LG-7330-250</b> | 189.78        |
| 12000          | 29/42              | 24/40             | <b>LG-7330-254</b> | 269.00        |
| 12000          | 29/42              | 29/42             | <b>LG-7330-296</b> | 278.80        |
| 12000          | 34/45              | 24/40             | <b>LG-7330-256</b> | 286.13        |

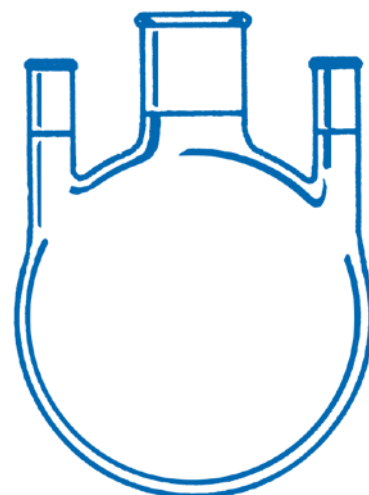
*Continued on next page*

### Flask, Round Bottom, Three-Neck, Cont.

All three necks are vertical. The two side necks are 180° apart.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number | Each<br>Price |
|----------------|--------------------|-------------------|----------------|---------------|
| 12000          | 45/50              | 24/40             | LG-7330-258    | \$299.78      |
| 12000          | 45/50              | 29/42             | LG-7330-300    | 289.79        |
| 12000          | 45/50              | 45/50             | LG-7330-370    | 314.94        |
| 12000          | 55/50              | 24/40             | LG-7330-260    | 293.46        |
| 12000          | 55/50              | 29/42             | LG-7330-302    | 298.35        |
| 12000          | 55/50              | 45/50             | LG-7330-372    | 303.24        |
| 22000          | 29/42              | 29/42             | LG-7330-306    | 518.27        |
| 22000          | 45/50              | 24/40             | LG-7330-268    | 523.08        |
| 22000          | 45/50              | 29/42             | LG-7330-310    | 509.74        |
| 22000          | 45/50              | 45/50             | LG-7330-376    | 549.60        |
| 22000          | 55/50              | 24/40             | LG-7330-270    | 552.02        |
| 22000          | 55/50              | 29/42             | LG-7330-312    | 554.43        |
| 22000          | 55/50              | 45/50             | LG-7330-378    | 568.90        |
| 50000          | 45/50              | 29/42             | LG-7330-316    | 1,301.73      |
| 50000          | 45/50              | 45/50             | LG-7330-382    | 1,313.77      |
| 50000          | 55/50              | 29/42             | LG-7330-318    | 1,317.39      |
| 50000          | 55/50              | 45/50             | LG-7330-384    | 1,343.91      |
| 50000          | 71/60              | 45/50             | LG-7330-386    | 1,421.05      |
| 72000          | 45/50              | 45/50             | LG-7330-388    | 1,611.42      |
| 72000          | 55/50              | 45/50             | LG-7330-390    | 1,659.68      |
| 72000          | 71/60              | 45/50             | LG-7330-392    | 1,705.48      |

*Note: Flasks of all capacities from 100mL to 72,000mL can be supplied with joints other than those listed under LG-7330 and LG-7331. Stopcock outlets may also be supplied. Prices on all these combinations will be furnished upon request.*



LG-7330

### Heating Mantle, Hemispherical

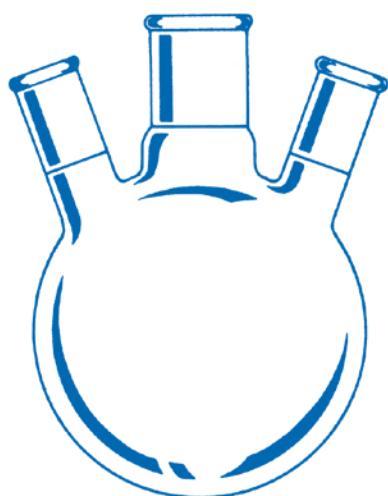
Soft, all glass fabric construction which supports the bottom half of flask. This allows full view of the contents of single or multi-neck flasks. Supplied with a separable foot long 2-wire cord and locking connector.

| Flask<br>Capacity<br>mL | Wattage | Volts | Part<br>Number | Each<br>Price |
|-------------------------|---------|-------|----------------|---------------|
| 50                      | 60      | 115   | LG-8800-100    | \$111.00      |
| 100                     | 80      | 115   | LG-8800-102    | 123.00        |
| 125                     | 80      | 115   | LG-8800-104    | 124.00        |
| 200                     | 100     | 115   | LG-8800-106    | 125.00        |
| 250                     | 180     | 115   | LG-8800-108    | 135.00        |
| 300                     | 180     | 115   | LG-8800-110    | 136.00        |
| 500                     | 270     | 115   | LG-8800-112    | 153.00        |
| 1000                    | 380     | 115   | LG-8800-114    | 171.00        |
| 2000                    | 500     | 115   | LG-8800-116    | 186.00        |
| 3000                    | 500     | 115   | LG-8800-118    | 207.00        |
| 5000                    | 600     | 115   | LG-8800-120    | 246.00        |
| 12000                   | 2x650   | 115   | LG-8800-122    | 495.00        |



LG-8800





**LG-7331**  
**ML-1130**

### Flask, Round Bottom, Three-Neck, Angled

Center neck is vertical. The two side necks are 180° apart and are inclined at an angle of 20° to the vertical.

| Capacity<br>mL | Center<br>Joints | Side<br>Joints | Part<br>Number     | Each<br>Price |
|----------------|------------------|----------------|--------------------|---------------|
| 25             | 14/20            | 14/20          | <b>ML-1130-700</b> | \$44.57       |
| 25             | 19/22            | 14/20          | <b>ML-1130-702</b> | 45.87         |
| 25             | 19/22            | 19/22          | <b>ML-1130-742</b> | 47.19         |
| 50             | 14/20            | 14/20          | <b>ML-1130-706</b> | 47.19         |
| 50             | 19/22            | 14/20          | <b>ML-1130-708</b> | 49.42         |
| 50             | 19/22            | 19/22          | <b>ML-1130-748</b> | 49.78         |
| 100            | 14/20            | 14/20          | <b>ML-1130-712</b> | 47.29         |
| 100            | 19/22            | 14/20          | <b>ML-1130-714</b> | 49.53         |
| 100            | 19/22            | 19/22          | <b>ML-1130-754</b> | 49.78         |
| 100            | 24/40            | 24/40          | <b>LG-7331-176</b> | 78.02         |
| 125            | 24/40            | 24/40          | <b>LG-7331-178</b> | 79.53         |
| 200            | 24/40            | 24/40          | <b>LG-7331-180</b> | 79.53         |
| 250            | 14/20            | 14/20          | <b>ML-1130-718</b> | 53.26         |
| 250            | 19/22            | 14/20          | <b>ML-1130-720</b> | 55.63         |
| 250            | 19/22            | 19/22          | <b>ML-1130-760</b> | 55.88         |
| 250            | 24/40            | 24/40          | <b>LG-7331-182</b> | 78.02         |
| 250            | 29/26            | 29/26          | <b>LG-7331-183</b> | 78.64         |
| 300            | 24/40            | 24/40          | <b>LG-7331-184</b> | 81.47         |
| 500            | 14/20            | 14/20          | <b>ML-1130-724</b> | 58.53         |
| 500            | 19/22            | 14/20          | <b>ML-1130-726</b> | 61.01         |
| 500            | 19/22            | 19/22          | <b>ML-1130-766</b> | 61.18         |
| 500            | 24/40            | 24/40          | <b>LG-7331-186</b> | 79.92         |
| 500            | 29/42            | 29/42          | <b>LG-7331-218</b> | 83.52         |
| 500            | 29/42            | 24/40          | <b>LG-7331-188</b> | 83.52         |
| 500            | 34/45            | 24/40          | <b>LG-7331-190</b> | 83.95         |
| 500            | 45/50            | 24/40          | <b>LG-7331-192</b> | 86.88         |
| 1000           | 24/40            | 24/40          | <b>LG-7331-194</b> | 93.04         |
| 1000           | 29/42            | 24/40          | <b>LG-7331-196</b> | 100.28        |
| 1000           | 29/42            | 29/42          | <b>LG-7331-224</b> | 98.97         |
| 1000           | 34/45            | 24/40          | <b>LG-7331-198</b> | 102.20        |
| 1000           | 45/50            | 24/40          | <b>LG-7331-200</b> | 103.66        |
| 2000           | 24/40            | 24/40          | <b>LG-7331-202</b> | 115.03        |
| 2000           | 29/26            | 29/26          | <b>LG-7331-203</b> | 118.72        |
| 2000           | 29/42            | 24/40          | <b>LG-7331-204</b> | 121.28        |
| 3000           | 45/50            | 29/42          | <b>LG-7331-240</b> | 165.55        |
| 5000           | 24/40            | 24/40          | <b>LG-7331-242</b> | 171.17        |
| 5000           | 45/50            | 24/40          | <b>LG-7331-248</b> | 180.96        |
| 12000          | 34/45            | 24/40          | <b>LG-7331-256</b> | 286.13        |
| 12000          | 45/50            | 29/42          | <b>LG-7331-300</b> | 289.79        |
| 12000          | 45/50            | 45/50          | <b>LG-7331-370</b> | 292.23        |
| 12000          | 55/50            | 45/50          | <b>LG-7331-372</b> | 302.10        |

*Note: Flasks of all capacities from 100mL to 72,000mL can be supplied with joint other than those listed under LG-7330 and LG-7331. Stopcock outlets may also be supplied. Prices on all these combinations will be furnished upon request.*

### Flask, Round Bottom, Three-Neck, Indented, Morton Style

Design promotes better mixing when contents are stirred from above or below. Side necks are 180° apart. All necks are vertical and supplied with outer joints.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | <b>LG-7560-100</b> | \$120.54      |
| 500            | 34/45              | 24/40             | <b>LG-7560-104</b> | 124.74        |
| 1000           | 24/40              | 24/40             | <b>LG-7560-106</b> | 138.61        |
| 1000           | 34/45              | 24/40             | <b>LG-7560-110</b> | 143.46        |
| 2000           | 24/40              | 24/40             | <b>LG-7560-114</b> | 173.67        |
| 2000           | 29/42              | 24/40             | <b>LG-7560-116</b> | 173.67        |
| 2000           | 45/50              | 24/40             | <b>LG-7560-120</b> | 181.77        |
| 2000           | 45/50              | 29/42             | <b>LG-7560-164</b> | 183.10        |
| 3000           | 29/42              | 24/40             | <b>LG-7560-124</b> | 216.34        |
| 3000           | 34/45              | 24/40             | <b>LG-7560-126</b> | 217.06        |
| 3000           | 45/50              | 24/40             | <b>LG-7560-128</b> | 222.05        |
| 5000           | 24/40              | 24/40             | <b>LG-7560-130</b> | 232.02        |
| 5000           | 29/26              | 29/26             | <b>LG-7560-131</b> | 240.59        |
| 5000           | 29/42              | 24/40             | <b>LG-7560-132</b> | 240.57        |
| 5000           | 34/45              | 24/40             | <b>LG-7560-134</b> | 240.76        |
| 5000           | 45/50              | 24/40             | <b>LG-7560-136</b> | 250.66        |
| 5000           | 45/50              | 29/42             | <b>LG-7560-176</b> | 251.28        |
| 12000          | 45/50              | 24/40             | <b>LG-7560-140</b> | 373.64        |

*Note: Flasks of all capacities from can be supplied with joints other than those listed. Prices quoted upon request.*



**LG-7560**

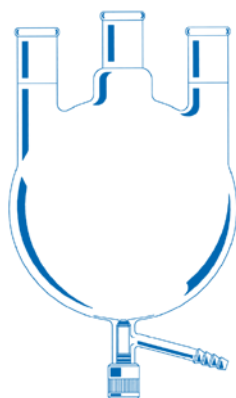
### Flask, Round Bottom, Three-Neck, with Bottom Outlet

Bottom outlet supplied with 4mm PTFE Plug.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number      | Each<br>Price |
|----------------|--------------------|-------------------|---------------------|---------------|
| 500            | 24/40              | 24/40             | <b>LG-7942T-100</b> | \$187.06      |
| 1000           | 29/42              | 24/40             | <b>LG-7942T-102</b> | 211.18        |
| 2000           | 29/42              | 24/40             | <b>LG-7942T-104</b> | 238.65        |
| 3000           | 29/42              | 24/40             | <b>LG-7942T-106</b> | 272.38        |
| 5000           | 45/50              | 24/40             | <b>LG-7942T-108</b> | 300.11        |



**LG-7942T**

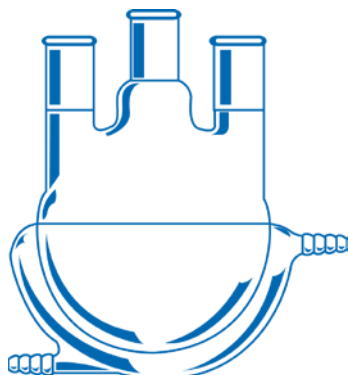


**LG-7952**

**Flask, Round Bottom, Three Neck, with Bottom Flush Valve**

Round bottom flask with flush closing bottom drain valve that eliminates dead space at bottom of flask. Valve design eliminates possible contamination of contents caused by residues that may be left in drain tube. Valve stem is made from PTFE.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Valve<br>Size mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | 0-4              | <b>LG-7952-100</b> | \$236.27      |
| 500            | 29/42              | 24/40             | 0-4              | <b>LG-7952-104</b> | 238.26        |
| 1000           | 24/40              | 24/40             | 0-4              | <b>LG-7952-106</b> | 250.42        |
| 1000           | 29/42              | 24/40             | 0-4              | <b>LG-7952-110</b> | 253.06        |
| 2000           | 24/40              | 24/40             | 0-4              | <b>LG-7952-112</b> | 264.89        |
| 2000           | 29/42              | 24/40             | 0-4              | <b>LG-7952-114</b> | 265.75        |
| 5000           | 45/50              | 24/40             | 0-8              | <b>LG-7952-122</b> | 426.09        |



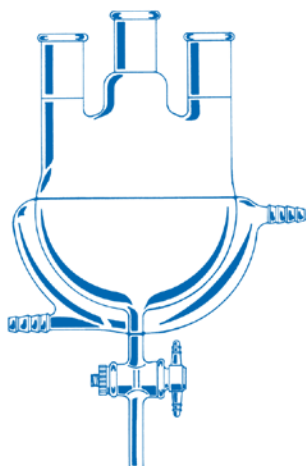
**LG-7967**

**Flask, Round Bottom, Three-Neck, Half Jacketed**

Lower hemisphere is jacketed. Hose connections are 180° apart.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | <b>LG-7967-100</b> | \$384.93      |
| 1000           | 29/42              | 24/40             | <b>LG-7967-106</b> | 464.81        |
| 2000           | 29/42              | 24/40             | <b>LG-7967-108</b> | 496.12        |

*500mL size supplied with 3/8" hose connection. 1000 and 2000mL sizes supplied with 1/2" hose connections.*



**LG-7966T**

**Flask, Round Bottom, Three-Neck, Half-Jacketed, with Bottom Outlet**

Lower hemisphere is jacketed with a straight bore PTFE stopcock bottom outlet. Hose connections are 180° apart.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|--------------------|-------------------|------------------|---------------------|---------------|
| 500            | 24/40              | 24/40             | 4                | <b>LG-7966T-100</b> | \$478.06      |
| 500            | 29/42              | 24/40             | 4                | <b>LG-7966T-102</b> | 480.47        |
| 1000           | 24/40              | 24/40             | 4                | <b>LG-7966T-104</b> | 543.09        |
| 1000           | 29/42              | 24/40             | 4                | <b>LG-7966T-106</b> | 552.71        |
| 2000           | 29/42              | 24/40             | 4                | <b>LG-7966T-108</b> | 580.40        |
| 3000           | 29/42              | 24/40             | 6                | <b>LG-7966T-110</b> | 646.64        |

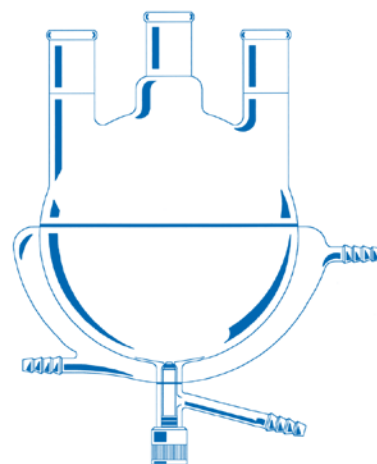
*500mL size supplied with 3/8" hose connections. Larger sizes supplied with 1/2" hose connections.*

### Flask, Round Bottom, Three-Neck, Half-Jacketed, Bottom Flush Valve

Three neck flask, with lower half enclosed in a jacket for heating and cooling during use. The PTFE flush bottom valve design eliminates possible contamination of contents caused by residues that may be trapped in drain tube.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Valve<br>Size mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | 0-4              | <b>LG-7956-100</b> | \$488.35      |
| 500            | 29/42              | 24/40             | 0-4              | <b>LG-7956-104</b> | 489.75        |
| 1000           | 24/40              | 24/40             | 0-4              | <b>LG-7956-106</b> | 517.95        |
| 1000           | 29/42              | 24/40             | 0-4              | <b>LG-7956-110</b> | 528.46        |
| 1000           | 29/42              | 29/42             | 0-4              | <b>LG-7956-112</b> | 535.01        |
| 3000           | 29/42              | 29/42             | 0-4              | <b>LG-7956-120</b> | 628.60        |
| 3000           | 34/45              | 24/40             | 0-4              | <b>LG-7956-122</b> | 642.10        |
| 5000           | 45/50              | 24/40             | 0-8              | <b>LG-7956-130</b> | 741.65        |
| 5000           | 45/50              | 29/42             | 0-8              | <b>LG-7956-132</b> | 746.62        |
| 12000          | 45/50              | 24/40             | 0-8              | <b>LG-7956-134</b> | 1,488.16      |

500mL and 1000mL size supplied with 3/8" hose connections. All larger sizes have 1/2" hose connections.



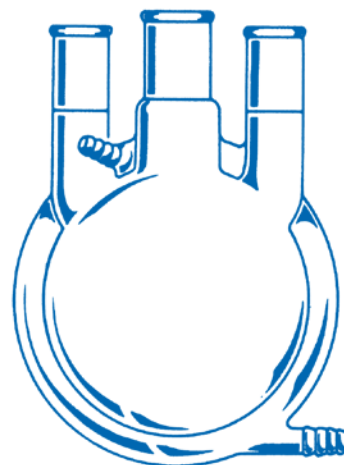
**LG-7956**

### Flask, Round Bottom, Three-Neck, Full Jacketed

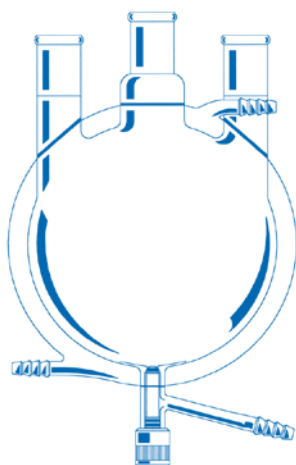
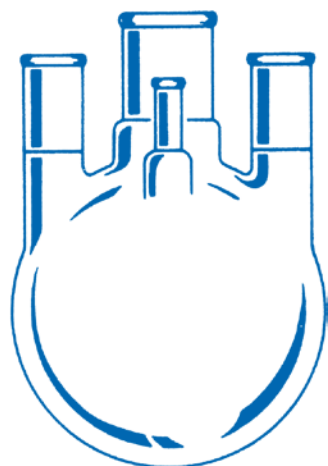
Flask and a portion of all three necks is jacketed. Coolant or steam can be circulated through the spherical jacket by using the attached hose connections.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | <b>LG-7960-100</b> | \$503.35      |
| 500            | 24/40              | 29/42             | <b>LG-7960-120</b> | 509.00        |
| 500            | 29/42              | 24/40             | <b>LG-7960-102</b> | 506.95        |
| 500            | 29/42              | 29/42             | <b>LG-7960-122</b> | 510.56        |
| 1000           | 24/40              | 24/40             | <b>LG-7960-104</b> | 547.90        |
| 1000           | 24/40              | 29/42             | <b>LG-7960-124</b> | 567.58        |
| 1000           | 29/42              | 24/40             | <b>LG-7960-106</b> | 551.51        |
| 1000           | 29/42              | 29/42             | <b>LG-7960-126</b> | 553.91        |
| 2000           | 29/42              | 24/40             | <b>LG-7960-108</b> | 729.73        |
| 2000           | 29/42              | 29/42             | <b>LG-7960-128</b> | 733.34        |
| 2000           | 34/45              | 24/40             | <b>LG-7960-110</b> | 786.87        |
| 2000           | 34/45              | 29/42             | <b>LG-7960-130</b> | 780.42        |

500mL sizes have 3/8" hose connections. All larger sizes have 1/2" hose connections.



**LG-7960**


**LG-7958**

**LG-7360**
**Flask, Round Bottom, Three Neck, Jacketed, Bottom Flush Valve**

Three neck flask completely jacketed for heating or cooling during use. The flush bottom valve design eliminates possible contamination of contents caused by residues that may be trapped in drain tube. Valve stem is made of PTFE.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Valve<br>Size mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|------------------|--------------------|---------------|
| 500            | 24/40              | 24/40             | 0-4              | <b>LG-7958-100</b> | \$548.28      |
| 500            | 29/42              | 24/40             | 0-4              | <b>LG-7958-104</b> | 550.50        |
| 1000           | 24/40              | 24/40             | 0-4              | <b>LG-7958-106</b> | 577.98        |
| 1000           | 29/26              | 29/26             | 0-4              | <b>LG-7958-108</b> | 587.04        |
| 1000           | 29/42              | 24/40             | 0-4              | <b>LG-7958-110</b> | 608.08        |

**Flask, Round Bottom, Four-Neck**

With a center neck, two side necks 180° apart and a third side neck 90° from the other two. This third neck has a 10/30 joint to take a thermometer, gas inlet or bleed tube. All necks are vertical.

| Capacity<br>mL | Center<br>\$ Joints | Side<br>\$ Joint | Part<br>Number     | Each<br>Price |
|----------------|---------------------|------------------|--------------------|---------------|
| 500            | 24/40               | 24/40            | <b>LG-7360-100</b> | \$117.53      |
| 500            | 29/42               | 24/40            | <b>LG-7360-102</b> | 118.95        |
| 500            | 29/26               | 29/26            | <b>LG-7360-103</b> | 118.95        |
| 500            | 34/45               | 24/40            | <b>LG-7360-104</b> | 139.80        |
| 500            | 34/45               | 29/42            | <b>LG-7360-162</b> | 130.98        |
| 1000           | 29/26               | 29/26            | <b>LG-7360-109</b> | 134.73        |
| 1000           | 24/40               | 24/40            | <b>LG-7360-106</b> | 137.39        |
| 1000           | 29/42               | 29/42            | <b>LG-7360-164</b> | 149.68        |
| 1000           | 34/45               | 24/40            | <b>LG-7360-110</b> | 145.14        |
| 2000           | 24/40               | 24/40            | <b>LG-7360-114</b> | 166.32        |
| 2000           | 29/42               | 24/40            | <b>LG-7360-116</b> | 169.70        |
| 2000           | 29/42               | 29/42            | <b>LG-7360-170</b> | 172.16        |
| 2000           | 29/26               | 29/26            | <b>LG-7360-171</b> | 169.70        |
| 2000           | 34/45               | 24/40            | <b>LG-7360-118</b> | 181.75        |
| 2000           | 34/45               | 29/42            | <b>LG-7360-172</b> | 174.65        |
| 3000           | 24/40               | 24/40            | <b>LG-7360-122</b> | 204.41        |
| 3000           | 29/26               | 29/26            | <b>LG-7360-175</b> | 172.03        |
| 3000           | 29/42               | 29/42            | <b>LG-7360-176</b> | 208.32        |
| 3000           | 34/45               | 29/42            | <b>LG-7360-178</b> | 212.06        |
| 3000           | 45/50               | 24/40            | <b>LG-7360-128</b> | 212.49        |
| 3000           | 45/50               | 29/42            | <b>LG-7360-180</b> | 215.81        |
| 5000           | 29/26               | 29/26            | <b>LG-7360-181</b> | 192.50        |
| 5000           | 24/40               | 24/40            | <b>LG-7360-130</b> | 224.53        |
| 5000           | 29/42               | 29/42            | <b>LG-7360-182</b> | 228.29        |
| 5000           | 34/45               | 24/40            | <b>LG-7360-134</b> | 228.25        |
| 5000           | 45/50               | 24/40            | <b>LG-7360-136</b> | 239.24        |
| 5000           | 45/50               | 29/42            | <b>LG-7360-186</b> | 240.76        |

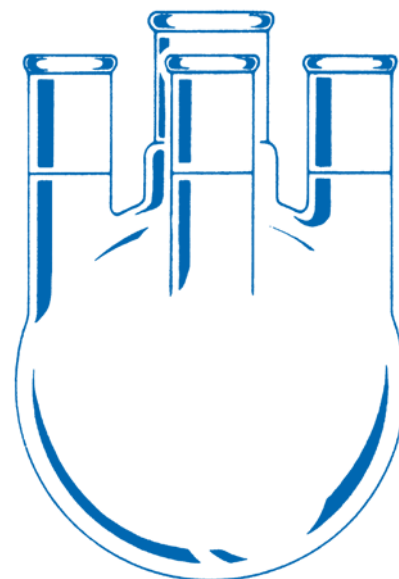
*Note: Flasks of all capacities from 500mL to 72,000mL can be supplied with joints other than those listed. Stopcock outlets may also be supplied. Prices on all of these combinations will be quoted upon request.*

### Flask, Round Bottom, Four-Neck

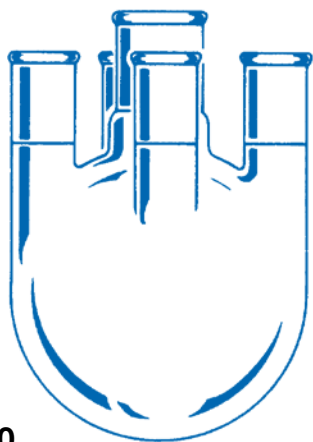
With center neck and three side necks. The side necks are 90° apart. All necks are vertical.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 250            | 24/40              | 24/40             | <b>LG-7370-150</b> | \$108.91      |
| 250            | 29/42              | 24/40             | <b>LG-7370-152</b> | 112.32        |
| 250            | 34/45              | 24/40             | <b>LG-7370-154</b> | 116.20        |
| 250            | 45/50              | 24/40             | <b>LG-7370-156</b> | 122.65        |
| 500            | 24/40              | 24/40             | <b>LG-7370-166</b> | 112.80        |
| 500            | 29/42              | 24/40             | <b>LG-7370-168</b> | 116.29        |
| 500            | 29/42              | 29/42             | <b>LG-7370-242</b> | 117.62        |
| 500            | 34/45              | 24/40             | <b>LG-7370-170</b> | 120.28        |
| 500            | 45/50              | 24/40             | <b>LG-7370-172</b> | 127.75        |
| 1000           | 24/40              | 24/40             | <b>LG-7370-174</b> | 141.62        |
| 1000           | 29/42              | 24/40             | <b>LG-7370-176</b> | 143.07        |
| 1000           | 29/42              | 29/42             | <b>LG-7370-248</b> | 144.40        |
| 1000           | 34/45              | 24/40             | <b>LG-7370-178</b> | 147.04        |
| 1000           | 34/45              | 29/42             | <b>LG-7370-250</b> | 149.68        |
| 1000           | 45/50              | 24/40             | <b>LG-7370-180</b> | 153.68        |
| 1000           | 45/50              | 29/42             | <b>LG-7370-252</b> | 157.65        |
| 2000           | 24/40              | 24/40             | <b>LG-7370-182</b> | 161.74        |
| 2000           | 29/42              | 24/40             | <b>LG-7370-184</b> | 164.40        |
| 2000           | 29/42              | 29/42             | <b>LG-7370-254</b> | 165.73        |
| 2000           | 34/45              | 24/40             | <b>LG-7370-186</b> | 167.04        |
| 2000           | 45/50              | 24/40             | <b>LG-7370-188</b> | 181.77        |
| 2000           | 45/50              | 29/42             | <b>LG-7370-258</b> | 187.18        |
| 3000           | 24/40              | 24/40             | <b>LG-7370-190</b> | 200.44        |
| 3000           | 29/42              | 29/42             | <b>LG-7370-260</b> | 204.41        |
| 3000           | 29/42              | 24/40             | <b>LG-7370-192</b> | 203.08        |
| 3000           | 34/45              | 29/42             | <b>LG-7370-262</b> | 207.87        |
| 3000           | 34/45              | 24/40             | <b>LG-7370-194</b> | 205.86        |
| 3000           | 45/50              | 29/42             | <b>LG-7370-264</b> | 213.82        |
| 3000           | 45/50              | 24/40             | <b>LG-7370-196</b> | 208.52        |
| 5000           | 29/42              | 24/40             | <b>LG-7370-200</b> | 221.87        |
| 5000           | 29/42              | 29/42             | <b>LG-7370-266</b> | 223.20        |
| 5000           | 34/45              | 24/40             | <b>LG-7370-202</b> | 224.53        |
| 5000           | 45/50              | 24/40             | <b>LG-7370-204</b> | 235.29        |
| 5000           | 45/50              | 29/42             | <b>LG-7370-270</b> | 239.28        |
| 5000           | 55/50              | 29/42             | <b>LG-7370-272</b> | 239.24        |
| 12000          | 45/50              | 24/40             | <b>LG-7370-212</b> | 347.48        |
| 12000          | 45/50              | 29/42             | <b>LG-7370-278</b> | 355.43        |

*Note: Flasks of all capacities from 250mL to 72,000mL can be supplied with joints other than those listed. Stopcock outlets may be supplied. Prices on all of these combinations will be quoted upon request.*



**LG-7370**


**LG-7390**

**LG-7246**

**LG-7245  
ML-1155**

### Flask, Round Bottom, Five-Neck

With one center neck and four side necks spaced 90° apart. All necks are vertical.

| Capacity<br>mL | Center<br>\$ Joint | Side<br>\$ Joints | Part<br>Number     | Each<br>Price |
|----------------|--------------------|-------------------|--------------------|---------------|
| 1000           | 29/42              | 29/42             | <b>LG-7390-170</b> | \$189.80      |
| 1000           | 45/50              | 24/40             | <b>LG-7390-114</b> | 198.84        |
| 1000           | 45/50              | 29/42             | <b>LG-7390-174</b> | 200.13        |
| 2000           | 29/42              | 29/42             | <b>LG-7390-176</b> | 217.06        |
| 2000           | 45/50              | 24/40             | <b>LG-7390-122</b> | 219.55        |
| 2000           | 45/50              | 29/42             | <b>LG-7390-180</b> | 227.04        |
| 3000           | 29/42              | 29/42             | <b>LG-7390-182</b> | 251.97        |
| 3000           | 45/50              | 24/40             | <b>LG-7390-130</b> | 255.72        |
| 3000           | 45/50              | 29/42             | <b>LG-7390-186</b> | 261.96        |
| 5000           | 29/42              | 29/42             | <b>LG-7390-188</b> | 270.40        |
| 5000           | 45/50              | 24/40             | <b>LG-7390-138</b> | 274.79        |
| 5000           | 45/50              | 29/42             | <b>LG-7390-192</b> | 277.21        |
| 5000           | 55/50              | 29/42             | <b>LG-7390-194</b> | 299.39        |

*Note: Flasks of all capacities from can be supplied with joints other than those listed above. Stopcock outlets may also be supplied. Prices on all of these combinations will be quoted upon request.*

### Flask, Evaporation

Low profile design sits upright on bench and provides easy access for cleaning. Unique design allows for use with rotary evaporators.

| Capacity<br>mL | Lower<br>\$ Joint | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|---------------|
| 25             | 14/20             | <b>LG-7246-100</b> | \$15.60       |
| 50             | 14/20             | <b>LG-7246-102</b> | 15.85         |
| 100            | 14/20             | <b>LG-7246-104</b> | 19.50         |
| 100            | 24/40             | <b>LG-7246-106</b> | 24.50         |
| 250            | 14/20             | <b>LG-7246-108</b> | 27.60         |
| 250            | 24/40             | <b>LG-7246-110</b> | 38.60         |
| 500            | 24/40             | <b>LG-7246-112</b> | 65.00         |

### Flask, Recovery

Upper portion of flask has gradual taper making it easier to remove reaction products. Lower hemisphere fits comparable sized heating mantles. Recommended for use with rotary evaporators.

| Capacity<br>mL | \$ Joint | Part<br>Number     | Each<br>Price |
|----------------|----------|--------------------|---------------|
| 10             | 14/20    | <b>ML-1155-700</b> | \$18.07       |
| 10             | 19/22    | <b>ML-1155-709</b> | 17.86         |
| 25             | 14/20    | <b>ML-1155-702</b> | 17.73         |
| 25             | 19/22    | <b>ML-1155-710</b> | 17.86         |
| 25             | 24/40    | <b>LG-7245-098</b> | 22.80         |
| 50             | 14/20    | <b>ML-1155-704</b> | 17.73         |
| 50             | 19/22    | <b>ML-1155-712</b> | 17.86         |
| 50             | 24/25    | <b>ML-1155-720</b> | 23.25         |
| 50             | 29/26    | <b>ML-1155-730</b> | 24.35         |
| 50             | 24/40    | <b>LG-7245-100</b> | 22.58         |
| 100            | 14/20    | <b>ML-1155-706</b> | 18.44         |

*Continued on the next page*



### Flask, Recovery

Upper portion of flask has gradual taper making it easier to remove reaction products. Lower hemisphere fits comparable sized heating mantles. Recommended for use with rotary evaporators.

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 100            | 19/22 | ML-1155-714    | \$18.55       |
| 100            | 24/25 | ML-1155-722    | 23.37         |
| 100            | 29/26 | ML-1155-732    | 24.72         |
| 100            | 24/40 | LG-7245-102    | 22.93         |
| 100            | 29/42 | LG-7245-120    | 24.72         |
| 200            | 14/20 | ML-1155-707    | 23.88         |
| 200            | 19/22 | ML-1155-716    | 24.11         |
| 200            | 24/25 | ML-1155-724    | 31.82         |
| 200            | 24/40 | LG-7245-104    | 31.21         |
| 200            | 29/26 | ML-1155-734    | 33.26         |
| 200            | 29/42 | LG-7245-122    | 32.63         |
| 500            | 14/20 | ML-1155-708    | 30.64         |
| 500            | 19/22 | ML-1155-718    | 30.99         |
| 500            | 24/25 | ML-1155-726    | 45.80         |
| 500            | 29/26 | ML-1155-736    | 47.48         |
| 500            | 24/40 | LG-7245-106    | 44.93         |
| 500            | 29/42 | LG-7245-124    | 47.48         |
| 1000           | 24/25 | ML-1155-728    | 46.91         |
| 1000           | 29/26 | ML-1155-738    | 59.55         |
| 1000           | 24/40 | LG-7245-108    | 56.75         |
| 1000           | 29/42 | LG-7245-128    | 58.42         |
| 2000           | 24/40 | LG-7245-110    | 79.53         |
| 2000           | 29/42 | LG-7245-130    | 81.00         |

Available with socket joints and/or safety coated upon request.



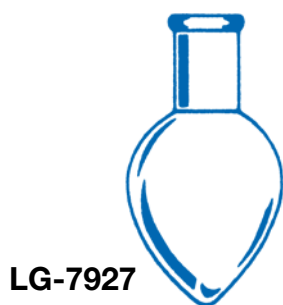
LG-7245  
ML-1155

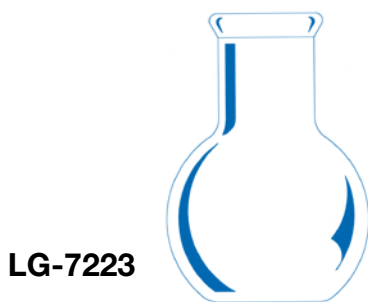
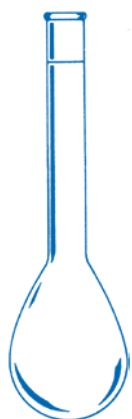
### Flask, Pear-Shaped

| Capacity<br>mL | Joint | Part<br>Number | Each<br>Price |
|----------------|-------|----------------|---------------|
| 2              | 14/20 | ML-1160-700    | \$22.20       |
| 4              | 14/20 | ML-1160-702    | 22.20         |
| 5              | 14/20 | ML-1160-704    | 17.25         |
| 10             | 14/20 | ML-1160-708    | 17.25         |
| 10             | 19/22 | ML-1160-748    | 18.07         |
| 15             | 14/20 | ML-1160-710    | 17.25         |
| 15             | 19/22 | ML-1160-750    | 18.07         |
| 20             | 14/20 | ML-1160-712    | 17.60         |
| 25             | 14/20 | ML-1160-714    | 17.25         |
| 25             | 19/22 | ML-1160-754    | 17.73         |
| 35             | 14/20 | ML-1160-716    | 17.60         |
| 35             | 19/22 | ML-1160-756    | 18.07         |
| 50             | 14/20 | ML-1160-718    | 17.25         |
| 50             | 19/22 | ML-1160-758    | 17.73         |
| 100            | 14/20 | ML-1160-722    | 18.44         |
| 100            | 19/22 | ML-1160-762    | 19.40         |
| 250            | 14/20 | ML-1160-724    | 30.08         |
| 250            | 19/22 | ML-1160-764    | 31.43         |



ML-1160


**LG-7927**

**ML-1170**

**LG-7223**

**LG-7920**

### Flask, Pear-Shaped

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 50             | 24/40 | <b>LG-7927-120</b> | \$23.65       |
| 100            | 24/40 | <b>LG-7927-122</b> | 24.94         |
| 200            | 24/40 | <b>LG-7927-126</b> | 31.07         |
| 250            | 24/40 | <b>LG-7927-127</b> | 31.46         |
| 150            | 29/26 | <b>LG-7927-129</b> | 36.80         |
| 500            | 24/40 | <b>LG-7927-130</b> | 38.82         |
| 250            | 29/42 | <b>LG-7927-143</b> | 32.91         |

### Flask, Pear-Shaped, Two-Neck

With angled side neck. The 10/18 is suitable for thermometers or gas inlet tubes.

| Capacity<br>mL | Center<br>Joint | Side<br>Joint | Part<br>Number     | Each<br>Price |
|----------------|-----------------|---------------|--------------------|---------------|
| 10             | 14/20           | 10/18         | <b>ML-1170-734</b> | \$34.71       |
| 10             | 14/20           | 14/20         | <b>ML-1170-760</b> | 35.92         |
| 10             | 19/22           | 14/20         | <b>ML-1170-762</b> | 35.90         |
| 15             | 14/20           | 14/20         | <b>ML-1170-764</b> | 35.92         |
| 25             | 14/20           | 14/20         | <b>ML-1170-772</b> | 35.92         |
| 50             | 14/20           | 10/18         | <b>ML-1170-750</b> | 34.71         |

### Flask, Extraction, Flat Bottom

Special purpose flask used in extraction to aid the process of separation of a selected analytes from a mixture or solution.

| Capacity<br>mL | Rubber<br>Stopper No. | Part<br>Number     | Each<br>Price |
|----------------|-----------------------|--------------------|---------------|
| 100            | 6                     | <b>LG-7223-100</b> | \$14.98       |
| 150            | 7                     | <b>LG-7223-102</b> | 15.96         |
| 250            | 8                     | <b>LG-7223-104</b> | 17.04         |
| 500            | 10                    | <b>LG-7223-106</b> | 19.40         |

### Flask, Kjeldahl

With outer joint.

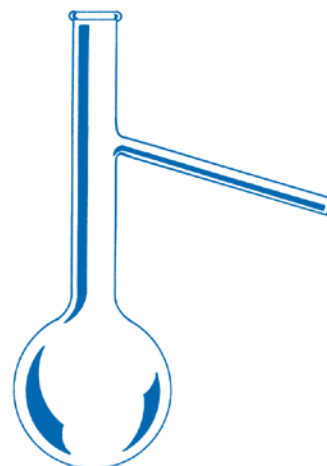
| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 100            | 24/40 | <b>LG-7920-100</b> | \$30.13       |
| 300            | 24/40 | <b>LG-7920-102</b> | 31.33         |
| 500            | 24/40 | <b>LG-7920-104</b> | 34.34         |
| 500            | 29/26 | <b>LG-7920-108</b> | 38.45         |
| 500            | 29/42 | <b>LG-7920-112</b> | 35.67         |
| 800            | 24/40 | <b>LG-7920-106</b> | 35.67         |
| 800            | 29/26 | <b>LG-7920-113</b> | 39.52         |
| 800            | 29/42 | <b>LG-7920-114</b> | 39.52         |

### Flask, Distilling, Engler

Engler type for laboratory distillation. Flask has sidearm sealed 137mm from the bottom.

Reference: ASTM E133 ASTM D86 ASTM D447

| Capacity<br>mL | Rubber<br>Stopper No. | Part<br>Number | Each<br>Price |
|----------------|-----------------------|----------------|---------------|
| 50             | 0                     | LG-7225-096    | \$17.76       |
| 100            | 1                     | LG-7225-098    | 18.24         |
| 125            | 2                     | LG-7225-100    | 18.36         |
| 200            | 3                     | LG-7225-102    | 29.37         |
| 250            | 3                     | LG-7225-104    | 32.02         |
| 500            | 4                     | LG-7225-106    | 30.82         |
| 1000           | 5                     | LG-7225-108    | 46.89         |



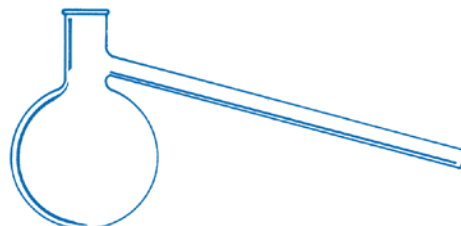
LG-7225

### Flask, Distilling, Church

Specified for the distillation of bituminous samples. Flasks have a 10mm I.D. sidearm.

Reference: ASTM D20 Test Method for Distillation of Road Tars. ASTM D246 Method for Distillation of Creosote and Creosote Coal Tar Solutions. ASTM D402 Test Method for Distillation of Cut-Back Asphaltic (Bituminous) Products. ASTM D2569 Test Method for Distillation of Pitch.

| Capacity<br>mL | Height<br>mm | Rubber<br>Stopper No. | Part<br>Number | Each<br>Price |
|----------------|--------------|-----------------------|----------------|---------------|
| 300            | 130          | 4                     | LG-7228-100    | \$53.25       |
| 500            | 135          | 5                     | LG-7228-102    | 58.57         |



LG-7228

### Flask, Freeze Dry

Glass replacement flasks for VirTis® lyophilizing equipment. Openings are extra-wide for efficient shell freezing and suited for bulky samples. Wall thickness of flask is designed for vacuum applications. Compatible with all brands.

| Working Capacity<br>mL | Maximum<br>Capacity mL | Part<br>Number | Each<br>Price |
|------------------------|------------------------|----------------|---------------|
| <b>CLEAR</b>           |                        |                |               |
| 20                     | 40                     | LG-13100-100   | \$23.94       |
| 35                     | 75                     | LG-13100-102   | 27.20         |
| 75                     | 150                    | LG-13100-104   | 56.65         |
| 150                    | 300                    | LG-13100-106   | 61.46         |
| 300                    | 600                    | LG-13100-108   | 74.72         |
| 600                    | 1200                   | LG-13100-110   | 86.77         |
| 1000                   | 2000                   | LG-13100-112   | 98.83         |
| <b>NYLON COATED</b>    |                        |                |               |
| 20                     | 40                     | LG-13100-500   | \$52.38       |
| 35                     | 75                     | LG-13100-502   | 61.56         |
| 75                     | 150                    | LG-13100-504   | 97.34         |
| 150                    | 300                    | LG-13100-506   | 102.00        |
| 300                    | 600                    | LG-13100-508   | 124.26        |
| 600                    | 1200                   | LG-13100-510   | 136.30        |
| 1000                   | 2000                   | LG-13100-512   | 148.35        |

Supplied without cap and O-Ring.



LG-13100



**LG-7750  
ML-1230**

**Heavy Wall**



**LG-7820**

### Flask, Erlenmeyer

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 5              | 14/20 | <b>ML-1230-700</b> | \$15.73       |
| 5              | 19/22 | <b>ML-1230-750</b> | 17.78         |
| 10             | 14/20 | <b>ML-1230-702</b> | 15.73         |
| 10             | 19/22 | <b>ML-1230-752</b> | 17.44         |
| 15             | 14/20 | <b>ML-1230-704</b> | 16.33         |
| 15             | 19/22 | <b>ML-1230-754</b> | 17.44         |
| 25             | 19/22 | <b>ML-1230-756</b> | 17.11         |
| 25             | 14/20 | <b>ML-1230-706</b> | 15.73         |
| 50             | 14/20 | <b>ML-1230-708</b> | 15.73         |
| 50             | 19/22 | <b>ML-1230-758</b> | 16.79         |
| 50             | 24/40 | <b>LG-7750-120</b> | 20.34         |
| 50             | 29/42 | <b>LG-7750-140</b> | 21.45         |
| 100            | 19/22 | <b>ML-1230-760</b> | 21.39         |
| 125            | 24/40 | <b>LG-7750-122</b> | 20.70         |
| 125            | 29/42 | <b>LG-7750-142</b> | 21.82         |
| 250            | 24/40 | <b>LG-7750-126</b> | 21.16         |
| 250            | 29/26 | <b>LG-7750-135</b> | 22.41         |
| 250            | 29/42 | <b>LG-7750-146</b> | 22.41         |
| 300            | 29/42 | <b>LG-7750-148</b> | 22.41         |
| 500            | 24/40 | <b>LG-7750-130</b> | 22.78         |
| 500            | 29/42 | <b>LG-7750-150</b> | 23.86         |
| 1000           | 24/40 | <b>LG-7750-132</b> | 26.03         |
| 1000           | 29/42 | <b>LG-7750-152</b> | 27.47         |
| 1000           | 34/45 | <b>LG-7750-160</b> | 32.29         |
| 1000           | 45/50 | <b>LG-7750-170</b> | 45.43         |
| 2000           | 24/40 | <b>LG-7750-134</b> | 34.77         |
| 2000           | 29/26 | <b>LG-7750-139</b> | 35.50         |
| 2000           | 29/42 | <b>LG-7750-154</b> | 36.84         |
| 2000           | 34/45 | <b>LG-7750-162</b> | 42.61         |
| 2000           | 45/50 | <b>LG-7750-172</b> | 50.37         |

### Flask, Erlenmeyer, Heavy Wall

Similar to *LG-7750* but with heavier wall.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 250            | 24/40 | <b>LG-7820-100</b> | \$42.18       |
| 500            | 24/40 | <b>LG-7820-102</b> | 45.43         |
| 500            | 29/26 | <b>LG-7820-106</b> | 46.76         |
| 500            | 29/42 | <b>LG-7820-110</b> | 46.76         |
| 1000           | 24/40 | <b>LG-7820-104</b> | 54.83         |
| 1000           | 29/42 | <b>LG-7820-112</b> | 57.84         |
| 2000           | 29/42 | <b>LG-7820-114</b> | 81.08         |

### Flask, Filtering, Heavy Wall

Duran® heavy wall filter flask with removable hose connection. Also available safety coated.

| Capacity<br>mL        | O.D.<br>mm | Height<br>mm | Neck I.D.<br>mm | Part<br>Number     | Each<br>Price |
|-----------------------|------------|--------------|-----------------|--------------------|---------------|
| <b>CLEAR</b>          |            |              |                 |                    |               |
| 3000                  | 170        | 295          | 60              | <b>LG-7802-096</b> | \$130.15      |
| 5000                  | 185        | 360          | 70              | <b>LG-7802-098</b> | 202.10        |
| 10000                 | 240        | 420          | 70              | <b>LG-7802-100</b> | 307.93        |
| 15000                 | 255        | 500          | 70              | <b>LG-7802-102</b> | 329.91        |
| 20000                 | 290        | 535          | 70              | <b>LG-7802-104</b> | 401.10        |
| <b>PLASTIC COATED</b> |            |              |                 |                    |               |
| 3000                  | 170        | 295          | 60              | <b>LG-7802-196</b> | 165.15        |
| 5000                  | 185        | 360          | 70              | <b>LG-7802-198</b> | 240.80        |
| 10000                 | 240        | 420          | 70              | <b>LG-7802-200</b> | 342.65        |
| 15000                 | 255        | 500          | 70              | <b>LG-7802-202</b> | 390.40        |
| 20000                 | 290        | 535          | 70              | <b>LG-7802-204</b> | 464.30        |

Flask, Replacement Hose Connection Set **LG-7802-150** 4.70  
(Includes 1 each tubulation, silicone rubber seal, male and female hose connection.)

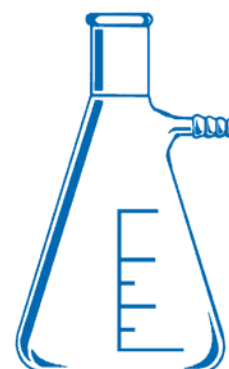


**LG-7802**

### Flask, Filter, Heavy Wall

Supplied with 3/8" hose connections.

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 125            | 24/40 | <b>LG-7800-100</b> | \$56.16       |
| 250            | 24/40 | <b>LG-7800-102</b> | 64.84         |
| 250            | 29/42 | <b>LG-7800-103</b> | 66.15         |
| 500            | 24/40 | <b>LG-7800-104</b> | 73.51         |
| 500            | 29/42 | <b>LG-7800-110</b> | 76.28         |
| 1000           | 24/40 | <b>LG-7800-106</b> | 96.17         |
| 1000           | 29/42 | <b>LG-7800-112</b> | 98.83         |
| 2000           | 24/40 | <b>LG-7800-113</b> | 125.70        |
| 2000           | 29/42 | <b>LG-7800-114</b> | 128.24        |

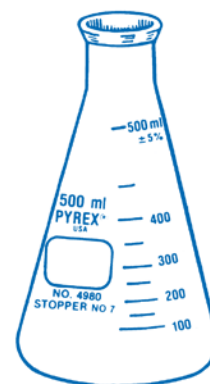


**LG-7800**

### Flask, PYREX®, Erlenmeyer, Narrow Mouth, Heavy Duty Rim

Approximate graduations are in durable white enamel. Heavy tooled top.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Part<br>Number    | Each<br>Price |
|----------------|--------------------------|-------------------|---------------|
| 10             | 00                       | <b>C-4980-10</b>  | \$6.71        |
| 25             | 0                        | <b>C-4980-25</b>  | 3.80          |
| 50             | 1                        | <b>C-4980-50</b>  | 3.80          |
| 125            | 5                        | <b>C-4980-125</b> | 3.59          |
| 250            | 6                        | <b>C-4980-250</b> | 3.72          |
| 300            | 6                        | <b>C-4980-300</b> | 4.55          |
| 500            | 7                        | <b>C-4980-500</b> | 4.69          |
| 1000           | 9                        | <b>C-4980-1L</b>  | 7.62          |
| 1500           | 9                        | <b>C-4980-1XL</b> | 65.61         |
| 2000           | 10                       | <b>C-4980-2L</b>  | 17.93         |
| 4000           | 10                       | <b>C-4980-4L</b>  | 56.85         |
| 6000           | 10                       | <b>C-4980-6L</b>  | 104.53        |



**C-4908**

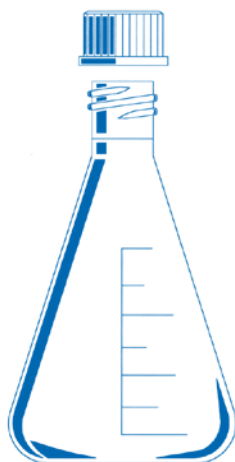

**LG-7780**
**Flask, Erlenmeyer, Socket Joint**

| Capacity<br>mL | Socket Joint | Part<br>Number     | Each<br>Price |
|----------------|--------------|--------------------|---------------|
| 250            | 35/25        | <b>LG-7780-116</b> | \$34.34       |
| 300            | 35/25        | <b>LG-7780-118</b> | 34.34         |
| 500            | 35/25        | <b>LG-7780-120</b> | 34.89         |
| 1000           | 35/25        | <b>LG-7780-122</b> | 39.64         |
| 2000           | 35/25        | <b>LG-7780-124</b> | 49.04         |


**LG-7790**
**Flask, Erlenmeyer, with Glass Stopper**

| Capacity<br>mL | Socket Stopper | Supplied   | Part<br>Number     | Each<br>Price |
|----------------|----------------|------------|--------------------|---------------|
| 25             | 16             | Complete   | <b>LG-7790-102</b> | 18.62         |
| 25             | 16             | Flask Only | <b>LG-7790-122</b> | 13.61         |
| 50             | 19             | Complete   | <b>LG-7790-104</b> | 19.28         |
| 50             | 19             | Flask Only | <b>LG-7790-124</b> | 14.59         |
| 125            | 22             | Complete   | <b>LG-7790-106</b> | 22.90         |
| 125            | 22             | Flask Only | <b>LG-7790-126</b> | 16.02         |
| 250            | 27             | Complete   | <b>LG-7790-108</b> | 27.71         |
| 250            | 27             | Flask Only | <b>LG-7790-128</b> | 18.21         |
| 500            | 32             | Complete   | <b>LG-7790-112</b> | 33.44         |
| 500            | 32             | Flask Only | <b>LG-7790-132</b> | 20.38         |
| 1000           | 32             | Complete   | <b>LG-7790-114</b> | 40.38         |
| 1000           | 32             | Flask Only | <b>LG-7790-134</b> | 28.80         |

*Note: Replacement stoppers are listed under LG-10320.*


**LG-7792**
**Flask, Erlenmeyer, Screw Cap**

Erlenmeyer flask with screw thread finish. Supplied complete with rubber lined phenolic cap.

| Capacity<br>mL | GPI<br>Thread<br>Size | Part<br>Number     | Each<br>Price |
|----------------|-----------------------|--------------------|---------------|
| 10             | 20-410                | <b>LG-7792-100</b> | \$14.16       |
| 25             | 20-410                | <b>LG-7792-102</b> | 14.98         |
| 50             | 24-410                | <b>LG-7792-104</b> | 16.90         |
| 125            | 24-410                | <b>LG-7792-106</b> | 17.03         |
| 250            | 38-430                | <b>LG-7792-108</b> | 18.30         |
| 500            | 38-430                | <b>LG-7792-110</b> | 21.69         |
| 1000           | 38-430                | <b>LG-7792-112</b> | 25.50         |
| 2000           | 38-430                | <b>LG-7792-114</b> | 34.73         |
| 3000           | 38-430                | <b>LG-7792-116</b> | 55.75         |
| 4000           | 38-430                | <b>LG-7792-118</b> | 81.08         |
| 6000           | 38-430                | <b>LG-7792-120</b> | 112.95        |

### Flask, PYREX®, Filtering, Heavy Wall, Graduated

These flasks, without tubulation, are blown in special molds, in shapes designed to give maximum mechanical strength. These flasks are graduated to show their approximate capacity. Marked "Filter Flask" to avoid confusion with similar sizes of Erlenmeyer flasks. All flasks have permanent white enamel graduations and marking spots.

| Capacity (mL) | Rubber Stopper No. | Approx. O.D. Height (mm) | Part Number       | Each Price |
|---------------|--------------------|--------------------------|-------------------|------------|
| 250           | 6                  | 84 x 146                 | <b>C-5320-250</b> | \$13.76    |
| 500           | 7                  | 106 x 184                | <b>C-5320-500</b> | 31.42      |
| 1000          | 8                  | 137 x 238                | <b>C-5320-1L</b>  | 42.65      |
| 2000          | 9                  | 168 x 292                | <b>C-5320-2L</b>  | 79.54      |
| 4000          | 12                 | 198 x 372                | <b>C-5320-4L</b>  | 104.32     |



**C-5320**

### Flask, PYREX®, Filtering, Micro, Tubulation

These small filtering flasks are recommended for microchemical use. All flasks have permanent white enamel marking spots.

| Capacity (mL) | Rubber Stopper No. | Approx. O.D. x Height (mm) | Part Number       | Each Price |
|---------------|--------------------|----------------------------|-------------------|------------|
| 25            | 3                  | 40 x 75                    | <b>C-5360-25</b>  | \$18.38    |
| 50            | 4                  | 51 x 85                    | <b>C-5360-50</b>  | 18.54      |
| 125           | 5                  | 70 x 110                   | <b>C-5360-125</b> | 19.35      |



**C-5360**

### Flash, PYREX®, Filtering, Heavy Wall, Tubulation, Graduated

These flasks, with tubulation, are blown in special molds, in shapes designed to give maximum mechanical strength. For convenience, the flasks are graduated to show approximate capacity. The neck finish affords an excellent fit for rubber stoppers. Tubulation O.D. on sizes up to 1000mL is 10mm. Tubulation O.D. for 2000mL and 4000mL is 12.5mm.

| Capacity (mL) | Rubber Stopper No. | Approx. O.D. x Height (mm) | Part Number       | Each Price |
|---------------|--------------------|----------------------------|-------------------|------------|
| 250           | 6                  | 84 x 146                   | <b>C-5340-250</b> | \$14.81    |
| 500           | 7                  | 106 x 184                  | <b>C-5340-500</b> | 19.01      |
| 1000          | 8                  | 137 x 238                  | <b>C-5340-1L</b>  | 40.15      |
| 2000          | 9                  | 168 x 292                  | <b>C-5340-2L</b>  | 79.74      |
| 4000          | 12                 | 198 x 356                  | <b>C-5340-4L</b>  | 117.14     |



**C-5340**

### Flasks, PYREX®, Fernbach, Culture

This wide mouth flask is designed for culturing organisms requiring a large surface area to volume ratio. It can also be used for serum production.

| Capacity mL | Approx. Rubber Stopper No. | Part Number       | Each Price |
|-------------|----------------------------|-------------------|------------|
| 2800        | 13-14                      | <b>C-4420-2XL</b> | \$57.36    |

*Note: Do not use this flask on a heat source smaller than the base of the flask. Uneven heating of the flask could cause breakage.*



**C-4420**




**C-4423**
**Flask, PYREX®, Fernbach, Culture, Baffled, Beaded Neck**

This wide mouth flask is designed for culturing organisms requiring a large surface area to volume ratio. Triple baffled on the bottom outside edges to achieve maximal oxygen transfer to culture medium. Beaded neck is 63mm I.D. and accepts cotton plugs or rubber stoppers.

| Capacity<br>mL | Description   | Approx.<br>Rubber<br>Stopper<br>No. | Part<br>Number    | Each<br>Price |
|----------------|---------------|-------------------------------------|-------------------|---------------|
| 2800           | Culture Flask | 13                                  | <b>C-4423-2XL</b> | \$95.06       |


**C-4424**
**Flask, PYREX®, Fernbach, Culture Flask, Baffled, Plain Neck**

This wide mouth flask has a Delong style 38mm neck for plastic or stainless steel closures. Triple baffles are located at the center of the flask bottom to achieve maximal oxygen transfer to culture medium. Closures are sold separately.

| Capacity<br>mL | Part<br>Number    | Each<br>Price |
|----------------|-------------------|---------------|
| 2800           | <b>C-4424-2XL</b> | \$95.63       |


**C-4425**
**Flasks, PYREX®, Fernbach, Culture Flask, Baffled, with Screw Cap**

This wide mouth flask is designed for culturing organisms requiring a large surface area to volume ratio. Triple baffled on the bottom outside edges to achieve maximal oxygen transfer to culture medium. Supplied with GL45 orange polypropylene cap.

| Capacity<br>mL | Part<br>Number    | Each<br>Price |
|----------------|-------------------|---------------|
| 2800           | <b>C-4425-2XL</b> | \$181.91      |


**C-4442**
**Flask, PYREX®, Culture, Long Neck**

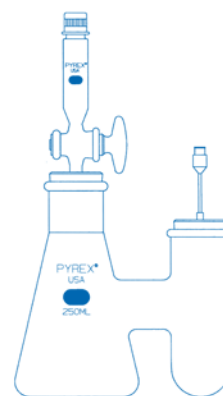
The long neck culture flask is basically an Erlenmeyer flask to which a long, straight, rimless neck of heavy tubing has been added. The longer necks reduce the amount of splashed reaching the closure. It is ideal for shaker cultures.

| Capacity<br>mL | Approx.<br>O.D. x<br>Height | Approx.<br>Neck<br>O.D.<br>mm | Part<br>Number    | Each<br>Price |
|----------------|-----------------------------|-------------------------------|-------------------|---------------|
| 50             | 50 x 105                    | 18                            | <b>C-4442-50</b>  | \$10.83       |
| 125            | 66 x 122                    | 25                            | <b>C-4442-125</b> | 9.92          |
| 250            | 81 x 138                    | 38                            | <b>C-4442-250</b> | 10.86         |
| 500            | 101 x 181                   | 38                            | <b>C-4442-500</b> | 15.57         |
| 1000           | 129 x 216                   | 38                            | <b>C-4442-1L</b>  | 23.12         |
| 2000           | 160 x 285                   | 38                            | <b>C-4442-2L</b>  | 40.37         |

### Flask, PYREX®, Biometer Flask, #2 Stopcock

Used to measure production of carbon dioxide produced by microorganisms grown on a variety of culture medium over longer periods of time. Minimizes the need for commonly used gas trains. Also useful in Biomediation studies. Supplied complete with #6 rubber stopper in the flask neck. #7 rubber stopper in the side tube and 16 gauge needle. Delivery funnel has a 15-415 PTFE lined screw cap and standard taper 12/30 stopcock plug with #2 bore.

| Description                        | Part Number  | Each Price |
|------------------------------------|--------------|------------|
| Complete                           | C-4443-250   | \$112.84   |
| Flask Only 250mL                   | C-4443-250FO | 65.49      |
| Delivery Funnel w/stopcock and cap | C-4443-TO    | 63.04      |
| Needle Only, 16ga.                 | C4443-NO     | 14.78      |



C-4443

### Flask, PYREX®, Baffled Shaker

Delong style, with three baffle indents to provide greater agitation of solutions to improve oxygen or gas transfer when used with rotary or reciprocating shakers. Long neck reduces splashing and is designed for two-position polypropylene closures.

| Capacity mL | Neck O.D. | Approx. O.D. x Height | Part Number | Each Price |
|-------------|-----------|-----------------------|-------------|------------|
| 125         | 25        | 70 x 140              | C-4444-125  | \$16.17    |
| 250         | 38        | 85 x 155              | C-4444-250  | 18.78      |
| 500         | 38        | 100 x 200             | C-4444-500  | 20.38      |
| 1000        | 38        | 130 x 240             | C-4444-1L   | 34.11      |
| 2000        | 38        | 160 x 282             | C-4444-2L   | 53.72      |
| 4000        | 38        | 210 x 350             | C-4444-4L   | 118.44     |



C-4444

### Flask, PYREX®, Shaker Flask, Extra Deep Baffles

Delong style, with three extra-deep baffles to enhance gas transfer when used with rotary or reciprocating shakers. Long neck reduces splashing and is designed for two-position polypropylene closures. Closures are sold separately.

| Capacity mL | Approx. Neck O.D. mm | Part Number | Each Price |
|-------------|----------------------|-------------|------------|
| 50          | 18                   | C-4446-50   | \$17.16    |
| 125         | 25                   | C-4446-125  | 16.79      |
| 250         | 38                   | C-4446-250  | 17.16      |
| 300         | 38                   | C-4446-300  | 17.37      |
| 500         | 38                   | C-4446-500  | 18.64      |
| 1000        | 38                   | C-4446-1L   | 27.22      |
| 2000        | 38                   | C-4446-2L   | 44.30      |
| 3000        | 38                   | C-4446-3L   | 126.09     |
| 4000        | 38                   | C-4446-4L   | 171.58     |



C-4446


**C-4450**
**Flask, PYREX®, Erlenmeyer, Baffled**

Heavy tooled rim for maximum durability. The same baffle design as found on our Delong flasks promotes optimal and consistent solution agitation when used with flask shakers.

| Capacity<br>mL | Rubber<br>Stopper<br>No. | Part<br>Number    | Each<br>Price |
|----------------|--------------------------|-------------------|---------------|
| 125            | 5                        | <b>C-4450-125</b> | \$22.38       |
| 250            | 6                        | <b>C-4450-250</b> | 25.19         |
| 500            | 7                        | <b>C-4450-500</b> | 26.75         |
| 1000           | 8.5                      | <b>C-4450-1L</b>  | 38.51         |


**C-4460**
**Flask, PYREX®, Trypsinizing Flask, Beaded Neck, Baffled**

Flasks are used for converting homogeneous tissue samples into cell suspensions by digestion of connective proteins. Heavy beaded neck accepts cotton plugs. Four extra-deep baffles enhance vigorous agitation.

| Capacity<br>mL | Height of<br>Baffles<br>mm | Part<br>Number    | Each<br>Price |
|----------------|----------------------------|-------------------|---------------|
| 35             | 30                         | <b>C-4460-50</b>  | \$22.95       |
| 75             | 50                         | <b>C-4460-125</b> | 27.14         |
| 150            | 70                         | <b>C-4460-250</b> | 31.30         |
| 300            | 95                         | <b>C-4460-500</b> | 37.30         |
| 700            | 105                        | <b>C-4460-1L</b>  | 52.97         |
| 1500           | 125                        | <b>C-4460-2L</b>  | 83.42         |


**C-4462**
**Flask, PYREX®, Trypsinizing Flask with Sidearm, Plain Neck, Baffled**

Flasks are used for converting homogenous tissue samples into cell suspensions by digestion of connective tissues. Designed with well below the sidearm to prevent unseparated tissues from being poured out of the flask. Four extra long, extra deep baffles promote vigorous agitation. Sidearm is 16mm O.D. Delong style neck on flask and sidearm accommodates plastic closures. Closures sold separately.

| Capacity<br>mL | Height of<br>Baffles<br>mm | Center<br>Neck<br>O.D.<br>mm | Part<br>Number    | Each<br>Price |
|----------------|----------------------------|------------------------------|-------------------|---------------|
| 35             | 30                         | 18                           | <b>C-4462-50</b>  | \$173.27      |
| 75             | 45                         | 25                           | <b>C-4462-125</b> | 204.46        |
| 150            | 70                         | 38                           | <b>C-4462-250</b> | 235.13        |
| 300            | 95                         | 38                           | <b>C-4462-500</b> | 279.81        |
| 700            | 105                        | 38                           | <b>C-4462-1L</b>  | 398.75        |
| 1500           | 125                        | 38                           | <b>C-4462-2L</b>  | 450.89        |

### Flask, Iodine, with Stopper

With funnel top and with closed bottom 24/40 hollow stopper.

| Capacity<br>mL | Supplied     | Part<br>Number      | Each<br>Price |
|----------------|--------------|---------------------|---------------|
| 125            | Complete     | <b>LG-7870-100</b>  | \$56.16       |
| 250            | Complete     | <b>LG-7870-102</b>  | 56.77         |
| 500            | Complete     | <b>LG-7870-106</b>  | 67.56         |
| 1000           | Complete     | <b>LG-7870-108</b>  | 73.78         |
| 125            | Flask Only   | <b>LG-7870-110</b>  | 36.04         |
| 250            | Flask Only   | <b>LG-7870-112</b>  | 36.74         |
| 500            | Flask Only   | <b>LG-7870-116</b>  | 43.90         |
| 1000           | Flask Only   | <b>LG-7870-118</b>  | 49.04         |
|                | Stopper Only | <b>LG-10350-100</b> | 21.33         |



**LG-7870**

### Flask, Iodine, with Venting Stopper

With funnel top and specially constructed neck and stopper. The lower part of neck and upper portion of shank of stopper have vertical indentations, which can permit entrance or exit of air or gas, according to position of stopper in neck. Stopper has 24/40 joint and is hollow with closed bottom.

| Capacity<br>mL | Supplied     | Part<br>Number     | Each<br>Price |
|----------------|--------------|--------------------|---------------|
| 125            | Complete     | <b>LG-7890-100</b> | \$65.20       |
| 250            | Complete     | <b>LG-7890-102</b> | 74.23         |
| 125            | Flask Only   | <b>LG-7890-110</b> | 38.07         |
| 250            | Flask Only   | <b>LG-7890-112</b> | 38.74         |
|                | Stopper Only | <b>LG-7890-120</b> | 37.06         |

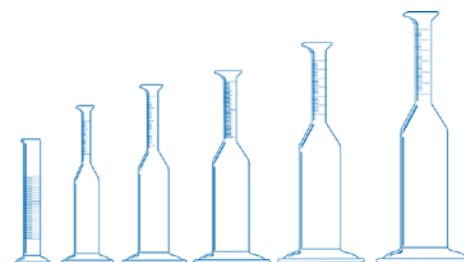


**LG-7890**

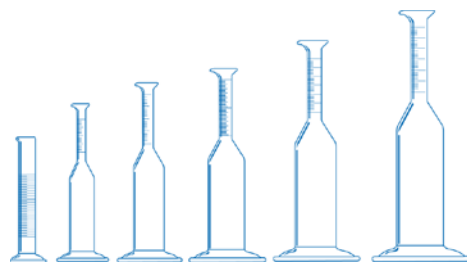
### Flask, Calibration/Measuring Set, TD U.S. Customary System

A complete set which contains the cylinder and flasks as specified in NIST Handbook 105-2 as a set of U.S. Customary field standard flasks. All sizes are calibrated to deliver at 68°F/20°C. (10 second drain). Set is comprised of 2 ounce, 1 gill, 1/2 pint, 1 pint, 1 quart, 1/2 gallon, and 1 gallon. The two ounce size is a cylindrical graduate; the other sizes are graduated neck flasks. Set includes 2 cases, one for the gallon flask, the other for the six smaller sizes. Cylinder is graduated from 2 to 16 fluid drams (2 fluid ounces). The other sizes are graduated in the neck, above and below the nominal as indicated.

| Supplied                | Grad.<br>Above/Below<br>Nom. x<br>Nominal<br>Capacity | Tol. at<br>Nominal<br>Subdivisions<br>Fluid Drams | Tol.<br>Within<br>Graduated<br>±<br>Min./mL | Portion,<br>Min./ mL | Part<br>Number     | Each<br>Price |
|-------------------------|-------------------------------------------------------|---------------------------------------------------|---------------------------------------------|----------------------|--------------------|---------------|
| Complete Set,<br>w/Case |                                                       |                                                   |                                             |                      | <b>LG-4300-100</b> | \$2,642.87    |
| Flask Only              | 2 fl. oz                                              | See Above                                         | 5/3                                         | 5/3                  | <b>LG-4300-102</b> | 107.63        |
| Flask Only              | 1 gill                                                | 1/2 x 1/4                                         | 3/2                                         | 1/1                  | <b>LG-4300-104</b> | 146.42        |
| Flask Only              | 1/2 pint                                              | 1 x 1/4                                           | 4/3                                         | 1/1                  | <b>LG-4300-106</b> | 181.69        |
| Flask Only              | 1 pint                                                | 2 x 1/2                                           | 7/4                                         | 3/15                 | <b>LG-4300-108</b> | 211.72        |
| Flask Only              | 1 quart                                               | 4 x 1                                             | 12/7                                        | 5/3                  | <b>LG-4300-110</b> | 326.38        |
| Flask Only              | 1/2 gallon                                            | 6 x 1                                             | 16/1.0                                      | 5/3                  | <b>LG-4300-112</b> | 432.26        |
| Flask Only              | 1 gallon                                              | 8 x 1                                             | 20/1.2                                      | 5/3                  | <b>LG-4300-114</b> | 573.39        |
| Small Case              |                                                       |                                                   |                                             |                      | <b>LG-4320-100</b> | 396.95        |
| Large Case              |                                                       |                                                   |                                             |                      | <b>LG-4320-102</b> | 546.92        |



**LG-4300**


**LG-4307**
**Flask, Calibration/Measuring Set, TD, Metric System**

Set contains cylinder and flasks which are calibrated to deliver at 68°F/20°C (10 second drain). Complies with the NIST Handbook 105-2. Sizes included are 50mL, 100mL, 250mL, 500mL, 1000mL, and 2000mL. The 50mL size is a cylindrical graduate (graduated 10mL to 50mL in 1mL divisions); the others are graduated neck flasks. The complete set includes a wooden case which holds all six sizes.

| Supplied             | Grad.<br>Above/Below<br>Nominal<br>Capacity<br>mL | Tol. at<br>Nom. x<br>Subdivisions<br>mL | Tol.<br>Within<br>Nominal<br>± mL | Graduated<br>Portion<br>± mL | Part<br>Number     | Each<br>Price |
|----------------------|---------------------------------------------------|-----------------------------------------|-----------------------------------|------------------------------|--------------------|---------------|
| Complete Set, w/Case |                                                   |                                         |                                   |                              | <b>LG-4307-100</b> | \$1,755.44    |
| Flask Only           | 50                                                | See Above                               | .30                               | .30                          | <b>LG-4307-102</b> | 107.63        |
| Flask Only           | 100                                               | 4 x .50                                 | .20                               | .06                          | <b>LG-4307-104</b> | 146.42        |
| Flask Only           | 250                                               | 6 x .50                                 | .30                               | .10                          | <b>LG-4307-106</b> | 181.69        |
| Flask Only           | 500                                               | 10 x 1.0                                | .50                               | .15                          | <b>LG-4307-108</b> | 211.72        |
| Flask Only           | 1000                                              | 20 x 1.00                               | .80                               | .22                          | <b>LG-4307-110</b> | 326.38        |
| Flask Only           | 2000                                              | 30 x 2.0                                | 1.20                              | .33                          | <b>LG-4307-112</b> | 432.26        |
| Large Case           |                                                   |                                         |                                   |                              | <b>LG-4320-102</b> | 546.92        |


**LG-4309**
**Flask, Calibration/Measuring, TD, Metric Series**

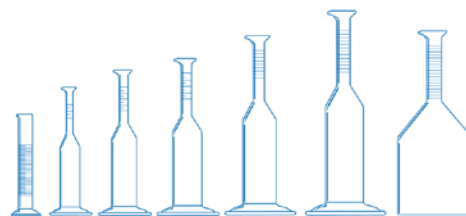
Flask style in sizes to supplement the official metric series. Calibrated to deliver at 68°F/20°C with 10 second drain.

| Nominal<br>Capacity<br>mL | Grad.<br>Above/Below<br>Nom. x<br>Subdivisions<br>mL | Tolerance<br>at<br>Nominal<br>± mL | Tolerance<br>Within<br>Graduated<br>Portion<br>± mL | Part<br>Number     | Each<br>Price |
|---------------------------|------------------------------------------------------|------------------------------------|-----------------------------------------------------|--------------------|---------------|
| 150                       | 2 x .25                                              | .20                                | .10                                                 | <b>LG-4309-100</b> | \$168.39      |
| 187                       | 4 x .25                                              | .30                                | .10                                                 | <b>LG-4309-102</b> | 168.39        |
| 200                       | 4 x .25                                              | .30                                | .10                                                 | <b>LG-4309-104</b> | 168.39        |
| 300                       | 8 x .50                                              | .50                                | .20                                                 | <b>LG-4309-106</b> | 208.97        |
| 375                       | 8 x .50                                              | .50                                | .20                                                 | <b>LG-4309-108</b> | 208.97        |
| 750                       | 15 x 1.0                                             | .80                                | .30                                                 | <b>LG-4309-110</b> | 243.46        |
| 1500                      | 25 x 1.0                                             | 1.00                               | .30                                                 | <b>LG-4309-112</b> | 375.35        |
| 1750                      | 25 x 1.0                                             | 1.00                               | .30                                                 | <b>LG-4309-114</b> | 375.35        |
| 3000                      | 25 x 1.0                                             | 1.20                               | .30                                                 | <b>LG-4309-116</b> | 497.09        |
| 4000                      | 25 x 1.0                                             | 1.20                               | .30                                                 | <b>LG-4309-118</b> | 659.41        |

### Flask, Calibration/Measuring Set, TD Ounce System

Set is comprised of a cylinder and flasks calibrated to contain at 68°F. Two ounce size is graduated cylinder, the others are 1 gill, 1 /2 pint, 1 pint, 1 quart, 1 /2 gallon and 1 gallon. The to contain series is intended for use in checking automatic fill volumes. Complete set includes two wooden cases, one for the gallon size, the other for the remaining six sizes.

| Supplied             | Grad.<br>Above/Below<br>Nominal<br>Capacity<br>Ounces | Tol. at<br>Nom. x<br>Subdivisions<br>Ounces | Tol.<br>Within<br>Nominal<br>±<br>mL | Graduated<br>Portion<br>Minims/mL | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------------------------------------|---------------------------------------------|--------------------------------------|-----------------------------------|--------------------|---------------|
| Complete Set, w/Case |                                                       |                                             |                                      |                                   | <b>LG-4310-100</b> | \$2,642.87    |
| Flask Only           | 2 fl. oz.                                             | See Above                                   | 5 / .31                              | 5 / 0.31                          | <b>LG-4310-102</b> | 107.63        |
| Flask Only           | 1 gill                                                | 1/2 x 1/4                                   | 3 / .18                              | 1 / 0.06                          | <b>LG-4310-104</b> | 146.42        |
| Flask Only           | 1/2 pint                                              | 1 x 1/4                                     | 4 / .25                              | 1.5 / 0.09                        | <b>LG-4310-106</b> | 181.69        |
| Flask Only           | 1 pint                                                | 2 x 1/2                                     | 7 / .43                              | 3 / 0.18                          | <b>LG-4310-108</b> | 211.72        |
| Flask Only           | 1 quart                                               | 4 x 1                                       | 12 / .74                             | 5 / 0.31                          | <b>LG-4310-110</b> | 326.38        |
| Flask Only           | 1/2 gallon                                            | 6 x 1                                       | 16 / .99                             | 5 / 0.31                          | <b>LG-4310-112</b> | 432.26        |
| Flask Only           | 1 gallon                                              | 8 x 1                                       | 20 / 1.23                            | 5 / 0.31                          | <b>LG-4310-114</b> | 573.39        |
| Small Case           |                                                       |                                             |                                      |                                   | <b>LG-4320-100</b> | 396.95        |
| Large Case           |                                                       |                                             |                                      |                                   | <b>LG-4320-102</b> | 546.92        |

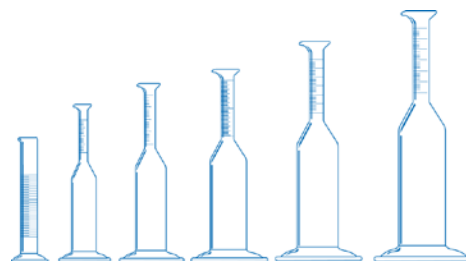


**LG-4310**

### Flask, Calibration/Measuring Set, TC Metric System

Cylinder and flasks are calibrated to contain at 68°F/20°C. Sizes included are 50mL, 100mL, 250mL, 500mL, 1000mL, and 2000mL. The 50mL is a cylindrical graduate (graduated 10mL to 50mL in 1mL divisions) - the others are graduated neck flasks. Set includes wooden case which holds all six sizes.

| Supplied             | Grad.<br>Above/Below<br>Nominal<br>Capacity<br>Ounces | Tol. at<br>Nom. x<br>Subdivisions<br>Ounces | Tol.<br>Within<br>Nominal<br>±<br>mL | Graduated<br>Portion<br>Minims/mL | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------------------------------------|---------------------------------------------|--------------------------------------|-----------------------------------|--------------------|---------------|
| Complete Set, w/Case |                                                       |                                             |                                      |                                   | <b>LG-4317-100</b> | \$1,755.44    |
| Flask Only           | 50                                                    | See Above                                   | .30                                  | .30                               | <b>LG-4317-102</b> | 107.63        |
| Flask Only           | 100                                                   | 4 x .50                                     | .20                                  | .06                               | <b>LG-4317-104</b> | 146.42        |
| Flask Only           | 250                                                   | 6 x .50                                     | .30                                  | .10                               | <b>LG-4317-106</b> | 181.69        |
| Flask Only           | 500                                                   | 10 x 1.0                                    | .50                                  | .15                               | <b>LG-4317-108</b> | 211.72        |
| Flask Only           | 1000                                                  | 20 x 1.0                                    | .80                                  | .22                               | <b>LG-4317-110</b> | 326.38        |
| Flask Only           | 2000                                                  | 30 x 2.0                                    | 1.20                                 | .33                               | <b>LG-4317-112</b> | 432.26        |
| Large Case           |                                                       |                                             |                                      |                                   | <b>LG-4320-102</b> | 546.92        |



**LG-4317**

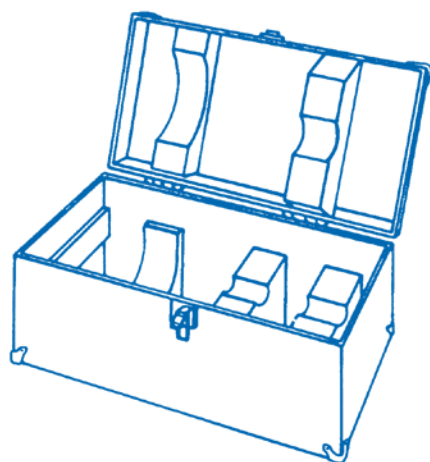


**LG-4319**

### Flask, Calibration/Measuring Set, TC Metric System

Supplemental sizes are listed to those included as *LG-4317-100*. Vessels are flask shaped and calibrated to contain at 68°F/20°C. Other sizes and graduations will be provided on request.

| Nominal Capacity<br>mL | Grad.<br>Above/Below<br>Nom. x<br>Subdivisions<br>mL | Tolerance<br>at<br>Nominal<br>± mL | Tolerance<br>Within<br>Graduated<br>Portion<br>± mL | Part<br>Number     | Each<br>Price |
|------------------------|------------------------------------------------------|------------------------------------|-----------------------------------------------------|--------------------|---------------|
| 100                    | 4 x .25                                              | .20                                | .08                                                 | <b>LG-4319-100</b> | \$168.39      |
| 150                    | 2 x .25                                              | .20                                | .10                                                 | <b>LG-4319-102</b> | 168.39        |
| 187                    | 4 x .25                                              | .30                                | .10                                                 | <b>LG-4319-104</b> | 168.39        |
| 200                    | 4 x .25                                              | .30                                | .10                                                 | <b>LG-4319-106</b> | 208.97        |
| 300                    | 8 x .50                                              | .50                                | .20                                                 | <b>LG-4319-108</b> | 208.97        |
| 375                    | 8 x .50                                              | .50                                | .20                                                 | <b>LG-4319-110</b> | 208.97        |
| 750                    | 15 x 1.00                                            | .80                                | .30                                                 | <b>LG-4319-112</b> | 243.46        |
| 1500                   | 25 x 1.00                                            | 1.00                               | .30                                                 | <b>LG-4319-114</b> | 375.35        |
| 1750                   | 25 x 1.00                                            | 1.00                               | .30                                                 | <b>LG-4319-116</b> | 375.35        |
| 3000                   | 25 x 1.00                                            | 1.20                               | .30                                                 | <b>LG-4319-118</b> | 497.09        |
| 4000                   | 25 x 1.00                                            | 1.20                               | .30                                                 | <b>LG-4319-120</b> | 659.41        |



**LG-4320**

### Flask, Calibration/ Measuring Cases

Wooden cases with protective inserts designed to hold individual flasks or sets. Rugged construction with carrying handle.

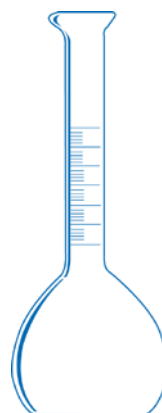
| Item             | Holds<br>Sizes                                                                                  | Part<br>Number     | Each<br>Price |
|------------------|-------------------------------------------------------------------------------------------------|--------------------|---------------|
| Case Only, Small | 1 Gallon or 4000mL<br>Six Piece Metric Series<br>(50mL, 100mL, 250mL,<br>500mL, 1000mL, 2000mL) | <b>LG-4320-100</b> | \$396.95      |
| Case Only, Large | Six Piece Ounce Series<br>(2 Ounce, 1 Gill, 1/2 Pint,<br>1 Pint, 1 Quart, 1/2 Gallon)           | <b>LG-4320-102</b> | 546.92        |



### Flask, Calibration/Liquid Measure, TC, Metric Series

The neck is graduated to contain at 15.6°C. Graduations extend 20 divisions above and 10 divisions below the zero mark.

| Capacity<br>mL | Subdivision | Part<br>Number     | Each<br>Price |
|----------------|-------------|--------------------|---------------|
| 250mL          | 0.5mL       | <b>LG-4327-100</b> | \$153.10      |
| 500mL          | 1.0mL       | <b>LG-4327-102</b> | 179.44        |
| 750mL          | 1.6mL       | <b>LG-4327-104</b> | 246.86        |
| 1 liter        | 2.0mL       | <b>LG-4327-106</b> | 269.26        |
| 2 liters       | 4.0mL       | <b>LG-4327-108</b> | 341.26        |
| 4 liters       | 8.0mL       | <b>LG-4327-110</b> | 448.94        |

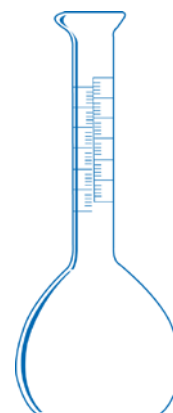


**LG-4327**

### Flask, Calibration/Liquid Measure, TC, Wine Metric Series

Flasks are calibrated to contain at temperatures from 5°C to 60°C using 15.6°C as the standard temperature.

| Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| 250mL          | <b>LG-4328-100</b> | \$153.10      |
| 375mL          | <b>LG-4328-102</b> | 153.10        |
| 500mL          | <b>LG-4328-104</b> | 179.41        |
| 750mL          | <b>LG-4328-106</b> | 246.86        |
| 1 liter        | <b>LG-4328-108</b> | 269.26        |
| 1.5 liter      | <b>LG-4328-110</b> | 269.26        |
| 2 liters       | <b>LG-4328-112</b> | 341.26        |
| 4 liters       | <b>LG-4328-114</b> | 448.94        |



**LG-4328**

### Flask, Volumetric, Class A

Calibrated to contain at 20°C. Flask is designed to meet specifications of ASTM E288 Class A. Supplied with snap cap.

| Capacity<br>mL | Tolerance<br>± mL | Approx.<br>Height,<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------------|--------------------|---------------|
| 10             | 0.02              | 82                       | <b>LG-8090-100</b> | \$15.12       |
| 100            | 0.08              | 160                      | <b>LG-8090-106</b> | 19.28         |
| 250            | 0.12              | 230                      | <b>LG-8090-110</b> | 23.94         |
| 500            | 0.20              | 250                      | <b>LG-8090-112</b> | 29.06         |
| 1000           | 0.30              | 315                      | <b>LG-8090-114</b> | 36.90         |



**LG-8090**



### Flask, Volumetric, Class A, with Pourout

Calibrated to contain at 20°C. Flask sizes comply with requirements for Type 1, Class A "Unserialized flasks".

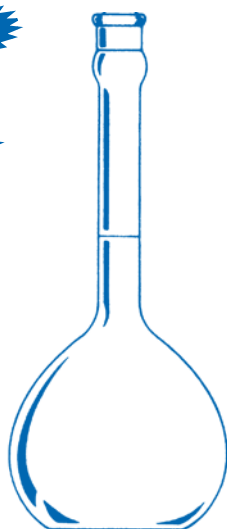
| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|--------------------|---------------|
| 10             | 0.02              | 82              | <b>LG-8108-100</b> | \$48.00       |
| 25             | 0.03              | 160             | <b>LG-8108-102</b> | 51.00         |
| 50             | 0.05              | 230             | <b>LG-8108-104</b> | 54.00         |
| 100            | 0.08              | 250             | <b>LG-8108-106</b> | 56.00         |
| 250            | 0.12              | 315             | <b>LG-8108-108</b> | 63.00         |



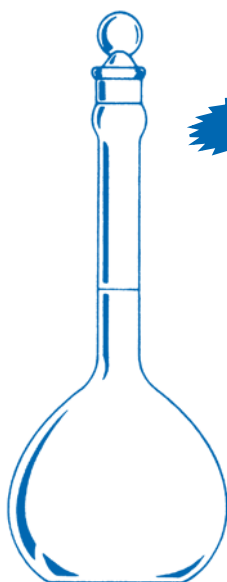
**LG-8108**

Class A

NEW


**LG-8109**

Class A


**LG-8110**
**Flask, Volumetric, Unstoppered, Class A**

Calibrated to contain at 20°C. Flask sizes comply with requirements for Type 1, Class A "Unserialized flasks."

Reference: ASTM E288 and Federal Specifications NNN-F-289.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 10             | 0.02              | 9               | 100                     | <b>LG-8109-106</b> | \$15.90       |
| 25             | 0.03              | 9               | 120                     | <b>LG-8109-108</b> | 17.60         |
| 50             | 0.05              | 9               | 150                     | <b>LG-8109-110</b> | 19.30         |
| 100            | 0.08              | 13              | 180                     | <b>LG-8109-112</b> | 20.70         |
| 200            | 0.10              | 13              | 240                     | <b>LG-8109-114</b> | 24.70         |
| 250            | 0.12              | 16              | 250                     | <b>LG-8109-116</b> | 26.05         |
| 500            | 0.20              | 19              | 275                     | <b>LG-8109-118</b> | 32.65         |
| 1000           | 0.30              | 22              | 345                     | <b>LG-8109-120</b> | 40.70         |

**Flask, Volumetric, Stoppered, Class A**

Calibrated to contain at 20°C. Flask sizes comply with requirements for Type 1, Class A "Unserialized flasks." Supplied with a penny head stopper.

Reference: ASTM E288 and Federal Specifications NNN-F289.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 1              | 0.02              | 9               | 80                      | <b>LG-8110-100</b> | \$15.57       |
| 2              | 0.02              | 9               | 105                     | <b>LG-8110-102</b> | 16.56         |
| 5              | 0.02              | 9               | 90                      | <b>LG-8110-104</b> | 17.48         |
| 10             | 0.02              | 9               | 100                     | <b>LG-8110-106</b> | 20.85         |
| 25             | 0.03              | 9               | 120                     | <b>LG-8110-108</b> | 22.66         |
| 50             | 0.05              | 9               | 150                     | <b>LG-8110-110</b> | 24.23         |
| 100            | 0.08              | 13              | 180                     | <b>LG-8110-112</b> | 25.91         |
| 200            | 0.10              | 13              | 240                     | <b>LG-8110-114</b> | 29.76         |
| 250            | 0.12              | 16              | 250                     | <b>LG-8110-116</b> | 32.05         |
| 500            | 0.20              | 19              | 275                     | <b>LG-8110-118</b> | 39.66         |
| 1000           | 0.30              | 22              | 345                     | <b>LG-8110-120</b> | 48.34         |
| 2000           | 0.50              | 27              | 410                     | <b>LG-8110-122</b> | 60.01         |
| 3000           | 1.0               | 32              | 440                     | <b>LG-8110-124</b> | 206.58        |
| 4000           | 1.0               | 38              | 480                     | <b>LG-8110-126</b> | 219.49        |
| 5000           | 1.5               | 38              | 510                     | <b>LG-8110-128</b> | 238.53        |
| 6000           | 2.0               | 38              | 600                     | <b>LG-8110-130</b> | 279.19        |
| 10000          | 2.5               | 38              | 600                     | <b>LG-8110-132</b> | 473.86        |
| 20000*         | 4.0               | 38              | 640                     | <b>LG-8110-134</b> | 618.47        |

\*Not volumetric shaped.

### Flask, Volumetric, Stoppered, Class A, Ambered

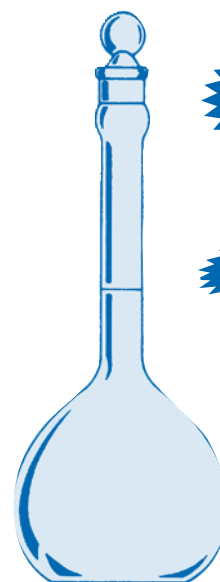
Calibrated to contain at 20° C. Flask sizes comply with requirements for Type 1, Class A "Unserialized flasks." Supplied with a penny head stopper.

Reference: ASTM E288 and Federal Specifications NNN-F289.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 10             | 0.02              | 9               | 100                     | <b>LG-8111-106</b> | \$26.75       |
| 25             | 0.03              | 9               | 120                     | <b>LG-8111-108</b> | 30.55         |
| 50             | 0.05              | 9               | 150                     | <b>LG-8111-110</b> | 34.76         |
| 100            | 0.08              | 13              | 180                     | <b>LG-8111-112</b> | 34.93         |
| 200            | 0.10              | 13              | 240                     | <b>LG-8111-114</b> | 35.15         |
| 250            | 0.12              | 16              | 250                     | <b>LG-8111-116</b> | 42.51         |
| 500            | 0.20              | 19              | 275                     | <b>LG-8111-118</b> | 84.81         |
| 1000           | 0.30              | 22              | 345                     | <b>LG-8111-120</b> | 104.87        |
| 2000           | 0.50              | 27              | 410                     | <b>LG-8111-122</b> | 114.38        |

#### FLASK ONLY

|      |      |    |     |                    |        |
|------|------|----|-----|--------------------|--------|
| 10   | 0.02 | 9  | 100 | <b>LG-8111-206</b> | 21.71  |
| 25   | 0.03 | 9  | 120 | <b>LG-8111-208</b> | 25.48  |
| 50   | 0.05 | 9  | 150 | <b>LG-8111-210</b> | 29.74  |
| 100  | 0.08 | 13 | 180 | <b>LG-8111-212</b> | 29.65  |
| 200  | 0.10 | 13 | 240 | <b>LG-8111-214</b> | 29.86  |
| 250  | 0.12 | 16 | 250 | <b>LG-8111-216</b> | 36.18  |
| 500  | 0.20 | 19 | 275 | <b>LG-8111-218</b> | 77.42  |
| 1000 | 0.30 | 22 | 345 | <b>LG-8111-220</b> | 96.80  |
| 2000 | 0.50 | 27 | 410 | <b>LG-8111-222</b> | 104.13 |



**CLASS A  
AMBERED**

**NEW**

**LG-8111**

### Flask, Volumetric, Stopper, Serialized, Class A

Glass quality, calibration lines, inscription, and appearance are maintained according to the former NBS circular 602. Flask has a marking spot in addition to a serial number. Calibrated to Contain (TC) at 20°C. Supplied with stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 10             | 0.02              | 9               | 100                     | <b>LG-8112-106</b> | \$29.06       |
| 25             | 0.03              | 9               | 120                     | <b>LG-8112-108</b> | 30.64         |
| 50             | 0.05              | 9               | 150                     | <b>LG-8112-110</b> | 34.87         |
| 100            | 0.08              | 13              | 180                     | <b>LG-8112-112</b> | 37.45         |
| 200            | 0.10              | 13              | 240                     | <b>LG-8112-114</b> | 41.30         |
| 250            | 0.12              | 16              | 250                     | <b>LG-8112-116</b> | 43.90         |
| 500            | 0.20              | 19              | 275                     | <b>LG-8112-118</b> | 52.94         |
| 1000           | 0.30              | 22              | 345                     | <b>LG-8112-120</b> | 61.97         |
| 2000           | 0.50              | 27              | 410                     | <b>LG-8112-122</b> | 77.46         |

**SUPPLIED W/  
CERTIFICATE OF  
COMPLIANCE**

**Class A**



**LG-8112**


**LG-8120**
**Flask, Volumetric, HD, Wide Mouth, Class A, TC, Glass Stopper**

Wide mouth design helps with mixing, sampling and filling. Unique Flat Bottom Interior permits the use of a standard stir bar. Flasks are calibrated to contain at Class A tolerances. Supplied complete with a glass stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx. Height<br>w/Stopper<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-----------------------------------|--------------------|---------------|
| 5              | 0.02              | 13              | 95                                | <b>LG-8120-104</b> | \$22.18       |
| 10             | 0.03              | 13              | 100                               | <b>LG-8120-106</b> | 23.86         |
| 20             | 0.03              | 13              | 125                               | <b>LG-8120-107</b> | 24.60         |
| 25             | 0.03              | 13              | 130                               | <b>LG-8120-108</b> | 25.13         |
| 50             | 0.05              | 13              | 150                               | <b>LG-8120-110</b> | 25.66         |
| 100            | 0.08              | 16              | 180                               | <b>LG-8120-112</b> | 32.48         |
| 200            | 0.10              | 19              | 175                               | <b>LG-8120-114</b> | 39.21         |
| 250            | 0.12              | 19              | 250                               | <b>LG-8120-116</b> | 40.89         |


**LG-8121**
**Flask, Volumetric, HD, Wide Mouth, Class A, TC, Glass Stopper, Ambered**

Helps with mixing, sampling, and filling. Same as *LG-8120* except ambered.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx. Height<br>w/Stopper<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-----------------------------------|--------------------|---------------|
| 5              | 0.02              | 13              | 95                                | <b>LG-8121-104</b> | \$26.97       |
| 10             | 0.03              | 13              | 100                               | <b>LG-8121-106</b> | 28.98         |
| 20             | 0.03              | 13              | 125                               | <b>LG-8121-107</b> | 29.86         |
| 25             | 0.03              | 13              | 130                               | <b>LG-8121-108</b> | 29.86         |
| 50             | 0.05              | 13              | 150                               | <b>LG-8121-110</b> | 32.25         |
| 100            | 0.08              | 16              | 180                               | <b>LG-8121-112</b> | 43.41         |
| 200            | 0.10              | 19              | 175                               | <b>LG-8121-114</b> | 47.85         |
| 250            | 0.12              | 19              | 250                               | <b>LG-8121-116</b> | 49.71         |


**LG-8122**
**Flask, Volumetric, HD, Wide Mouth, Class A, TC, PTFE Stopper**

Same as *LG-8120* except with PTFE stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx. Height<br>w/Stopper<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-----------------------------------|--------------------|---------------|
| 5              | 0.02              | 13              | 95                                | <b>LG-8122-104</b> | \$21.53       |
| 10             | 0.03              | 13              | 100                               | <b>LG-8122-106</b> | 23.17         |
| 20             | 0.03              | 13              | 125                               | <b>LG-8122-107</b> | 23.88         |
| 25             | 0.03              | 13              | 130                               | <b>LG-8122-108</b> | 23.88         |
| 50             | 0.05              | 13              | 150                               | <b>LG-8122-110</b> | 24.91         |
| 100            | 0.08              | 16              | 180                               | <b>LG-8122-112</b> | 31.54         |
| 200            | 0.10              | 19              | 175                               | <b>LG-8122-114</b> | 38.07         |
| 250            | 0.12              | 19              | 250                               | <b>LG-8122-116</b> | 39.70         |

**Flask, Volumetric, HD, Wide Mouth, Class A, TC, PTFE Stopper, Ambered**

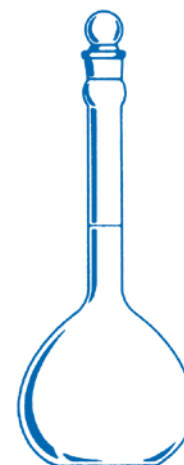
Same as LG-8121 except with PTFE stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx. Height<br>w/Stopper<br>mm | Part<br>Number | Each<br>Price |
|----------------|-------------------|-----------------|-----------------------------------|----------------|---------------|
| 5              | 0.02              | 13              | 95                                | LG-8123-104    | \$26.97       |
| 10             | 0.03              | 13              | 100                               | LG-8123-106    | 28.98         |
| 20             | 0.03              | 13              | 125                               | LG-8123-107    | 29.86         |
| 25             | 0.03              | 13              | 130                               | LG-8123-108    | 29.86         |
| 50             | 0.05              | 13              | 150                               | LG-8123-110    | 32.25         |
| 100            | 0.08              | 16              | 180                               | LG-8123-112    | 43.45         |
| 200            | 0.10              | 19              | 175                               | LG-8123-114    | 47.85         |
| 250            | 0.12              | 19              | 250                               | LG-8123-116    | 49.71         |


**LG-8123**
**Flask, Volumetric, Stoppered, Laboratory Grade**

Complies with specifications detailed in ASTM E228. Calibrated to contain at 20°C. Supplied with a penny head stopper.

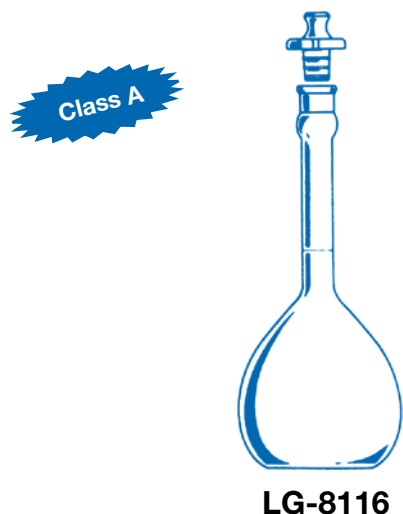
| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx. Height<br>mm | Part<br>Number | Each<br>Price |
|----------------|-------------------|-----------------|----------------------|----------------|---------------|
| 10             | 0.04              | 9               | 100                  | LG-8125-100    | \$20.14       |
| 25             | 0.06              | 9               | 120                  | LG-8125-102    | 22.16         |
| 50             | 0.10              | 9               | 150                  | LG-8125-104    | 23.52         |
| 100            | 0.16              | 13              | 180                  | LG-8125-106    | 25.54         |
| 200            | 0.20              | 13              | 240                  | LG-8125-108    | 29.39         |
| 250            | 0.24              | 16              | 250                  | LG-8125-110    | 31.25         |
| 500            | 0.40              | 19              | 275                  | LG-8125-112    | 39.31         |
| 1000           | 0.60              | 22              | 345                  | LG-8125-114    | 48.30         |
| 2000           | 1.00              | 27              | 410                  | LG-8125-116    | 62.01         |


**LG-8125**
**Flask, PYREX®, Volumetric, Class A, Polyethylene Stopper**

Flask have machine blown bodies to which are sealed heavy-beaded, heavy-tubing necks, tooled for polyethylene stopper. The graduation line is sharp and permanent with large white block letters for easy reading.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Part<br>Number | Each<br>Price |
|----------------|-------------------|-----------------|----------------|---------------|
| 5              | 0.02              | 8               | C-5642-5       | \$22.73       |
| 10             | 0.02              | 9               | C-5642-10      | 19.88         |
| 25             | 0.03              | 9               | C-5642-25      | 21.70         |
| 50             | 0.05              | 9               | C-5642-50      | 23.36         |
| 100            | 0.08              | 13              | C-5642-100     | 24.23         |
| 200            | 0.10              | 13              | C-5642-200     | 28.28         |
| 250            | 0.12              | 16              | C-5642-250     | 30.04         |
| 500            | 0.20              | 19              | C-5642-500     | 38.61         |
| 1000           | 0.30              | 22              | C-5642-1L      | 47.12         |
| 2000           | 0.50              | 27              | C-5642-2L      | 58.98         |


**C-5642**

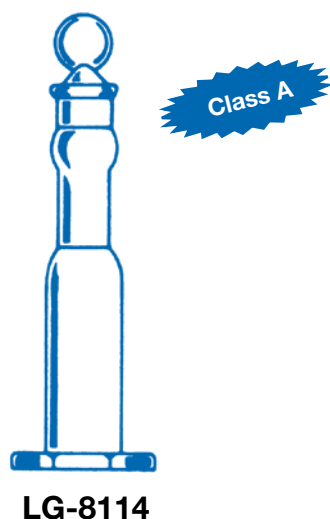


### Flask, Volumetric, Plastic Stopper, TC, Class A

Flask is provided with a plastic closed-bottom stopper. Stopper design prevents the neck breaking if the flask is tipped over. Calibrated to contain at 20°C.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>\$ Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|-------------------------|--------------------|---------------|
| 5              | 0.02              | 9                  | 90                      | <b>LG-8116-104</b> | \$16.48       |
| 10             | 0.02              | 9                  | 100                     | <b>LG-8116-106</b> | 19.71         |
| 25             | 0.03              | 9                  | 120                     | <b>LG-8116-108</b> | 21.35         |
| 50             | 0.05              | 9                  | 150                     | <b>LG-8116-110</b> | 22.88         |
| 100            | 0.08              | 13                 | 180                     | <b>LG-8116-112</b> | 23.74         |
| 200            | 0.10              | 13                 | 240                     | <b>LG-8116-114</b> | 28.04         |
| 250            | 0.12              | 16                 | 250                     | <b>LG-8116-116</b> | 30.19         |
| 500            | 0.20              | 19                 | 275                     | <b>LG-8116-118</b> | 38.13         |
| 1000           | 0.30              | 22                 | 345                     | <b>LG-8116-120</b> | 45.60         |
| 2000           | 0.50              | 27                 | 410                     | <b>LG-8116-122</b> | 56.61         |
| 3000           | 1.0               | 32                 | 440                     | <b>LG-8116-124</b> | 166.81        |
| 4000           | 1.0               | 38                 | 480                     | <b>LG-8116-126</b> | 177.87        |
| 5000           | 1.5               | 38                 | 510                     | <b>LG-8116-128</b> | 301.48        |
| 6000           | 2.0               | 38                 | 600                     | <b>LG-8116-130</b> | 294.60        |
| 10000          | 2.5               | 38                 | 600                     | <b>LG-8116-132</b> | 494.14        |
| 20000*         | 4.0               | 38                 | 640                     | <b>LG-8116-134</b> | 645.77        |

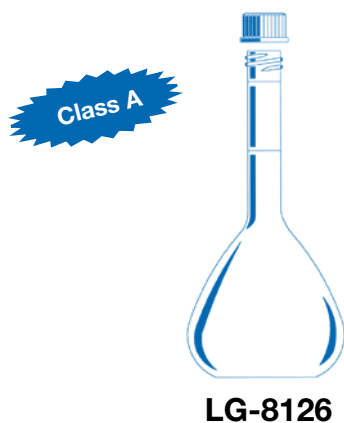
\*Not volumetric shaped.



### Flask, Volumetric, Cylindrical, Serialized, Class A, Supplied

Flasks have wide base for greater stability and have marking area in addition to a serial number. Design addresses needs of smaller volume vessels. All sizes are made to meet the requirements of ASTM E237 Calibrated to contain (TC) at 20°C. Supplied with stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>\$ Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|-------------------------|--------------------|---------------|
| 1              | 0.01              | 8                  | 76                      | <b>LG-8114-100</b> | \$36.82       |
| 2              | 0.015             | 8                  | 76                      | <b>LG-8114-102</b> | 53.09         |
| 3              | 0.015             | 8                  | 78                      | <b>LG-8114-104</b> | 40.13         |
| 4              | 0.02              | 8                  | 82                      | <b>LG-8114-106</b> | 57.86         |
| 5              | 0.02              | 8                  | 82                      | <b>LG-8114-108</b> | 45.31         |
| 10             | 0.02              | 9                  | 106                     | <b>LG-8114-110</b> | 46.83         |
| 25             | 0.03              | 9                  | 134                     | <b>LG-8114-112</b> | 70.42         |



### Flask, Volumetric, Class A, TC, Screw Cap

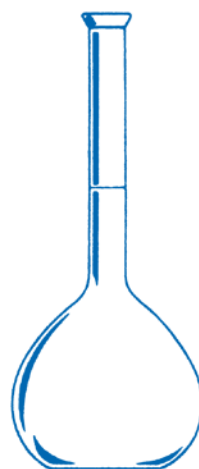
Standard design volumetric flasks calibrated to contain with Class A tolerances. Each flask is supplied with a phenolic screw cap having a PTFE faced rubber liner.

| Capacity<br>mL | Tolerance<br>mL | G.P.I.<br>Thread | Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-----------------|------------------|--------------|--------------------|---------------|
| 5              | ±.02            | 13-425           | 80           | <b>LG-8126-100</b> | \$17.56       |
| 10             | ±.02            | 13-425           | 90           | <b>LG-8126-102</b> | 22.21         |
| 25             | ±.03            | 13-425           | 100          | <b>LG-8126-104</b> | 24.82         |
| 50             | ±.05            | 13-425           | 140          | <b>LG-8126-106</b> | 26.79         |
| 100            | ±.08            | 13-425           | 160          | <b>LG-8126-108</b> | 28.55         |
| 250            | ±.12            | 20-400           | 210          | <b>LG-8126-110</b> | 35.98         |
| 500            | ±.20            | 20-400           | 260          | <b>LG-8126-112</b> | 44.29         |
| 1000           | ±.30            | 24-400           | 320          | <b>LG-8126-114</b> | 54.30         |

### Flask, Volumetric, MCA, Stoppered, Class A

Mixing bulb in neck is 0.1 the volume of the body. The 2000mL size bulb is 0.05 the body volume. Calibrated to contain at 20°C and meets ASTM specification E288 Class A. Supplied with stopper.

| Capacity<br>mL | Tolerance<br>± mL | Stopper<br>Size | Approx.<br>Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-----------------|-------------------------|--------------------|---------------|
| 100            | 0.08              | 13              | 185                     | <b>LG-8190-102</b> | \$49.90       |
| 250            | 0.12              | 16              | 230                     | <b>LG-8190-104</b> | 55.56         |
| 500            | 0.20              | 19              | 280                     | <b>LG-8190-106</b> | 65.08         |
| 1000           | 0.30              | 22              | 315                     | <b>LG-8190-108</b> | 74.25         |
| 2000           | 0.50              | 27              | 375                     | <b>LG-8190-110</b> | 92.32         |



**LG-8190**

### Flask, Volumetric, Unstoppered, Kohlrausch, Class A

Calibrated to contain at 20°C. The upper neck of the flask is enlarged to permit easy introduction of solids. Each flask is provided with a marking spot in addition to a serial number.

| Capacity<br>mL | Tolerance<br>± mL | Approx.<br>Height,<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------------|--------------------|---------------|
| 100            | 0.08              | 160                      | <b>LG-8192-100</b> | \$57.57       |
| 200            | 0.10              | 197                      | <b>LG-8192-102</b> | 62.36         |

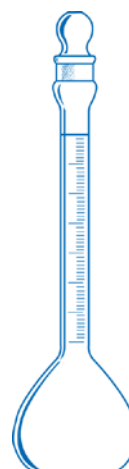


**LG-8192**

### Flask, Cassia, TC, Class A (USP)

Used for testing cinnamon oil (cassia) and other essential oils. Calibrated to contain at 20°C within Class A tolerances. Neck is graduated 0 to 10mL in 0.1mL subdivisions. Supplied complete with a #13 stopper.

| Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| 100-110        | <b>LG-8193-100</b> | \$58.10       |



**LG-8193**

### Flask, Volumetric, Unstoppered, Saybolt Viscosity, TC, Class A

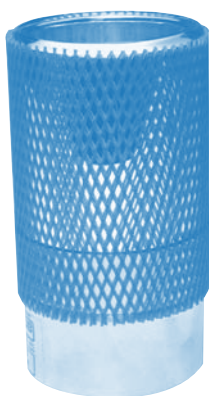
Calibrated to contain at 20°C. Flasks are made from heavy wall blanks. Top has a reinforced lip. Conforms to ASTM D88 specifications. Each flask is provided with a marking spot.

| Capacity<br>mL | Tolerance<br>± mL | Approx.<br>Height,<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------------|--------------------|---------------|
| 60             | 0.05              | 84                       | <b>LG-8194-100</b> | \$26.20       |



**LG-8194**




**LG-8195**

**LG-7671**

**LG-7680**
**Flask, Volumetric, Cylindrical**

Flasks have a 45/50 joint. Not supplied with stopper.

| Capacity<br>mL     | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| 4000               | <b>LG-8195-100</b>  | \$261.96      |
| 5000               | <b>LG-8195-102</b>  | 286.91        |
| 6000               | <b>LG-8195-104</b>  | 336.82        |
| 10000              | <b>LG-8195-106</b>  | 387.02        |
| 20000              | <b>LG-8195-108</b>  | 545.59        |
| 45/50 Stopper Only | <b>LG-10300-120</b> | 32.40         |

**Flask, Dewar, Cylindrical, Laboratory Grade**

For routine use. Furnished silvered, evacuated and with aluminum base.

| Capacity<br>mL | Inside<br>Diameter<br>Inches    | Inside<br>Depth<br>Inches       | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------|---------------------------------|--------------------|---------------|
| 350            | 2 <sup>3</sup> / <sub>8</sub>   | 4 <sup>7</sup> / <sub>16</sub>  | <b>LG-7671-100</b> | \$90.35       |
| 665            | 2 <sup>3</sup> / <sub>4</sub>   | 7 <sup>11</sup> / <sub>16</sub> | <b>LG-7671-102</b> | 89.64         |
| 1000           | 2 <sup>11</sup> / <sub>16</sub> | 11 <sup>7</sup> / <sub>8</sub>  | <b>LG-7671-104</b> | 94.53         |
| 1900           | 4 <sup>3</sup> / <sub>4</sub>   | 7 <sup>3</sup> / <sub>4</sub>   | <b>LG-7671-106</b> | 218.81        |
| 4300           | 6                               | 10 <sup>7</sup> / <sub>8</sub>  | <b>LG-7671-108</b> | 288.51        |
| 5000           | 8 <sup>1</sup> / <sub>2</sub>   | 15                              | <b>LG-7671-110</b> | 407.03        |

*\*Note: LG-7671-110 has spherical shape.*

**Flask, Dewar, Low Form, Cylindrical**

Flasks are silvered and evacuated. Suitable for use with liquid nitrogen. Convenient when doing sub-ambient reactions or working with biological materials. Entire unit can be placed on a magnetic stirrer. Supplied with aluminum base.

| Capacity<br>mL | Inside<br>Diameter<br>mm | Inside<br>Depth<br>mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------------|-----------------------|--------------------|---------------|
| 150            | 80                       | 35                    | <b>LG-7680-100</b> | \$169.15      |
| 350            | 80                       | 75                    | <b>LG-7680-102</b> | 173.04        |
| 500            | 105                      | 53                    | <b>LG-7680-104</b> | 212.90        |
| 850            | 130                      | 75                    | <b>LG-7680-106</b> | 227.24        |
| 2500           | 170                      | 135                   | <b>LG-7680-108</b> | 407.18        |

**Funnel, Addition, Cylindrical, Pressure Equalizing, PTFE Plug**

Cylindrical funnel has pressure equalizing sidearm. Outer joint at top is the same size as the lower inner joint. Inner joint has a sealed-in drip tube.

| Capacity<br>mL | Joint | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------|------------------|---------------------|---------------|
| 10             | 14/20 | 2                | <b>ML-1421T-700</b> | \$107.75      |
| 10             | 19/22 | 2                | <b>ML-1421T-750</b> | 111.01        |
| 25             | 14/20 | 2                | <b>ML-1421T-702</b> | 107.75        |
| 25             | 19/22 | 2                | <b>ML-1421T-752</b> | 111.01        |
| 50             | 14/20 | 2                | <b>ML-1421T-704</b> | 107.75        |
| 60             | 14/20 | 2                | <b>ML-1421T-706</b> | 107.75        |
| 60             | 19/22 | 2                | <b>ML-1421T-756</b> | 111.01        |
| 60             | 24/40 | 2                | <b>LG-8266T-100</b> | 141.62        |
| 125            | 24/40 | 2                | <b>LG-8266T-102</b> | 149.68        |
| 250            | 24/40 | 2                | <b>LG-8266T-104</b> | 169.70        |
| 500            | 24/40 | 4                | <b>LG-8266T-106</b> | 178.99        |
| 500            | 29/26 | 4                | <b>LG-8266T-107</b> | 185.87        |
| 500            | 29/42 | 4                | <b>LG-8266T-108</b> | 185.85        |
| 1000           | 24/40 | 4                | <b>LG-8266T-110</b> | 208.52        |
| 1000           | 29/26 | 4                | <b>LG-8266T-111</b> | 215.17        |
| 1000           | 29/42 | 4                | <b>LG-8266T-112</b> | 215.15        |



**LG-8266T  
ML-1421T**

Teflon  
Plugs

**Funnel, Addition, Cylindrical, Pressure Equalizing, PTFE Plug**

Similar to *LG-8266T*, except with a 2mm PTFE stopcock in the pressure equalizing sidearm. Thus, the funnel may be refilled without opening a system to the atmosphere.

| Capacity<br>mL | Joint | Bottom<br>Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------|----------------------------|---------------------|---------------|
| 60             | 24/40 | 2                          | <b>LG-8268T-100</b> | \$185.73      |
| 125            | 24/40 | 2                          | <b>LG-8268T-102</b> | 188.37        |
| 250            | 24/40 | 2                          | <b>LG-8268T-104</b> | 199.11        |
| 500            | 24/40 | 4                          | <b>LG-8268T-106</b> | 215.15        |
| 1000           | 24/40 | 4                          | <b>LG-8268T-110</b> | 244.56        |

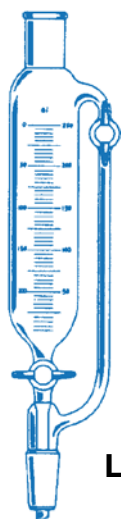


**LG-8268T**



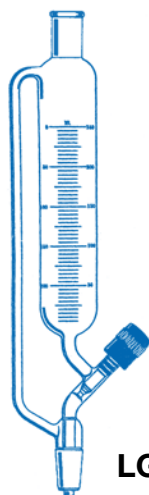
**Teflon Plug**

**ML-1431T  
LG-8271T**



**Teflon Plug**

**LG-8273T**



**LG-8269T**

### Funnel, Addition, Cylindrical, Pressure Equalizing, Graduated

Similar to LG-8266T but graduated with a double scale from the stopcock.

| Capacity<br>mL | Subdivision<br>mL | Joint | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-------|------------------|---------------------|---------------|
| 10             | 0.2               | 14/20 | 2                | <b>ML-1431T-700</b> | \$137.76      |
| 25             | 0.5               | 14/20 | 2                | <b>ML-1431T-702</b> | 137.76        |
| 50             | 1                 | 14/20 | 2                | <b>ML-1431T-704</b> | 140.43        |
| 60             | 1                 | 14/20 | 2                | <b>ML-1431T-706</b> | 140.43        |
| 10             | 0.2               | 19/22 | 2                | <b>ML-1431T-750</b> | 142.95        |
| 25             | 0.5               | 19/22 | 2                | <b>ML-1431T-752</b> | 142.95        |
| 50             | 1                 | 19/22 | 2                | <b>ML-1431T-754</b> | 142.95        |
| 60             | 1                 | 19/22 | 2                | <b>ML-1431T-756</b> | 142.95        |
| 60             | 1                 | 24/40 | 2                | <b>LG-8271T-100</b> | 154.90        |
| 125            | 1                 | 24/40 | 2                | <b>LG-8271T-102</b> | 167.90        |
| 250            | 5                 | 24/40 | 2                | <b>LG-8271T-104</b> | 191.42        |
| 500            | 5                 | 24/40 | 4                | <b>LG-8271T-106</b> | 213.82        |
| 500            | 5                 | 29/42 | 4                | <b>LG-8271T-108</b> | 220.56        |
| 1000           | 10                | 24/40 | 4                | <b>LG-8271T-110</b> | 256.72        |
| 1000           | 10                | 29/42 | 4                | <b>LG-8271T-112</b> | 263.35        |

### Funnel, Addition, Cylindrical, Pressure Equalizing, Graduated

Similar to LG-8271T, except with a 2mm PTFE stopcock in the pressure equalizing sidearm. Thus, the funnel may be refilled without opening a system to the atmosphere. Graduated with double scale from the stopcock.

| Capacity<br>mL | Subdivision<br>mL | Bottom<br>Joint | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-----------------|------------------|---------------------|---------------|
| 60             | 1                 | 24/40           | 2                | <b>LG-8273T-100</b> | \$205.16      |
| 125            | 1                 | 24/40           | 2                | <b>LG-8273T-102</b> | 207.17        |
| 250            | 5                 | 24/40           | 2                | <b>LG-8273T-104</b> | 235.15        |
| 500            | 5                 | 24/40           | 4                | <b>LG-8273T-106</b> | 253.83        |
| 500            | 5                 | 29/42           | 4                | <b>LG-8273T-108</b> | 260.57        |
| 1000           | 10                | 24/40           | 4                | <b>LG-8273T-110</b> | 296.73        |
| 1000           | 10                | 29/42           | 4                | <b>LG-8273T-112</b> | 303.38        |

### Funnel, Addition, Graduated, Threaded Valve

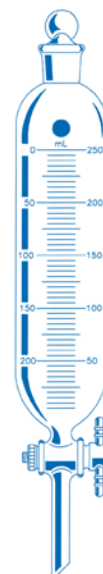
Similar to LG-8271T except supplied with PTFE valve to allow for semi-needle valve action.

| Capacity<br>mL | Subdivision<br>mL | Joints | Valve<br>Size mm | Part<br>Number      | Each<br>Price |
|----------------|-------------------|--------|------------------|---------------------|---------------|
| 250            | 5.0               | 24/40  | 0-4              | <b>LG-8269T-100</b> | \$187.50      |
| 250            | 5.0               | 29/42  | 0-4              | <b>LG-8269T-102</b> | 195.10        |
| 500            | 5.0               | 24/40  | 0-4              | <b>LG-8269T-104</b> | 211.40        |
| 500            | 5.0               | 29/42  | 0-4              | <b>LG-8269T-106</b> | 218.60        |
| 1000           | 10.0              | 24/40  | 0-4              | <b>LG-8269T-108</b> | 248.20        |
| 1000           | 10.0              | 29/42  | 0-4              | <b>LG-8269T-110</b> | 252.90        |

### Funnel, Separatory, Cylindrical, Graduated, PTFE Plug

Volume is calibrated to the stopcock and offered with increasing/decreasing volume graduations. Supplied with glass stopper.

| Capacity<br>mL | Subdivision<br>mL | Stopper<br>Size | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------------------|-----------------|------------------|---------------------|---------------|
| 125            | 1                 | 22              | 2                | <b>LG-8441T-100</b> | \$100.28      |
| 250            | 5                 | 22              | 2                | <b>LG-8441T-102</b> | 134.99        |
| 500            | 5                 | 27              | 4                | <b>LG-8441T-104</b> | 160.29        |
| 1000           | 10                | 27              | 4                | <b>LG-8441T-106</b> | 179.57        |
| 2000           | 20                | 27              | 6                | <b>LG-8441T-108</b> | 281.48        |
| 125            | 1                 | 24/40           | 2                | <b>LG-8441T-200</b> | 117.02        |
| 250            | 5                 | 24/40           | 2                | <b>LG-8441T-202</b> | 145.10        |
| 500            | 5                 | 24/40           | 4                | <b>LG-8441T-204</b> | 172.03        |
| 1000           | 10                | 24/40           | 4                | <b>LG-8441T-206</b> | 224.69        |
| 2000           | 20                | 24/40           | 6                | <b>LG-8441T-208</b> | 289.06        |



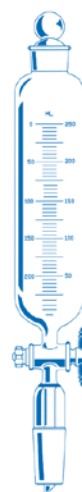
**Teflon  
Plug**

**LG-8441T**

### Funnel, Separatory, Cylindrical, Graduated, PTFE Plug

With a inner joint and drip tip which extends below the joint. Supplied with glass stopper and PTFE Plug.

| Capacity<br>mL | Subdivision<br>mL | Lower<br>Joint | Stopcock<br>Size | Stopper<br>Size | Part<br>Number      | Each<br>Price |
|----------------|-------------------|----------------|------------------|-----------------|---------------------|---------------|
| 60             | 1                 | 24/40          | 2                | 16              | <b>LG-8471T-100</b> | \$157.65      |
| 125            | 1                 | 24/40          | 2                | 22              | <b>LG-8471T-102</b> | 159.10        |
| 250            | 5                 | 24/40          | 2                | 22              | <b>LG-8471T-104</b> | 169.84        |
| 250            | 5                 | 29/26          | 2                | 22              | <b>LG-8471T-105</b> | 197.06        |
| 250            | 5                 | 29/42          | 2                | 22              | <b>LG-8471T-106</b> | 197.06        |
| 500            | 5                 | 24/40          | 4                | 27              | <b>LG-8471T-108</b> | 205.86        |



**Teflon  
Plug**

**LG-8471T**

### Funnel, Separatory, Cylindrical, Graduated, Glass Plug

With a inner joint and drip tip which extends below the joint. Supplied with glass stopper and glass plug.

| Capacity<br>mL | Subdivision<br>mL | Lower<br>Joint | Stopcock<br>Size | Stopper<br>Size | Part<br>Number     | Each<br>Price |
|----------------|-------------------|----------------|------------------|-----------------|--------------------|---------------|
| 125            | 1                 | 24/40          | 2                | 22              | <b>LG-8480-100</b> | \$145.84      |
| 250            | 5                 | 24/40          | 2                | 22              | <b>LG-8480-102</b> | 159.49        |
| 500            | 5                 | 24/40          | 4                | 27              | <b>LG-8480-106</b> | 182.96        |



**LG-8480**



**LG-8370**



**LG-8371T**



**LG-8420**



**C-6340**

### Funnel, Separatory, Globe

Supplied with solid glass stopper.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Length of<br>Stem mm | Part<br>Number     | Each<br>Price |
|----------------|------------------|---------|----------------------|--------------------|---------------|
| 30             | 2                | 16      | 175                  | <b>LG-8370-100</b> | \$60.25       |
| 60             | 2                | 16      | 175                  | <b>LG-8370-102</b> | 63.52         |
| 125            | 2                | 22      | 175                  | <b>LG-8370-104</b> | 76.32         |
| 250            | 2                | 22      | 175                  | <b>LG-8370-106</b> | 90.52         |
| 500            | 4                | 27      | 175                  | <b>LG-8370-108</b> | 126.29        |
| 1000           | 4                | 27      | 175                  | <b>LG-8370-110</b> | 171.32        |
| 2000           | 6                | 38      | 130                  | <b>LG-8370-112</b> | 275.45        |
| 4000           | 8                | 38      | 135                  | <b>LG-8370-114</b> | 379.06        |

### Funnel, Separatory, Globe, with PTFE Plug

Supplied with a glass stopper and PTFE plug.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Length of<br>Stem mm | Part<br>Number      | Each<br>Price |
|----------------|------------------|---------|----------------------|---------------------|---------------|
| 30             | 2                | 16      | 175                  | <b>LG-8371T-100</b> | \$57.94       |
| 60             | 2                | 16      | 175                  | <b>LG-8371T-102</b> | 65.02         |
| 125            | 2                | 22      | 175                  | <b>LG-8371T-104</b> | 70.94         |
| 250            | 2                | 22      | 175                  | <b>LG-8371T-105</b> | 83.95         |
| 500            | 4                | 27      | 175                  | <b>LG-8371T-108</b> | 98.13         |
| 1000           | 4                | 27      | 175                  | <b>LG-8371T-110</b> | 138.61        |
| 2000           | 6                | 38      | 130                  | <b>LG-8371T-112</b> | 207.19        |
| 4000           | 8                | 38      | 135                  | <b>LG-8371T-114</b> | 292.04        |
| 6000           | 8                | 38      | 135                  | <b>LG-8371T-116</b> | 313.84        |

### Funnel, Separatory, Squibb

With glass stopper and a glass plug.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Part<br>Number     | Each<br>Price |
|----------------|------------------|---------|--------------------|---------------|
| 30             | 2                | 13      | <b>LG-8420-100</b> | \$48.11       |
| 60             | 2                | 16      | <b>LG-8420-102</b> | 50.86         |
| 125            | 2                | 22      | <b>LG-8420-104</b> | 60.13         |
| 250            | 4                | 22      | <b>LG-8420-106</b> | 69.48         |
| 500            | 4                | 27      | <b>LG-8420-108</b> | 84.18         |
| 1000           | 4                | 27      | <b>LG-8420-110</b> | 123.20        |
| 2000           | 6                | 38      | <b>LG-8420-112</b> | 171.03        |
| 3000           | 8                | 38      | <b>LG-8420-114</b> | 212.49        |
| 4000           | 8                | 38      | <b>LG-8420-116</b> | 253.88        |
| 6000           | 8                | 38      | <b>LG-8420-118</b> | 296.73        |

### Funnel, PYREX®, Separatory, Globe Shape

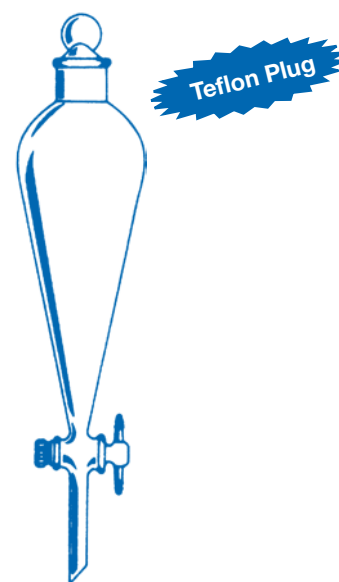
Funnels are tapered towards the stopcock to facilitate the separation of liquids.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Part<br>Number    | Each<br>Price |
|----------------|------------------|---------|-------------------|---------------|
| 125            | 2                | 22      | <b>C-6340-125</b> | \$84.51       |
| 250            | 2                | 22      | <b>C-6340-250</b> | 99.66         |
| 500            | 4                | 27      | <b>C-6340-500</b> | 139.99        |
| 1000           | 4                | 27      | <b>C-6340-1L</b>  | 173.99        |
| 4000           | 8                | 38      | <b>C-6340-4L</b>  | 373.25        |

### Funnel, Separatory, Squibb

Similar to *LG-8420*, except with stopcock having PTFE plug.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Part<br>Number      | Each<br>Price |
|----------------|------------------|---------|---------------------|---------------|
| 10             | 2                | 14/20   | <b>ML-1441T-700</b> | \$59.06       |
| 15             | 2                | 14/20   | <b>ML-1441T-702</b> | 59.06         |
| 25             | 2                | 14/20   | <b>ML-1441T-704</b> | 59.06         |
| 30             | 2                | 14/20   | <b>ML-1441T-706</b> | 59.06         |
| 30             | 2                | 13      | <b>LG-8421T-100</b> | 57.94         |
| 50             | 2                | 14/20   | <b>ML-1441T-708</b> | 59.06         |
| 60             | 2                | 16      | <b>LG-8421T-102</b> | 60.86         |
| 125            | 2                | 22      | <b>LG-8421T-104</b> | 68.16         |
| 250            | 4                | 22      | <b>LG-8421T-106</b> | 81.28         |
| 500            | 4                | 27      | <b>LG-8421T-108</b> | 94.35         |
| 1000           | 4                | 27      | <b>LG-8421T-110</b> | 125.81        |
| 2000           | 6                | 38      | <b>LG-8421T-112</b> | 187.06        |
| 3000           | 8                | 38      | <b>LG-8421T-114</b> | 221.77        |
| 4000           | 8                | 38      | <b>LG-8421T-116</b> | 262.02        |
| 6000           | 8                | 38      | <b>LG-8421T-118</b> | 300.72        |
| 30             | Funnel Only      |         | <b>LG-8421T-200</b> | 50.63         |
| 60             | Funnel Only      |         | <b>LG-8421T-202</b> | 51.66         |
| 125            | Funnel Only      |         | <b>LG-8421T-204</b> | 59.00         |
| 250            | Funnel Only      |         | <b>LG-8421T-206</b> | 70.36         |
| 500            | Funnel Only      |         | <b>LG-8421T-208</b> | 81.65         |
| 1000           | Funnel Only      |         | <b>LG-8421T-210</b> | 108.95        |
| 2000           | Funnel Only      |         | <b>LG-8421T-212</b> | 158.85        |
| 3000           | Funnel Only      |         | <b>LG-8421T-214</b> | 188.34        |
| 4000           | Funnel Only      |         | <b>LG-8421T-216</b> | 222.52        |
| 6000           | Funnel Only      |         | <b>LG-8421T-218</b> | 255.37        |



**ML-1441T  
LG-8421T**

### Funnel, Separatory, Squibb, PFTE Plug, Plastic Stopper

Similar to *LG-8241T* except supplied with plastic stopper.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Part<br>Number      | Each<br>Price |
|----------------|------------------|---------|---------------------|---------------|
| 60             | 2                | 16      | <b>LG-8422T-100</b> | \$64.77       |
| 125            | 2                | 22      | <b>LG-8422T-102</b> | 73.18         |
| 250            | 4                | 22      | <b>LG-8422T-104</b> | 86.36         |
| 500            | 4                | 27      | <b>LG-8422T-106</b> | 100.75        |
| 1000           | 4                | 27      | <b>LG-8422T-108</b> | 131.94        |
| 2000           | 6                | 38      | <b>LG-8422T-110</b> | 187.10        |
| 4000           | 8                | 38      | <b>LG-8422T-112</b> | 257.89        |



**LG-8422T**

### Funnel, PYREX®, Separatory, Pear-Shaped

| Capacity<br>mL | Stopcock<br>Size | Stopper | Part<br>Number    | Each<br>Price |
|----------------|------------------|---------|-------------------|---------------|
| 60             | 2                | 16      | <b>C-6400-60</b>  | \$64.79       |
| 125            | 2                | 22      | <b>C-6400-125</b> | 78.35         |
| 250            | 2                | 22      | <b>C-6400-250</b> | 92.40         |
| 500            | 4                | 27      | <b>C-6400-500</b> | 110.44        |
| 1000           | 4                | 27      | <b>C-6400-1L</b>  | 164.70        |
| 2000           | 6                | 38      | <b>C-6400-2L</b>  | 238.16        |
| 4000           | 8                | 38      | <b>C-6400-4L</b>  | 525.71        |
| 6000           | 10               | 38      | <b>C-6400-6L</b>  | 387.29        |



**C-6400**

PLASTIC  
STOPPER

Teflon Plug



**LG-8435T**  
**LG-8436**  
**LG-3958T**



**LG-8430**

Teflon Plug



**ML-1451T**  
**LG-8431T**

### Funnel, Separatory, Squibb, Detachable PTFE Stopcock, Economy Style

Complete unit has a detachable PTFE stopcock, glass drip tip and plastic stopper.

| Supplied       | Capacity<br>mL | Stopper | Part<br>Number      | Each<br>Price |
|----------------|----------------|---------|---------------------|---------------|
| Complete       | 60             | 16      | <b>LG-8435T-100</b> | \$58.10       |
| Complete       | 125            | 22      | <b>LG-8435T-102</b> | 72.31         |
| Complete       | 250            | 22      | <b>LG-8435T-104</b> | 76.52         |
| Complete       | 500            | 27      | <b>LG-8435T-106</b> | 89.21         |
| Funnel Only    | 60             |         | <b>LG-8436-100</b>  | 32.29         |
| Funnel Only    | 125            |         | <b>LG-8436-102</b>  | 40.01         |
| Funnel Only    | 250            |         | <b>LG-8436-104</b>  | 46.07         |
| Funnel Only    | 500            |         | <b>LG-8436-106</b>  | 51.78         |
| 2mm PTFE Valve |                |         | <b>LG-3958T-104</b> | 29.68         |
| Glass Tip Only |                |         | <b>LG-3958-106</b>  | 5.69          |

### Funnel, Separatory, Squibb

Similar to *LG-8420*, except with inner member grinding with drip tip as the delivery stem.

| Capacity<br>mL | Stopcock<br>Size | Stopper | Joint | Part<br>Number     | Each<br>Price |
|----------------|------------------|---------|-------|--------------------|---------------|
| 60             | 2                | 16      | 24/40 | <b>LG-8430-100</b> | \$94.10       |
| 125            | 2                | 22      | 24/40 | <b>LG-8430-102</b> | 100.60        |
| 250            | 4                | 22      | 24/40 | <b>LG-8430-104</b> | 115.40        |
| 500            | 4                | 27      | 24/40 | <b>LG-8430-106</b> | 136.80        |
| 1000           | 4                | 27      | 29/42 | <b>LG-8430-108</b> | 215.60        |
| 2000           | 6                | 38      | 29/42 | <b>LG-8430-110</b> | 267.50        |

### Funnel, Separatory, Squibb, with PTFE Plug

Supplied with a inner joint, PTFE plug, and glass stopper. Lower joint has a sealed-in drip tube.

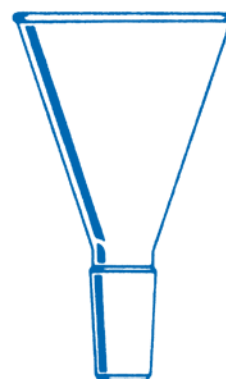
| Capacity<br>mL | Lower<br>Joint | Stopcock<br>Size | Stopper | Part<br>Number      | Each<br>Price |
|----------------|----------------|------------------|---------|---------------------|---------------|
| 30             | 14/20          | 2                | 14/20   | <b>ML-1451T-706</b> | \$74.84       |
| 60             | 14/20          | 2                | 14/20   | <b>ML-1451T-710</b> | 74.84         |
| 60             | 19/22          | 2                | 14/20   | <b>ML-1451T-760</b> | 77.50         |
| 60             | 24/40          | 2                | 16      | <b>LG-8431T-100</b> | 95.33         |
| 125            | 14/20          | 2                | 14/20   | <b>ML-1451T-712</b> | 76.19         |
| 125            | 19/22          | 2                | 14/20   | <b>ML-1451T-762</b> | 77.33         |
| 125            | 24/40          | 2                | 22      | <b>LG-8431T-102</b> | 98.95         |
| 250            | 24/40          | 4                | 22      | <b>LG-8431T-104</b> | 112.32        |
| 500            | 24/40          | 4                | 27      | <b>LG-8431T-106</b> | 132.58        |
| 1000           | 29/42          | 4                | 27      | <b>LG-8431T-108</b> | 203.97        |
| 2000           | 29/42          | 6                | 38      | <b>LG-8431T-110</b> | 256.72        |



### Funnel, Powder

For introduction of liquids or powders into containers having the same joint. Funnel design promotes free flow. Provides smooth surface for transfer of material.

| Approx. Diameter at Top mm | Joint | Part Number | Each Price |
|----------------------------|-------|-------------|------------|
| 100                        | 24/40 | LG-8300-102 | \$36.16    |
| 100                        | 29/26 | LG-8300-103 | 38.91      |
| 100                        | 29/42 | LG-8300-104 | 38.91      |
| 100                        | 45/50 | LG-8300-105 | 44.10      |
| 125                        | 24/40 | LG-8300-106 | 37.37      |
| 125                        | 29/42 | LG-8300-108 | 44.10      |
| 150                        | 45/50 | LG-8300-110 | 60.50      |



LG-8300

### Funnel, Powder, Offset

Designed with a straight side and suggested for use with multi-neck flasks.

| Approx. Diameter at Top mm | Joint | Part Number | Each Price |
|----------------------------|-------|-------------|------------|
| 50                         | 14/20 | ML-1365-700 | \$31.21    |
| 50                         | 19/22 | ML-1365-702 | 32.44      |
| 75                         | 24/40 | LG-8303-100 | 40.97      |
| 100                        | 24/40 | LG-8303-102 | 47.60      |
| 100                        | 29/26 | LG-8303-103 | 50.14      |
| 100                        | 29/42 | LG-8303-104 | 50.14      |

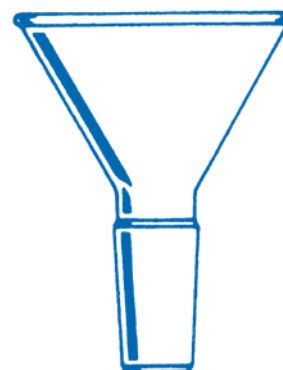


ML-1365  
LG-8303

### Funnel, Powder, 60°

Uniform wall and a strong beaded rim. Funnel angle is approximately 60°.

| Approx. Diameter at Top mm | Joint | Part Number | Each Price |
|----------------------------|-------|-------------|------------|
| 50                         | 14/20 | ML-1360-700 | \$23.74    |
| 75                         | 24/40 | LG-8305-100 | 32.05      |
| 100                        | 24/40 | LG-8305-102 | 34.85      |
| 100                        | 29/42 | LG-8305-104 | 40.01      |
| 125                        | 24/40 | LG-8305-106 | 48.46      |
| 125                        | 29/42 | LG-8305-108 | 51.76      |
| 150                        | 45/50 | LG-8305-110 | 60.13      |



ML-1360  
LG-8305

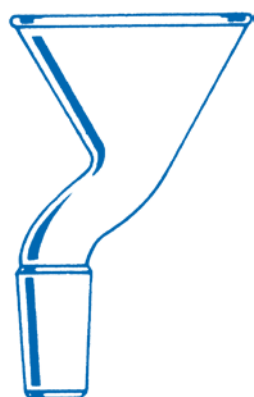


**LG-8307**

### Funnel, Powder, 60° Offset

Similar to LG-8305. Angled for use with multi-neck flasks.

| Approx.<br>Diameter<br>at Top mm | Joint | Part<br>Number     | Each<br>Price |
|----------------------------------|-------|--------------------|---------------|
| 75                               | 24/40 | <b>LG-8307-100</b> | \$42.37       |
| 100                              | 24/40 | <b>LG-8307-102</b> | 51.25         |
| 100                              | 29/42 | <b>LG-8307-104</b> | 59.29         |



**LG-8312**

### Funnel, Powder, 60° Angled

Designed for use with multi-neck flasks. Suitable for powders and liquids.

| Approx.<br>Diameter<br>at Top mm | Joint | Part<br>Number     | Each<br>Price |
|----------------------------------|-------|--------------------|---------------|
| 75                               | 24/40 | <b>LG-8312-102</b> | \$53.01       |
| 100                              | 24/40 | <b>LG-8312-104</b> | 57.49         |
| 100                              | 29/42 | <b>LG-8312-106</b> | 60.13         |
| 125                              | 24/40 | <b>LG-8312-108</b> | 64.77         |
| 125                              | 29/42 | <b>LG-8312-110</b> | 70.50         |

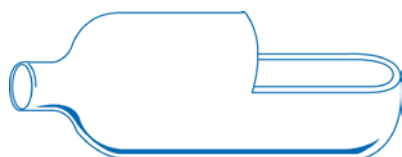


**LG-8313**

### Funnel, PTFE, Powder

Totally chemically inert with super smooth non-stick internal finish.

| Top Diam.<br>mm | Stem<br>mm | Height<br>mm | Part<br>Number     | Each<br>Price |
|-----------------|------------|--------------|--------------------|---------------|
| 30              | 8          | 50           | <b>LG-8313-100</b> | \$13.50       |
| 50              | 10         | 85           | <b>LG-8313-102</b> | 23.00         |
| 70              | 12         | 110          | <b>LG-8313-104</b> | 40.00         |
| 100             | 14         | 170          | <b>LG-8313-106</b> | 79.00         |
| 150             | 16         | 220          | <b>LG-8313-108</b> | 158.00        |



**LG-8315**

### Funnel, Weighing

Base of funnel is flat to provide stability on the balance pan. Provides a means of direct transfer to volumetric flasks, beakers, etc.

| Diameter<br>x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------------------|--------------------|---------------|
| 15 x 40                    | <b>LG-8315-100</b> | \$13.32       |
| 25 x 65                    | <b>LG-8315-102</b> | 16.04         |

### Funnel, PYREX®, Plain Stemless

Of molded construction with bottom ground flat; for use in the sugar industries. All have 6mm openings.

| Approx.<br>I.D.<br>mm | Approx.<br>Length<br>mm | Part<br>Number    | Each<br>Price |
|-----------------------|-------------------------|-------------------|---------------|
| 75                    | 60                      | <b>C-6240-75</b>  | \$9.08        |
| 100                   | 82                      | <b>C-6240-100</b> | 12.38         |



**C-6240**

### Funnel, PYREX®, Plain Filling, Powder

With a short stem. For use in transferring powders or filling bottles.

| Approx.<br>I.D. mm | Approx. Stem<br>Length x<br>O.D. mm | Total<br>Length<br>mm | Part<br>Number    | Each<br>Price |
|--------------------|-------------------------------------|-----------------------|-------------------|---------------|
| 65                 | 25 x 15                             | 83                    | <b>C-6220-65</b>  | \$6.92        |
| 75                 | 30 x 17                             | 94                    | <b>C-6220-75</b>  | 7.70          |
| 100                | 30 x 20                             | 120                   | <b>C-6220-100</b> | 11.30         |
| 125                | 35 x 25                             | 132                   | <b>C-6220-125</b> | 22.66         |
| 150                | 35 x 30                             | 157                   | <b>C-6220-150</b> | 44.44         |



**C-6220**

### Funnel, PYREX®, Hirsch Type, Fritted Disc

This type is very useful in preparation work, or in making separations where it is necessary to wash the precipitate and redissolve with chemicals which would attack filter paper. The angle of the funnel body facilitates the removal of precipitates.

| Approx. Top<br>Diam. mm<br>and Porosity | Approx.<br>Stem O.D.<br>x Length mm | Approx.<br>Length<br>mm | Part<br>Number     | Each<br>Price |
|-----------------------------------------|-------------------------------------|-------------------------|--------------------|---------------|
| 50C                                     | 20                                  | 118                     | <b>C-36210-50C</b> | \$52.03       |
| 50M                                     | 20                                  | 118                     | <b>C-36210-50M</b> | 51.12         |
| 50F                                     | 20                                  | 118                     | <b>C-36210-50F</b> | 51.49         |
| 75C                                     | 30                                  | 139                     | <b>C-36210-75C</b> | 71.99         |
| 75M                                     | 30                                  | 139                     | <b>C-36210-75M</b> | 73.25         |
| 75F                                     | 30                                  | 139                     | <b>C-36210-75F</b> | 71.99         |



**C-36210**



**C-31750**

**Gas Apparatus, PYREX®, Gas Washing, Side Inlet, Fritted Disc**

The side tube on this bottle has a rod sealed to the bottle near the top for extra strength. Tubulation O.D. is 10mm. The large diameter fritted disc permits the handling of large volumes of gas.

| Capacity mL and Porosity | Stopper Size | Approx. O.D. x Height mm | Part Number         | Each Price |
|--------------------------|--------------|--------------------------|---------------------|------------|
| 350C                     | 24/40        | 70 x 285                 | <b>C-31750-350C</b> | \$288.85   |



**C-31760**

**Gas Apparatus, PYREX®, Gas Washing, Tall Form, Fritted Disc**

These bottles have a large hexagonal base for stability. The fritted disc provides greater efficiency and more uniform dispersion of gas bubbles for complete absorption. Tubulation O.D.'s are 8mm and disc diameters are 20mm.

| Capacity mL and Porosity | Stopper Size | Approx. O.D. x Height mm | Part Number          | Each Price |
|--------------------------|--------------|--------------------------|----------------------|------------|
| 125EC                    | 40/50        | 38 x 300                 | <b>C-31760-125EC</b> | \$199.29   |
| 125C                     | 40/50        | 38 x 300                 | <b>C-31760-125C</b>  | 196.73     |
| 250EC                    | 40/50        | 51 x 305                 | <b>C-31760-250EC</b> | 214.90     |
| 250C                     | 40/50        | 51 x 305                 | <b>C-31760-250C</b>  | 190.25     |
| 500EC                    | 40/50        | 64 x 350                 | <b>C-31760-500EC</b> | 223.21     |
| 500C                     | 40/50        | 64 x 350                 | <b>C-31760-500C</b>  | 208.69     |

**Gas Apparatus, PYREX®, Gas Washing, Tall Form, Fritted Cylinder**

Stopper is equipped with a 12mm diameter fritted cylinder instead of a disc as a distributor. Tubulation O.D.'s are 8mm.



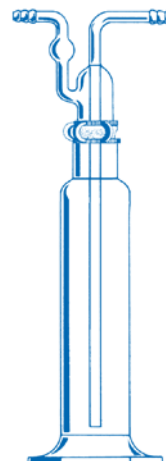
**C-31770**

| Capacity mL and Porosity | Stopper Size | Approx. O.D. x Height mm | Part Number          | Each Price |
|--------------------------|--------------|--------------------------|----------------------|------------|
| 125EC                    | 29/42        | 38 x 298                 | <b>C-31770-125EC</b> | \$159.08   |
| 125C                     | 29/42        | 38 x 298                 | <b>C-31770-125C</b>  | 174.57     |
| 250EC                    | 29/42        | 51 x 290                 | <b>C-31770-250EC</b> | 172.85     |
| 250C                     | 29/42        | 51 x 290                 | <b>C-31770-250C</b>  | 170.13     |
| 500EC                    | 29/42        | 63 x 340                 | <b>C-31770-500EC</b> | 210.64     |
| 500C                     | 29/42        | 63 x 340                 | <b>C-31770-500C</b>  | 188.89     |

**Gas Apparatus, Bottle, Gas Washing, Tall Form, Drechsel**

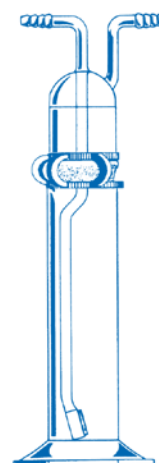
Complete unit is supplied with stopper having gas inlet and outlet tubes. A *LG-1004-110* clamp is supplied to secure the assembly. All joints are 29/42.

| Supplied     | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|--------------|----------------|--------------------|---------------|
| Complete     | 250            | <b>LG-3690-100</b> | \$99.38       |
| Complete     | 500            | <b>LG-3690-102</b> | 109.67        |
| Bottle Only  | 250            | <b>LG-3690-110</b> | 65.06         |
| Bottle Only  | 500            | <b>LG-3690-112</b> | 72.92         |
| Stopper Only | 250            | <b>LG-3690-120</b> | 34.71         |
| Stopper Only | 500            | <b>LG-3690-122</b> | 38.78         |

**LG-3690****Gas Apparatus, Bottle, Gas Washing, with Fritted Disc**

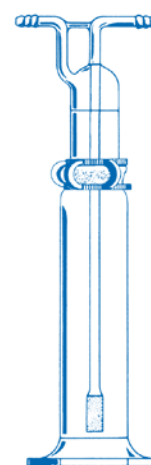
Stopper component contains gas inlet and outlet tubes. The lower inlet tube has coarse (C) disc sealed on to provide a stream of fine bubbles into the bottle. Complete units are supplied with a *LG-1004-116* plastic clamp. Joints are 45/50.

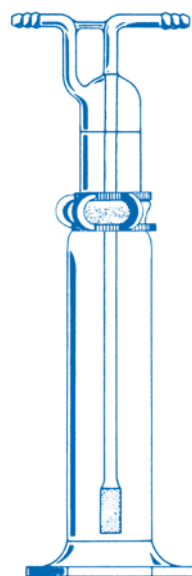
| Supplied     | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|--------------|----------------|--------------------|---------------|
| Complete     | 125            | <b>LG-3750-100</b> | \$167.70      |
| Complete     | 250            | <b>LG-3750-102</b> | 194.89        |
| Bottle Only  | 125            | <b>LG-3750-110</b> | 65.37         |
| Bottle Only  | 250            | <b>LG-3750-112</b> | 80.61         |
| Stopper Only | 125            | <b>LG-3750-120</b> | 107.49        |
| Stopper Only | 250            | <b>LG-3750-122</b> | 127.89        |

**LG-3750****Gas Apparatus, Bottle, Gas Washing, with Fritted Cylinder**

Similar to *LG-3750* except inlet tube has a fritted coarse disc. (12mm O.D. x 25mm Length). Supplied with *LG-1004-110* plastic clamp. Joints are 29/42. Inlet tube extends nearly to the base of the bottle.

| Supplied     | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|--------------|----------------|--------------------|---------------|
| Complete     | 125            | <b>LG-3761-100</b> | \$141.01      |
| Complete     | 250            | <b>LG-3761-102</b> | 147.04        |
| Complete     | 500            | <b>LG-3761-104</b> | 160.29        |
| Bottle Only  | 125            | <b>LG-3761-110</b> | 43.39         |
| Bottle Only  | 250            | <b>LG-3761-112</b> | 48.81         |
| Bottle Only  | 500            | <b>LG-3761-114</b> | 59.06         |
| Stopper Only | 125            | <b>LG-3761-120</b> | 99.18         |
| Stopper Only | 250            | <b>LG-3761-122</b> | 100.02        |
| Stopper Only | 500            | <b>LG-3761-124</b> | 103.66        |

**LG-3761**

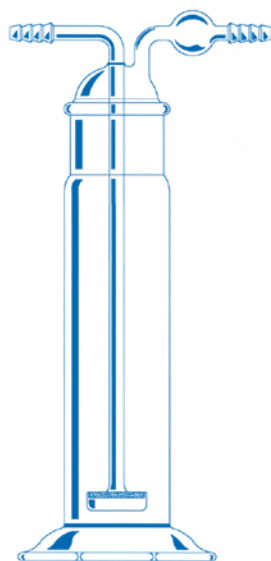


**LG-3762**

**Gas Apparatus, Bottle, Gas Washing, with Fritted Cylinder**

Similar to *LG-3750* except inlet tube has a fritted extra coarse disc. (12mm O.D. x 25mm Length). Supplied with *LG-1004-110* plastic clamp. Joints are 29/42. Inlet tube extends nearly to the base of the bottle.

| Supplied     | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|--------------|----------------|--------------------|---------------|
| Complete     | 125            | <b>LG-3762-100</b> | \$141.01      |
| Complete     | 250            | <b>LG-3762-102</b> | 147.04        |
| Complete     | 500            | <b>LG-3762-104</b> | 160.29        |
| Bottle Only  | 125            | <b>LG-3762-110</b> | 43.39         |
| Bottle Only  | 250            | <b>LG-3762-112</b> | 48.83         |
| Bottle Only  | 500            | <b>LG-3762-114</b> | 59.06         |
| Stopper Only | 125            | <b>LG-3762-120</b> | 99.18         |
| Stopper Only | 250            | <b>LG-3762-122</b> | 100.02        |
| Stopper Only | 500            | <b>LG-3762-124</b> | 103.66        |



**LG-3765**

**Gas Apparatus, Bottle, Gas Washing, with Fritted Disc**

Complete unit consists of a bottle and a 40/35 stopper assembly with an inlet tube sealed through the center of a fritted glass disc. Inlet tube extends nearly to the base of the bottle. Supplied with coarse (C) disc.

| Supplied     | Capacity<br>mL | Part<br>Number     | Each<br>Price |
|--------------|----------------|--------------------|---------------|
| Complete     | 125            | <b>LG-3765-124</b> | \$131.94      |
| Complete     | 250            | <b>LG-3765-126</b> | 137.94        |
| Complete     | 500            | <b>LG-3765-128</b> | 149.93        |
| Complete     | 1000           | <b>LG-3765-130</b> | 198.84        |
| Bottle Only  | 125            | <b>LG-3765-116</b> | 54.23         |
| Bottle Only  | 250            | <b>LG-3765-118</b> | 63.26         |
| Bottle Only  | 500            | <b>LG-3765-120</b> | 72.31         |
| Bottle Only  | 1000           | <b>LG-3765-122</b> | 94.88         |
| Stopper Only | 125            | <b>LG-3765-132</b> | 80.37         |
| Stopper Only | 250            | <b>LG-3765-134</b> | 81.56         |
| Stopper Only | 500            | <b>LG-3765-136</b> | 82.76         |
| Stopper Only | 1000           | <b>LG-3765-138</b> | 105.87        |

### Gas Apparatus, Gas Washing Tube

Fritted cylinder has a fine (F) porosity frit at base of inner tube.

| Supplied     | Outside<br>Perimeter<br>Overall<br>Height mm | Joint<br>Size | Part<br>Number     | Each<br>Price |
|--------------|----------------------------------------------|---------------|--------------------|---------------|
| Complete     | 17 x 170                                     | 14/20         | <b>ML-1490-700</b> | \$89.95       |
| Complete     | 22 x 170                                     | 19/22         | <b>ML-1490-702</b> | 91.17         |
| Stopper Only |                                              | 14/20         | <b>ML-1490-710</b> | 62.89         |
| Stopper Only |                                              | 19/22         | <b>ML-1490-712</b> | 64.65         |
| Tube Only    | 17 x 140                                     | 14/20         | <b>ML-1490-720</b> | 30.55         |
| Tube Only    | 22 x 140                                     | 19/22         | <b>ML-1490-722</b> | 31.11         |

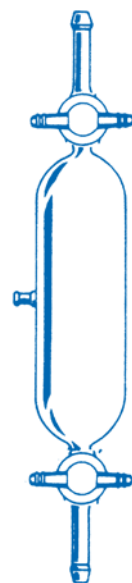


**ML-1490**

### Gas Apparatus, Gas Collecting Tube, PTFE Plugs

Unit has a side outlet in body for a self sealing syringe stopper (supplied). Useful in gas chromatography or mass spectroscopy. Stopcocks have PTFE plugs.

| Capacity<br>mL | Approx.<br>Body O.D.<br>x Length<br>mm | Stopcock<br>Size | Part<br>Number      | Each<br>Price |
|----------------|----------------------------------------|------------------|---------------------|---------------|
| 50             | 28 x 250                               | 2                | <b>LG-8601T-102</b> | \$130.75      |
| 125            | 38 x 300                               | 2                | <b>LG-8601T-104</b> | 134.99        |
| 250            | 51 x 340                               | 4                | <b>LG-8601T-106</b> | 154.27        |
| 500            | 64 x 380                               | 4                | <b>LG-8601T-108</b> | 179.57        |

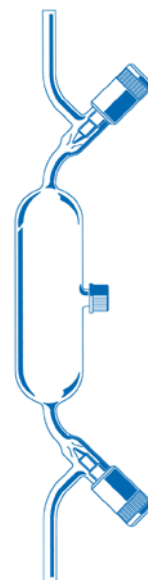


**LG-8601T**

### Gas Apparatus, Gas Collecting Tube, Economy Valves

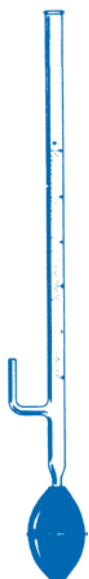
Gas collecting tube with economy 0-4mm PTFE valves having an adjustable internal seal and septum port having screw cap. Stored sample contacts only glass and PTFE.

| Capacity<br>mL | Part<br>Number      | Each<br>Price |
|----------------|---------------------|---------------|
| 125            | <b>LG-8603T-100</b> | \$94.78       |
| 500            | <b>LG-8603T-104</b> | 115.61        |
| 1000           | <b>LG-8603T-106</b> | 137.96        |



**LG-8603T**





**LG-8612**



**ML-1080**  
**LG-8680**



**LG-8700**

### Gas Apparatus, Flowmeter, Soap Film

Used in routine analytical gas chromatography to measure flow rate of the carrier gas. A soap bubble is formed in the bottom of the graduated tube, and it is pushed upward by gas from the exit end of the chromatograph. Measurement of the volume through which the bubble travels in a definite period of time gives a determination of flow rate. Supplied with *LG-4340-100* rubber bulb..

| Capacity<br>mL | Subdivision<br>mL | Part<br>Number     | Each<br>Price |
|----------------|-------------------|--------------------|---------------|
| 10             | 0.1               | <b>LG-8612-095</b> | \$55.18       |
| 25             | 1.0               | <b>LG-8612-100</b> | 62.36         |
| 50             | 1.0               | <b>LG-8612-102</b> | 71.96         |
| 100            | 1.0               | <b>LG-8612-104</b> | 82.76         |

### Gas Apparatus, Gas Dispersion Tube, Cylindrical

Consists of a closed bottom fritted glass cylinder. Useful when gas must be introduced into a container with narrow opening.

| Porosity     | Tube<br>Diam. (mm) | Overall<br>Length mm | Part<br>Number     | Each<br>Price |
|--------------|--------------------|----------------------|--------------------|---------------|
| Fine         | 5                  | 135                  | <b>ML-1080-700</b> | \$16.97       |
| Medium       | 5                  | 135                  | <b>ML-1080-702</b> | 16.97         |
| Coarse       | 5                  | 135                  | <b>ML-1080-704</b> | 16.97         |
| Extra Coarse | 12                 | 250                  | <b>LG-8680-100</b> | 25.92         |
| Coarse       | 12                 | 250                  | <b>LG-8680-110</b> | 25.00         |
| Medium       | 12                 | 250                  | <b>LG-8680-120</b> | 25.46         |
| Fine         | 12                 | 250                  | <b>LG-8680-130</b> | 25.46         |

### Gas Apparatus, Gas Dispersion Tube, Tilted

Stem diameter is 8mm. The disc angle is 15°. The angle allows passage through a small opening. Size of opening is detailed below.

| Porosity | Approx.<br>Diam. of<br>Disc (mm) | Opening<br>Necessary<br>mm | Part<br>Number     | Each<br>Price |
|----------|----------------------------------|----------------------------|--------------------|---------------|
| Coarse   | 20                               | 25                         | <b>LG-8700-110</b> | \$43.51       |
| Coarse   | 30                               | 37                         | <b>LG-8700-112</b> | 48.99         |
| Coarse   | 40                               | 50                         | <b>LG-8700-114</b> | 56.49         |
| Medium   | 20                               | 25                         | <b>LG-8700-120</b> | 42.69         |
| Medium   | 30                               | 37                         | <b>LG-8700-122</b> | 48.99         |
| Medium   | 40                               | 50                         | <b>LG-8700-124</b> | 56.49         |

### Gas Apparatus, Filter Tube

Consists of a 10mm fritted disc sealed at the end of a 6mm O.D. tube. Useful in removing supernatant liquid from above a precipitate.

| Frit Porosity | Part Number        | Each Price |
|---------------|--------------------|------------|
| Coarse        | <b>ML-1090-700</b> | \$27.18    |
| Medium        | <b>ML-1090-710</b> | 27.69      |
| Fine          | <b>ML-1090-720</b> | 27.69      |



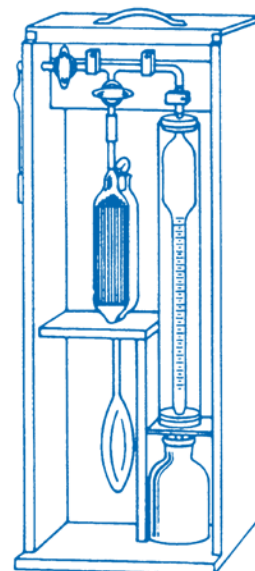
**ML-1090**

### Gas Apparatus, Orsat-Muencke Gas Analysis Apparatus

For the determination of carbon dioxide.

Apparatus consists of a jacketed buret, an absorption pipet, manifold, 250mL leveling bottle, orsat bag, and accessories. Glassware is mounted in a wooden carrying case with removable front and back panels.

| Supplied                        | Part Number        | Each Price |
|---------------------------------|--------------------|------------|
| Complete                        | <b>LG-8514-100</b> | \$ 573.87  |
| Buret Only                      | <b>LG-8514-102</b> | 97.73      |
| Buret Water Jacket Only         | <b>LG-8514-104</b> | 27.96      |
| Absorption Pipet Only           | <b>LG-8514-106</b> | 84.87      |
| Manifold Only                   | <b>LG-8514-108</b> | 95.55      |
| Drying Tube Only                | <b>LG-8514-110</b> | 15.32      |
| Rubber Stopper For Water Jacket | <b>LG-8514-112</b> | 3.43       |
| Leveling Bottle, 250mL          | <b>LG-8514-114</b> | 37.10      |
| Orsat Bag, 2" x 4"              | <b>LG-8514-116</b> | 15.71      |



**LG-8514**

**LG-8945****Digital Thermometer**

Micro-processed based, battery-operated thermometer monitors temperatures of furnaces, reactors, baths, appliances and heating mantles. Can be hand-held or placed on a bench with built-in flip-down stand. The 3 <sup>3</sup>/<sub>4</sub>" digit, 1/2" high LCD display makes it easy to read. Four buttons control On/Off, C/F scale, Hold and Cal for single point field calibration. Input is ANSI standard mini-connector, voltage protected. Thermocouples may be interchanged easily in seconds. Accuracy: +0.2% of reading +0.5°C above 99° (+1°C below 99°C)

| Type              | Range           | Description                                                                                    | Part Number        | Each Price |
|-------------------|-----------------|------------------------------------------------------------------------------------------------|--------------------|------------|
| Complete          | -190° to 1000°C | Portable Digital                                                                               | <b>LG-8945-100</b> | \$265.00   |
| Thermocouple Only | 0°C to 370°C    | 48" long, Fiberglass insulated duplex lead with stainless steel overband for liquid immersion. | <b>LG-8945-102</b> | 70.00      |
| Thermocouple Only | 0°C to 260°C    | Same as above except probe is PTFE coated                                                      | <b>LG-8945-104</b> | 110.00     |

**LG-8946****Digital Logging Thermometer**

Portable digital thermometer logs up to 1000 real-time readings and can send them to a printer or computer by infrared output. Accepts up to two thermocouple inputs and provides for two-point field calibration for offset and slope. Allows selection of log interval from one second to one hour and of resolution and input filtering. LCD display can show minimum, maximum and differential readings simultaneously. Provides field calibration anti-tampering lockout.

*Specifications:*

Display: Three 4-digits; 0.4"H and 0.2"H

*Accuracy:*

J Type: +/-0.4°C (+/-0.7°F) above -150°C (-238°F), +/-1°C (+/-2°F) below -150°C (-238°F), +/- 0.1% of reading

| Type              | Range           | Description                                                                                   | Part Number        | Each Price |
|-------------------|-----------------|-----------------------------------------------------------------------------------------------|--------------------|------------|
| Thermometer       | -200° to 1000°C | Portable Digital                                                                              | <b>LG-8946-100</b> | \$365.00   |
| Thermocouple Only | 0°C to 370°C    | 48" long, Fiberglass insulated duplex lead with stainless steel overband for liquid immersion | <b>LG-8945-102</b> | 70.00      |
| Thermocouple Only | 0°C to 260°C    | same as above except probe is PTFE coated                                                     | <b>LG-8945-104</b> | 110.00     |

### MiniTrol, Temperature Controller

Regulates apparatus requiring stepless control. Manually adjustable, it proportions the operating voltage to the load from 5.5% to 100% of the time according to the preset dial position. When turned off, it effects a positive break. Has no sensing element, so operator has control over operation. Once desired temperature is determined on initial trial, a simple dial setting controls repeat operations. Supplied with 3-wire line cord with molded plug.

| Volts | Amps | Part Number        | Each Price |
|-------|------|--------------------|------------|
| 120   | 12   | <b>LG-8951-100</b> | \$148.00   |
| 240   | 10   | <b>LG-8951-102</b> | 174.00     |



**LG-8951**

### MiniTwin, Temperature Controller

Similar to LG-8951, except it handles two separate circuits at one time.

| Volts | Amps | Part Number        | Each Price |
|-------|------|--------------------|------------|
| 120   | 7.5  | <b>LG-8952-100</b> | \$222.00   |



**LG-8952**

### PowrTrol™, Mantle Control

The PowrTrol control is a solid-state, proportional-voltage power control that provides precise manual control of heating mantles, tapes, cords and other resistive loads. The output range is adjustable from 5-100% of rated voltage. Provided with lighted on-off power switch, circuit breaker protection, 3-wire load receptacle, and 3-wire line cord with molded plug. 10A@120V, 1,200W.

| Electrical Rating | Part Number        | Each Price |
|-------------------|--------------------|------------|
| 10A@120V, 1200W   | <b>LG-8954-100</b> | \$148.00   |



**LG-8954**

### PowrTwin™, Mantle Control

The PowrTwin control is capable of controlling two separate circuits independently. The PowrTwin is a solid-state, proportional-voltage controller that allows precise manual control of laboratory heating equipment such as heating mantles, tapes and cords. The PowrTwin has an output range adjustable from 5-100% of rated voltage. Supplied with lighted on-off switch, circuit breaker protection, 3-wire load receptacle, and 3-wire line cord with molded plug.

| Electrical Rating         | Part Number        | Each Price |
|---------------------------|--------------------|------------|
| 7A@120V, 840W per circuit | <b>LG-8957-100</b> | \$235.00   |



**LG-8957**


**LG-8958**
**LimiTrol, Heat Control**

Provides a safety backup for laboratory heating processes. Allows for over-temperature limiting. Will terminate power to the primary control reducing the chance of damage to samples, equipment and glassware. Furnished with a Type J thermocouple with 6" long stainless steel probe.

| Electrical Rating | Range   | Part Number        | Each Price |
|-------------------|---------|--------------------|------------|
| 7.5A@120V, 1200W  | 0-750°C | <b>LG-8958-100</b> | \$442.00   |


**LG-8960**
**DigiTrol II, Temperature Control**

Uses a  $1/16$  DIN micro-processor-based, user-selectable control mode temperature control. The control features a digital dual output display for set point and process indication. Features automatic cold junction compensation and thermocouple break protection. Furnished with immersion thermocouple with 6" long stainless steel probe.

| Electrical Rating | Range   | Part Number        | Each Price |
|-------------------|---------|--------------------|------------|
| 15A@120V, 1800W   | 0-750°C | <b>LG-8960-100</b> | \$658.00   |


**LG-8965**
**Transformer, Variable**

An auto-transformer with a movable brush tap which rotates to deliver a continuously adjustable output voltage from AC power lines. The dial is graduated in output volts. Complete with 3-wire input cord, 3-wire output receptacle, on/off switch and fuse, all housed in a cast aluminum terminal enclosure. Output capacity is 0-140 volts, 10 amps, 1400 watts. Protected against overload by built-in fuse. Input is 120 volts, 50/60 Hz, single phase.

| Part Number        | Each Price |
|--------------------|------------|
| <b>LG-8965-100</b> | \$274.00   |

### Heat Gun, Heavy Duty

High air flow rating of 23 CFM at 3000 FPM for fast results. Has high power temperature rating of 1000°F/540°C at up to 1740 watts, which allows it to handle many industrial and commercial applications. Comes with adjustable non-slip stand.

| Electrical Rating | Temperature Range | Part Number        | Each Price |
|-------------------|-------------------|--------------------|------------|
| 5A@120V, 600W     | 93-150°C          | <b>LG-9034-096</b> | \$115.00   |
| 12A@120V, 1440W   | 150-260°C         | <b>LG-9034-098</b> | 115.00     |
| 14A@120V, 1680W   | 260-400°C         | <b>LG-9034-100</b> | 115.00     |
| 14.5A@120V, 1740W | 400-540°C         | <b>LG-9034-102</b> | 115.00     |



**LG-9034**

### Heat Gun, Varitemp

Lockable variable temperature control that allows user to dial in any temperature from ambient to 1000°F/540°C. Has adjustable non-slip stand. Use to activate adhesives, defrost frozen coils, heat sensitive material, melt solder and soften plastics.

| Electrical Rating | Part Number        | Each Price |
|-------------------|--------------------|------------|
| 14.5A@120V, 1740W | <b>LG-9035-100</b> | \$172.00   |



**LG-9035**

### Heat Gun, Master-Mite

Performs benchtop heating jobs without excess air flow, such as activating adhesives, curing epoxies, drying components, removing decals, shrinking tubing among other tasks. Comes with 650°F heating element, adjustable stand and heat shrink attachment.

| Electrical Rating | Part Number        | Each Price |
|-------------------|--------------------|------------|
| 14.5A@120V, 475W  | <b>LG-9036-100</b> | \$99.00    |

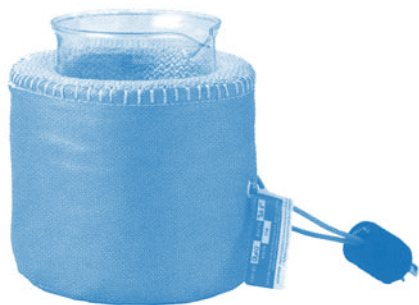


**LG-9036**


**LG-8800**
**Heating Mantle, Hemispherical**

Soft, all glass fabric construction which supports the bottom half of flask. This allows full view of the contents of single or multi-neck flasks. Supplied with a separable foot long 2-wire cord and locking connector.

| Flask Capacity mL | Wattage | Volts | Part Number        | Each Price |
|-------------------|---------|-------|--------------------|------------|
| 50                | 60      | 115   | <b>LG-8800-100</b> | \$111.00   |
| 100               | 80      | 115   | <b>LG-8800-102</b> | 123.00     |
| 125               | 80      | 115   | <b>LG-8800-104</b> | 124.00     |
| 200               | 100     | 115   | <b>LG-8800-106</b> | 125.00     |
| 250               | 180     | 115   | <b>LG-8800-108</b> | 135.00     |
| 300               | 180     | 115   | <b>LG-8800-110</b> | 136.00     |
| 500               | 270     | 115   | <b>LG-8800-112</b> | 153.00     |
| 1000              | 380     | 115   | <b>LG-8800-114</b> | 171.00     |
| 2000              | 500     | 115   | <b>LG-8800-116</b> | 186.00     |
| 3000              | 500     | 115   | <b>LG-8800-118</b> | 207.00     |
| 5000              | 600     | 115   | <b>LG-8800-120</b> | 246.00     |
| 12000             | 2x650   | 115   | <b>LG-8800-122</b> | 495.00     |


**LG-8862**
**Heating Mantle, Beaker (Griffin)**

All fabric construction without an outside aluminum housing. All of the wattage figures given below are for 115 volt circuits.

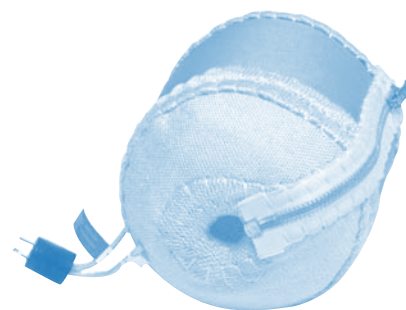
| Beaker Capacity mL | Wattage | Part Number        | Each Price |
|--------------------|---------|--------------------|------------|
| 100                | 100     | <b>LG-8862-102</b> | \$167.00   |
| 150                | 100     | <b>LG-8862-104</b> | 171.00     |
| 250                | 140     | <b>LG-8862-106</b> | 175.00     |
| 400                | 240     | <b>LG-8862-108</b> | 182.00     |
| 600                | 325     | <b>LG-8862-110</b> | 206.00     |
| 800                | 350     | <b>LG-8862-112</b> | 226.00     |
| 1000               | 430     | <b>LG-8862-114</b> | 238.00     |
| 2000               | 550     | <b>LG-8862-116</b> | 249.00     |
| 3000               | 630     | <b>LG-8862-118</b> | 261.00     |
| 4000               | 710     | <b>LG-8862-120</b> | 278.00     |



**Heating Mantle, Reaction Flask, with 1 1/4" Opening in Bottom;  
Side Split, Zipper Closure, 2-Wire**

Similar to *LG-8879* mantles, except with 1 1/4" opening to accommodate bottom take-off tube and zipper for easy on and off. All wattage given below are for 115 volt circuits.

| Flask Capacity<br>mL | Inside Diameter<br>of<br>Mantle<br>Inches | Inside Depth<br>of<br>Mantle<br>Inches | Wattage | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------------------------|----------------------------------------|---------|--------------------|---------------|
| 500                  | 4 5/8                                     | 2 1/2                                  | 250     | <b>LG-8877-100</b> | \$312.00      |
| 1000                 | 4 5/8                                     | 5 5/8                                  | 300     | <b>LG-8877-102</b> | 337.00        |
| 1500                 | 4 5/8                                     | 6 5/8                                  | 380     | <b>LG-8877-104</b> | 342.00        |
| 2000                 | 4 5/8                                     | 8 7/8                                  | 450     | <b>LG-8877-106</b> | 362.00        |
| 3000                 | 4 5/8                                     | 10                                     | 600     | <b>LG-8877-108</b> | 367.00        |
| 3000                 | 4 5/8                                     | 13                                     | 600     | <b>LG-8877-110</b> | 520.00        |


**LG-8877**
**Heating Mantle, Reaction Flask**

For use with *LG-8010* and *LG-8011* reaction flasks. All glass fabric construction. Provides even heat distribution and prevents scorching of clear materials. All heat input is in one electrical circuit to simplify temperature control.

| Flask Capacity<br>mL | Wattage | Part<br>Number     | Each<br>Price |
|----------------------|---------|--------------------|---------------|
| 500                  | 250     | <b>LG-8879-100</b> | \$277.00      |
| 1000                 | 300     | <b>LG-8879-102</b> | 302.00        |
| 1500                 | 380     | <b>LG-8879-104</b> | 307.00        |
| 2000                 | 450     | <b>LG-8879-106</b> | 327.00        |
| 3000                 | 600     | <b>LG-8879-108</b> | 332.00        |
| 5000                 | 600     | <b>LG-8879-110</b> | 485.00        |


**LG-8879**
**Heating Mantle, Reaction Kettle**

Designed to be used with reaction kettles *LG-8071* through *LG-8089*. All glass fabric construction-wattage requirements are for 115 volt circuits. Heating circuits have two short lead-in wires connected by a Hubbell plug to a 2-wire type SJT cord, 4 feet long.

| Kettle Capacity<br>mL | Inside Diameter<br>of<br>Mantle<br>Inches | Inside Depth<br>of<br>Mantle<br>Inches | Wattage | Part<br>Number     | Each<br>Price |
|-----------------------|-------------------------------------------|----------------------------------------|---------|--------------------|---------------|
| 500                   | 3 3/4                                     | 5                                      | 270     | <b>LG-8881-100</b> | \$240.00      |
| 1000                  | 4 1/4                                     | 5 1/4                                  | 335     | <b>LG-8881-102</b> | 249.00        |
| 2000                  | 5 1/2                                     | 6                                      | 470     | <b>LG-8881-106</b> | 259.00        |
| 3000                  | 5 1/2                                     | 9                                      | 550     | <b>LG-8881-108</b> | 276.00        |
| 4000                  | 5 1/2                                     | 11                                     | 750     | <b>LG-8881-110</b> | 283.00        |


**LG-8881**



**LG-8905**

### Heating Mantle, Supports for Fabric Mantles

Supports for table top and floor mantles. Steel support with fabric strap basket is strong, handy and durable. Table top support easily attaches to rack systems and tripod support sits comfortably on a table top or floor. Use with *LG-8800, LG-8862, LG-8877, LG-8879 and LG-8881* mantles.

| Support Type | Mantle Size | Part Number        | Each Price |
|--------------|-------------|--------------------|------------|
| Extension    | 50          | <b>LG-8905-098</b> | \$58.00    |
| Extension    | 100-200     | <b>LG-8905-100</b> | 59.00      |
| Extension    | 250-300     | <b>LG-8905-102</b> | 59.00      |
| Extension    | 500         | <b>LG-8905-104</b> | 61.00      |
| Extension    | 1000        | <b>LG-8905-106</b> | 67.00      |
| Extension    | 2000        | <b>LG-8905-108</b> | 71.00      |
| Extension    | 3000        | <b>LG-8905-110</b> | 73.00      |
| Extension    | 5000        | <b>LG-8905-112</b> | 75.00      |
| Tripod       | 5000        | <b>LG-8905-114</b> | 160.00     |
| Tripod       | 12000       | <b>LG-8905-116</b> | 165.00     |
| Tripod       | 22000       | <b>LG-8905-118</b> | 175.00     |



**ML-1540**

### Heating Mantle, Micro, Spherical

Soft, all glass fabric construction which supports the bottom half of flask. This allows full view of the contents of single or multi-neck flasks. Supplied with a separable 3 foot long 2-wire cord and locking connector.

| Flask Capacity mL | Wattage | Volts  | Part Number        | Each Price |
|-------------------|---------|--------|--------------------|------------|
| 5                 | 12      | 30 max | <b>ML-1540-700</b> | \$105.00   |
| 10                | 20      | 30 max | <b>ML-1540-702</b> | 105.00     |
| 20                | 27      | 60 max | <b>ML-1540-704</b> | 115.00     |
| 25                | 30      | 60 max | <b>ML-1540-706</b> | 115.00     |
| 35                | 35      | 60 max | <b>ML-1540-708</b> | 115.00     |

*Note: See LG-8920-100 for support.*

**Heating Mantle, Micro, Pear-Shaped**

Mantle is all glass fabric construction and must be used with a voltage regulator as shown by *LG-8965-100*. Heating circuits have two short lead-in wires connected to 2-wire cord and plug.

| Flask Capacity mL | Wattage | Volts  | Part Number        | Each Price |
|-------------------|---------|--------|--------------------|------------|
| 5                 | 12      | 30 max | <b>ML-1560-700</b> | \$115.00   |
| 10                | 15      | 30 max | <b>ML-1560-702</b> | 115.00     |
| 25                | 25      | 60 max | <b>ML-1560-706</b> | 130.00     |
| 50                | 35      | 60 max | <b>ML-1560-710</b> | 140.00     |
| 100               | 70      | 115    | <b>ML-1560-714</b> | 150.00     |
| 150               | 90      | 115    | <b>ML-1560-716</b> | 152.00     |
| 250               | 135     | 115    | <b>ML-1560-720</b> | 172.00     |

*Note: See LG-8920 for support.*

**ML-1560****Heating Mantle, Aluminum Housing, Round Bottom Flask**

Bench top, aluminum-housed mantle. It is hemispherical with an outside aluminum housing having an internal glass fabric covering. Unit can be used at temperatures up to 450°C. Supplied with a three wire terminal with one wire grounded to the housing, a 3-wire type SJT cord, 4 feet long.

| Flask Capacity mL | Wattage | Volts | Part Number        | Each Price |
|-------------------|---------|-------|--------------------|------------|
| 1000              | 380     | 115   | <b>LG-8875-114</b> | \$212.00   |
| 2000              | 500     | 115   | <b>LG-8875-116</b> | 220.00     |
| 3000              | 500     | 115   | <b>LG-8875-118</b> | 262.00     |
| 5000              | 600     | 115   | <b>LG-8875-120</b> | 315.00     |
| 12000             | 2x650   | 115   | <b>LG-8875-122</b> | 589.00     |
| 22000             | 2x770   | 115   | <b>LG-8875-124</b> | 678.00     |

**LG-8875**

**LG-8887****Heating Mantle, Aluminum Housing, Spherical, High Temperature**

Similar to *LG-8875* series heating mantles. Aluminum housing with quartz fabric, wired for high wattage and suitable for temperatures up to 650°C. They are useful for distillation and fractionation processes, especially when time is important. The higher temperature range allows operations such as rapid distillation of water and liquid-phase cracking in a flask, where the products are taken out of the flask through a column. Sizes up to 5000mL are supplied with a 4 foot, 3-wire cord and locking connector. 12000 and 22000mL are supplied with a terminal box.

| Flask Capacity mL | Wattage | Volts | Part Number        | Each Price |
|-------------------|---------|-------|--------------------|------------|
| 1000              | 600     | 115   | <b>LG-8887-112</b> | \$303.00   |
| 2000              | 870     | 115   | <b>LG-8887-114</b> | 378.00     |
| 3000              | 970     | 115   | <b>LG-8887-116</b> | 450.00     |
| 5000              | 2x700   | 115   | <b>LG-8887-118</b> | 545.00     |
| 12000             | 2x1000  | 115   | <b>LG-8887-120</b> | 1125.00    |
| 22000             | 3x1000  | 115   | <b>LG-8887-122</b> | 1358.00    |

**LG-8883****Heating Mantle, Reaction Kettle**

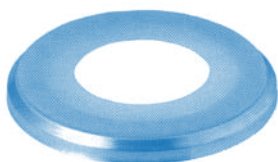
Aluminum housing exterior - designed to be used with reaction kettles *LG-8071* through *LG-8089*.

Equipped with a 3-wire terminal with one grounded to housing. Supplied with a detachable 4 foot 3-wire cord and locking connector.

| Kettle Capacity mL | Flask Diameter Inches | Mantle Depth Inches | Wattage | Volts | Part Number        | Each Price |
|--------------------|-----------------------|---------------------|---------|-------|--------------------|------------|
| 500                | 3 3/4                 | 4 1/2               | 270     | 115   | <b>LG-8883-100</b> | \$234.00   |
| 1000               | 4 1/4                 | 5 1/4               | 335     | 115   | <b>LG-8883-102</b> | 245.00     |
| 2000               | 5 1/2                 | 6                   | 470     | 115   | <b>LG-8883-106</b> | 251.00     |
| 3000               | 5 1/2                 | 9                   | 550     | 115   | <b>LG-8883-108</b> | 282.00     |
| 4000               | 5 1/2                 | 11                  | 750     | 115   | <b>LG-8883-110</b> | 308.00     |

**Heating Mantle, Splash Guard**

Splash guards can help prevent mantle damage from chemical spillage and improve operating safety when heating liquids. Use with low-wattage mantles for flasks, beakers and funnels. A rugged silicone pad grips outer circumference of vessel, holding it securely in place. Use with *LG-8825* and *LG-8875* mantles.

**LG-8876**

| For Catalog # | Item and Size  | Part Number        | Each Price |
|---------------|----------------|--------------------|------------|
| LG-8875-114   | Flask - 1000mL | <b>LG-8876-104</b> | \$81.00    |
| LG-8825-112   | Flask - 1000mL | <b>LG-8876-108</b> | 87.00      |
| LG-8875-116   | Flask - 2000mL | <b>LG-8876-110</b> | 93.00      |
| LG-8825-114   | Flask - 2000mL | <b>LG-8876-112</b> | 98.00      |
| LG-8875-118   | Flask - 3000mL | <b>LG-8876-114</b> | 104.00     |
| LG-8875-120   | Flask - 5000mL | <b>LG-8876-118</b> | 150.00     |

### Heating Mantle, Poncho Safety Shield

Reduces fire hazards, protects flasks from falling objects and protects personnel from flying glass and liquid if flask implodes or explodes. Also serves as a efficient insulator. The poncho has two observation ports for viewing while in use. Use with *LG-8875* and *LG-8887* mantles.

| Flask Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------------|--------------------|---------------|
| 1000                 | <b>LG-8886-102</b> | \$104.00      |
| 2000 - 3000          | <b>LG-8886-106</b> | 178.00        |
| 5000                 | <b>LG-8886-108</b> | 320.00        |
| 22000                | <b>LG-8886-112</b> | 530.00        |



**LG-8886**

### Heating Mantle, Aluminum Housing, Hemispherical

These heating mantles are the most compact mantles available with an aluminum housing. They have a durable aluminum housing outside and a resilient glass fabric inside to support flasks and to protect flask walls from thermal strain. Only the bottom of the flask is covered so the contents being heated are fully visible. These mantles will withstand internal operating temperatures up to 450°C.

The mantles are grounded through the aluminum housing. They are provided with a detachable 4 foot long, 3-wire cord and locking connector.

These heating mantles require a support. See *LG-8920* series and *LG-8940* series. See *LG-8876* for splash guards.



**LG-8825**

| Flask<br>Capacity<br>mL | Wattage | Volts | Part<br>Number     | Each<br>Price |
|-------------------------|---------|-------|--------------------|---------------|
| 1000                    | 380     | 115   | <b>LG-8825-112</b> | \$228.00      |
| 2000                    | 500     | 115   | <b>LG-8825-114</b> | 243.00        |
| 12000                   | 2x650   | 115   | <b>LG-8825-120</b> | 656.00        |
| 22000                   | 2x770   | 115   | <b>LG-8825-122</b> | 742.00        |

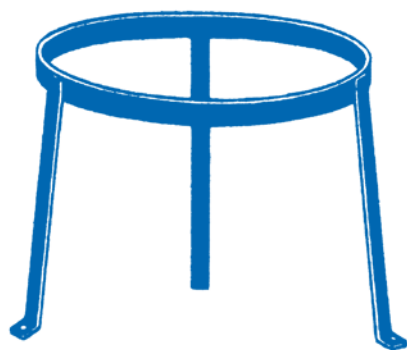
### Extension Support for Heating Mantles

To support mantles with hemispherical aluminum housing and with flask capacities up to and including 5000mL. Unit is a steel ring with a 6 inch shank for attachment to a stable ring stand or distillation rack. Designed for use with *LG-8825* mantles.

| Mantle Size<br>mL | Part<br>Number     | Each<br>Price |
|-------------------|--------------------|---------------|
| 100-200           | <b>LG-8920-100</b> | \$58.00       |
| 250-500           | <b>LG-8920-102</b> | 62.00         |
| 1000              | <b>LG-8920-104</b> | 64.00         |
| 2000-3000         | <b>LG-8920-106</b> | 68.00         |
| 5000              | <b>LG-8920-110</b> | 70.00         |



**LG-8920**

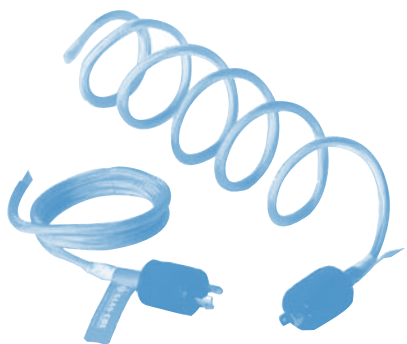


**LG-8940**

### Tripod Support for Heating Mantles

For use with mantles with hemispherical housing. Support consists of a ring and three legs which are bolted to the ring. Support is shipped unassembled. Designed for use with *LG-8825* mantles.

| Mantle Size<br>mL | Part<br>Number     | Each<br>Price |
|-------------------|--------------------|---------------|
| 12000             | <b>LG-8940-104</b> | \$104.00      |
| 22000             | <b>LG-8940-106</b> | 140.00        |



**LG-8889**

### Heating Cord

Designed especially for high temperature use, this flexible heating cord can be installed and removed quickly. It can coil to wrap around a tube as small as 1/2" diameter without damage. Available in temperature ranges up to 400°C when made of glass fabric materials. Supplied in the standard lengths listed below, complete with plug.

| Length<br>Feet | Material     | Wattage<br>and<br>Voltage | Part<br>Number     | Each<br>Price |
|----------------|--------------|---------------------------|--------------------|---------------|
| 2              | Glass Fabric | 80W-115V                  | <b>LG-8889-100</b> | \$70.00       |
| 3              | Glass Fabric | 120W-115V                 | <b>LG-8889-102</b> | 75.00         |
| 4              | Glass Fabric | 160W-115V                 | <b>LG-8889-104</b> | 90.00         |
| 6              | Glass Fabric | 240W-115V                 | <b>LG-8889-106</b> | 99.00         |
| 8              | Glass Fabric | 340W-115V                 | <b>LG-8889-108</b> | 112.00        |
| 10             | Glass Fabric | 400W-115V                 | <b>LG-8889-110</b> | 118.00        |
| 12             | Glass Fabric | 480W-230V                 | <b>LG-8889-112</b> | 136.00        |
| 14             | Glass Fabric | 560W-230V                 | <b>LG-8889-114</b> | 147.00        |
| 16             | Glass Fabric | 640W-230V                 | <b>LG-8889-116</b> | 162.00        |

**Heating Tapes**

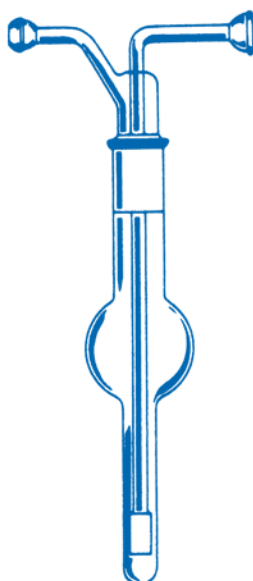
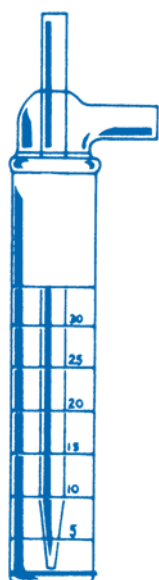
Especially designed for use where tapes are frequently installed and removed. Heating elements are of a precision ribbon type and are insulated with glass braid. They are impregnated with tough pliable silicone rubber. Both supply leads are at the same end of the tape, wired to a twist lock for attachment to a heater cord. The other ends of tape are joined and finished with a waterproof silicone rubber fitting. Temperature limit is 480°F.

Double element heating tapes are only 1/16" thick, yet they are unusually flexible, easy to handle, strong and durable. Supplied in the standard lengths listed below, complete with plug and cord. A variable transformer should be used to control temperature level and heat input.

| Width x Length Ft. | Wattage and Voltage | Part Number        | Each Price |
|--------------------|---------------------|--------------------|------------|
| 1/4" x 4           | 60W-45V             | <b>LG-8888-100</b> | \$77.00    |
| 1/2" x 8           | 280W-95V            | <b>LG-8888-112</b> | 102.00     |
| 1" x 12            | 1400W-230V          | <b>LG-8888-124</b> | 268.00     |
| 5/8" x 5           | 145W-115V           | <b>LG-8888-126</b> | 105.00     |
| 1" x 3             | 150W-115V           | <b>LG-8888-134</b> | 106.00     |
| 1" x 4             | 120W-115V           | <b>LG-8888-136</b> | 113.00     |
| 1" x 5             | 100W-115V           | <b>LG-8888-138</b> | 128.00     |

**LG-8888**




**LG-6885**

**LG-6890**

**LG-6893**
**Impinger, Bubbler, Smog Sampling, with Fritted Inlet Tube**

For use in procedures for monitoring environmental pollution. This design is recommended by the Environmental Protection Agency. The ground joints on the flask neck and bubbler stopper are 24/40. The bubbler has 12/5 ball and socket joints on the inlet and outlet tubes. The bottom tube of the flask is 100mm long with a volume of 20mL, providing for a very uniform rate of absorption. The fritted tip of the inlet tube has a coarse porosity.

| Supplied     | Part Number        | Each Price |
|--------------|--------------------|------------|
| Complete     | <b>LG-6885-100</b> | \$109.14   |
| Flask Only   | <b>LG-6885-110</b> | 30.90      |
| Bubbler Only | <b>LG-6885-120</b> | 81.40      |

**Impinger, Midget, Graduated**

Calibrated in 5mL subdivisions. Used to collect samples of pollutants in air. Particularly suitable for determinations of sulfur dioxide by the West and Gaeke method and of oxidants, including ozone, by the alkaline potassium iodide method. The orifice at the bottom of the bubbler tube is 1mm. It passes 0.09-0.11 CFM of air at a vacuum of 12" H<sub>2</sub>O. Adaptable to any air sample running steadily at 0.1 CFM.

| Capacity mL | Supplied     | Joint | Part Number        | Each Price |
|-------------|--------------|-------|--------------------|------------|
| 25          | Complete     | 24/40 | <b>LG-6890-100</b> | \$49.16    |
| 30          | Complete     | 24/40 | <b>LG-6890-102</b> | 51.10      |
| 25          | Tube Only    | 24/40 | <b>LG-6890-110</b> | 18.80      |
| 30          | Tube Only    | 24/40 | <b>LG-6890-112</b> | 20.60      |
| 25          | Stopper Only | 24/40 | <b>LG-6890-120</b> | 30.86      |
| 30          | Stopper Only | 24/40 | <b>LG-6890-122</b> | 30.86      |

**Impinger, Bubbler, Midget, with Fritted Inlet Tube, Graduated**

Bubbler has extra coarse (EC) fritted dispersion tube. Fritted tube maximizes absorption by the trapping liquid.

*Reference: R.I.3360 Bureau of Mines*

| Capacity mL | Supplied     | Joint | Part Number        | Each Price |
|-------------|--------------|-------|--------------------|------------|
| 25          | Complete     | 24/40 | <b>LG-6893-100</b> | \$53.54    |
| 30          | Complete     | 24/40 | <b>LG-6893-102</b> | 54.66      |
| 25          | Tube Only    | 24/40 | <b>LG-6890-110</b> | 18.80      |
| 30          | Tube Only    | 24/40 | <b>LG-6890-112</b> | 20.60      |
| 25          | Stopper Only | 24/40 | <b>LG-6893-120</b> | 36.74      |
| 30          | Stopper Only | 24/40 | <b>LG-6893-122</b> | 36.74      |

**Joint, Ground, Full Length, Inner**

| Joint  | Tubing<br>O.D. mm | Part<br>Number | Each<br>Price |
|--------|-------------------|----------------|---------------|
| 5/20   | 5                 | LG-1000-100    | \$12.55       |
| 7/25   | 6                 | LG-1000-102    | 7.62          |
| 10/30  | 8                 | LG-1000-104    | 6.27          |
| 12/30  | 10                | LG-1000-106    | 6.85          |
| 14/35  | 12                | LG-1000-108    | 7.83          |
| 19/38  | 17                | LG-1000-110    | 8.31          |
| 24/40  | 22                | LG-1000-112    | 8.38          |
| 29/42  | 28                | LG-1000-114    | 9.46          |
| 34/45  | 32                | LG-1000-116    | 12.64         |
| 40/50  | 38                | LG-1000-118    | 16.58         |
| 45/50  | 41                | LG-1000-120    | 19.50         |
| 50/50  | 48                | LG-1000-122    | 25.26         |
| 55/50  | 51                | LG-1000-124    | 28.42         |
| 60/50  | 57                | LG-1000-126    | 33.06         |
| 71/60  | 70                | LG-1000-128    | 40.51         |
| 103/60 | 100               | LG-1000-130    | 109.07        |

**LG-1000****Joint, Ground, Medium Length, Inner**

| Joint | Tubing<br>O.D. mm | Part<br>Number | Each<br>Price |
|-------|-------------------|----------------|---------------|
| 5/12  | 5                 | LG-1015-100    | \$8.17        |
| 7/15  | 6                 | LG-1015-104    | 8.17          |
| 10/18 | 8                 | LG-1015-106    | 6.39          |
| 12/18 | 10                | LG-1015-108    | 7.32          |
| 14/20 | 12                | LG-1015-110    | 7.56          |
| 19/22 | 17                | LG-1015-112    | 8.16          |
| 24/25 | 22                | LG-1015-114    | 9.37          |
| 29/26 | 28                | LG-1015-116    | 9.67          |
| 34/28 | 32                | LG-1015-118    | 13.34         |
| 40/35 | 38                | LG-1015-120    | 17.07         |

**LG-1015****Joint, Ground, Full Length, Inner with Drip Tip**

| Joint | Tubing<br>O.D. mm | Part<br>Number | Each<br>Price |
|-------|-------------------|----------------|---------------|
| 24/40 | 22                | LG-1095-104    | \$12.98       |
| 29/42 | 25                | LG-1095-106    | 14.18         |
| 45/50 | 41                | LG-1095-110    | 28.25         |

**LG-1095**



LG-1096



LG-1013



LG-1027

## Joint, Ground, Medium Length, Inner with Drip Tip

| Joint | Tubing<br>O.D. mm | Part<br>Number     | Each<br>Price |
|-------|-------------------|--------------------|---------------|
| 14/20 | 12                | <b>LG-1096-100</b> | \$10.47       |
| 19/22 | 17                | <b>LG-1096-102</b> | 11.42         |
| 24/25 | 22                | <b>LG-1096-104</b> | 16.88         |
| 29/26 | 25                | <b>LG-1096-106</b> | 18.12         |

## Joint, O-Ring, Inner, with Viton® O-Ring

Inner joint with a groove in the ground zone for use with an O-ring in vacuum applications. Supplied with a Viton® O-ring of the size shown. Lubrication is not required.

| Joint | Tubing<br>O.D. mm | O-Ring<br>Size | O-Ring Code<br>LG-1022 | Part<br>Number     | Each<br>Price |
|-------|-------------------|----------------|------------------------|--------------------|---------------|
| 24/40 | 22                | 115            | -528                   | <b>LG-1013-100</b> | \$30.28       |
| 29/42 | 28                | 118            | -532                   | <b>LG-1013-102</b> | 32.22         |
| 45/50 | 41                | 128            | -542                   | <b>LG-1013-104</b> | 41.42         |

## Joint, HVS Inner, with Viton® O-Ring

High vacuum inner joints have a groove above the ground zone for a Viton® O-Ring. This forms a vacuum-tight seal when used with a mating outer joint. No lubricants are required - twist to assemble or disassemble. Supplied with a Viton® O-Ring.

| Joint | Tubing<br>O.D. mm | O-Ring<br>Size | O-Ring Code<br>LG-1022 | Part<br>Number     | Each<br>Price |
|-------|-------------------|----------------|------------------------|--------------------|---------------|
| 24/25 | 22                | 117            | -531                   | <b>LG-1027-108</b> | \$18.42       |
| 29/26 | 25                | 119            | -535                   | <b>LG-1027-110</b> | 21.10         |
| 34/28 | 32                | 216            | -553                   | <b>LG-1027-112</b> | 27.47         |
| 45/35 | 41                | 222            | -557                   | <b>LG-1027-116</b> | 41.23         |

**Joint, Ground, Full Length, Outer, Straight-Sided**

With larger tubing than *LG-1001*, so that outside of ground portion and stem have approximately same diameters. This construction facilitates clamping.

| ⌘ Joint | Tubing<br>O.D. mm | Part<br>Number     | Each<br>Price |
|---------|-------------------|--------------------|---------------|
| 5/20    | 8                 | <b>LG-1003-100</b> | \$ 14.05      |
| 7/25    | 9                 | <b>LG-1003-102</b> | 8.88          |
| 10/30   | 13                | <b>LG-1003-104</b> | 8.55          |
| 12/30   | 16                | <b>LG-1003-106</b> | 8.88          |
| 14/35   | 17                | <b>LG-1003-108</b> | 9.26          |
| 19/38   | 22                | <b>LG-1003-110</b> | 9.26          |
| 24/40   | 28                | <b>LG-1003-112</b> | 9.32          |
| 29/42   | 32                | <b>LG-1003-114</b> | 10.97         |
| 34/45   | 38                | <b>LG-1003-116</b> | 15.04         |
| 40/50   | 45                | <b>LG-1003-118</b> | 20.80         |
| 45/50   | 51                | <b>LG-1003-120</b> | 22.21         |
| 50/50   | 54                | <b>LG-1003-122</b> | 28.74         |
| 55/50   | 57                | <b>LG-1003-124</b> | 31.90         |
| 60/50   | 64                | <b>LG-1003-126</b> | 35.47         |
| 71/60   | 75                | <b>LG-1003-128</b> | 47.50         |
| 103/60  | 110               | <b>LG-1003-130</b> | 111.70        |

**LG-1003****Joint, Ground, Medium Length, Outer, Straight-Sided**

With larger tubing than *LG-1016*, so that outside of ground portion and stem have approximately the same diameters. This makes clamping easier.

| ⌘ Joint | Tubing<br>O.D. mm | Part<br>Number     | Each<br>Price |
|---------|-------------------|--------------------|---------------|
| 5/12    | 8                 | <b>LG-1017-100</b> | \$9.37        |
| 7/15    | 9                 | <b>LG-1017-104</b> | 9.37          |
| 10/18   | 13                | <b>LG-1017-106</b> | 8.80          |
| 14/20   | 17                | <b>LG-1017-110</b> | 8.74          |
| 19/22   | 22                | <b>LG-1017-112</b> | 9.34          |
| 24/25   | 28                | <b>LG-1017-114</b> | 10.70         |
| 29/26   | 32                | <b>LG-1017-116</b> | 11.43         |
| 34/28   | 38                | <b>LG-1017-118</b> | 15.15         |
| 40/35   | 45                | <b>LG-1017-120</b> | 20.19         |

**LG-1017**



LG-1001



LG-1016



LG-1028

### Joint, Ground, Full Length, Outer

With bulb beneath ground portion.

| Joint  | Tubing O.D. mm | Part Number | Each Price |
|--------|----------------|-------------|------------|
| 5/20   | 5              | LG-1001-100 | \$14.05    |
| 7/25   | 6              | LG-1001-102 | 10.09      |
| 10/30  | 8              | LG-1001-104 | 10.21      |
| 12/30  | 10             | LG-1001-106 | 9.50       |
| 14/35  | 12             | LG-1001-108 | 9.62       |
| 19/38  | 17             | LG-1001-110 | 9.85       |
| 24/40  | 22             | LG-1001-112 | 9.98       |
| 29/42  | 28             | LG-1001-114 | 11.77      |
| 34/45  | 32             | LG-1001-116 | 15.15      |
| 40/50  | 38             | LG-1001-118 | 21.88      |
| 45/50  | 41             | LG-1001-120 | 23.70      |
| 50/50  | 48             | LG-1001-122 | 33.55      |
| 55/50  | 51             | LG-1001-124 | 36.80      |
| 60/50  | 57             | LG-1001-126 | 40.05      |
| 71/60  | 70             | LG-1001-128 | 52.05      |
| 103/60 | 100            | LG-1001-130 | 128.16     |

### Joint, Ground, Medium Length, Outer

With bulb beneath ground portion.

| Joint | Tubing O.D. mm | Part Number | Each Price |
|-------|----------------|-------------|------------|
| 10/18 | 8              | LG-1016-106 | \$9.50     |
| 14/20 | 12             | LG-1016-110 | 9.73       |
| 19/22 | 17             | LG-1016-112 | 10.09      |
| 24/25 | 22             | LG-1016-114 | 11.54      |
| 34/28 | 32             | LG-1016-118 | 15.51      |
| 40/35 | 38             | LG-1016-120 | 21.40      |

### Joint, HVS Outer

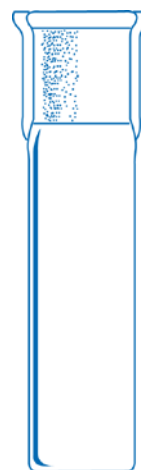
High vacuum outer joints have a channel above the ground zone to accept the O-Ring placed on the inner joint. May be used without an O-Ring as a standard medium length outer joint.

| Joint | Tubing O.D. mm | Part Number | Each Price |
|-------|----------------|-------------|------------|
| 24/25 | 22             | LG-1028-108 | \$19.58    |
| 29/26 | 25             | LG-1028-110 | 22.24      |
| 34/28 | 32             | LG-1028-112 | 22.96      |
| 45/35 | 41             | LG-1028-116 | 42.39      |

### Joint, HVS Outer, with Large OD Tubing

Joints have a larger diameter tubing.

| Joint | Tubing<br>O.D. mm | Part<br>Number | Each<br>Price |
|-------|-------------------|----------------|---------------|
| 24/25 | 28                | LG-1029-108    | \$20.15       |
| 29/26 | 32                | LG-1029-110    | 22.81         |
| 34/28 | 38                | LG-1029-112    | 29.18         |
| 45/35 | 51                | LG-1029-116    | 42.94         |



LG-1029

### Joint, Spherical, Ball

| Joint  | Part<br>Number | Each<br>Price |
|--------|----------------|---------------|
| 12/2   | LG-1040-106    | \$13.10       |
| 12/3   | LG-1040-108    | 10.47         |
| 12/5   | LG-1040-110    | 9.26          |
| 18/7   | LG-1040-114    | 9.50          |
| 18/9   | LG-1040-116    | 9.26          |
| 28/12  | LG-1040-118    | 9.68          |
| 28/15  | LG-1040-120    | 9.52          |
| 35/20  | LG-1040-122    | 11.92         |
| 35/25  | LG-1040-124    | 11.92         |
| 50/30  | LG-1040-128    | 24.52         |
| 65/40  | LG-1040-130    | 36.80         |
| 75/50  | LG-1040-132    | 54.46         |
| 102/75 | LG-1040-134    | 75.07         |

Note: See LG-1045 or LG-4600 for clamps

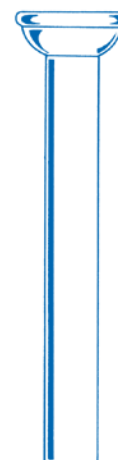


LG-1040

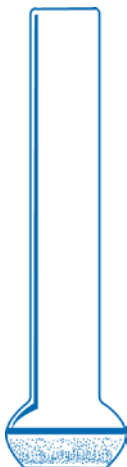
### Joint, Spherical, Socket

| Joint  | Part<br>Number | Each<br>Price |
|--------|----------------|---------------|
| 12/2   | LG-1041-106    | \$13.21       |
| 12/3   | LG-1041-108    | 10.47         |
| 12/5   | LG-1041-110    | 9.26          |
| 18/7   | LG-1041-114    | 9.50          |
| 18/9   | LG-1041-116    | 9.16          |
| 28/12  | LG-1041-118    | 9.16          |
| 28/15  | LG-1041-120    | 9.26          |
| 35/20  | LG-1041-122    | 11.70         |
| 35/25  | LG-1041-124    | 11.70         |
| 50/30  | LG-1041-128    | 24.16         |
| 65/40  | LG-1041-130    | 36.55         |
| 75/50  | LG-1041-132    | 46.53         |
| 102/75 | LG-1041-134    | 59.52         |

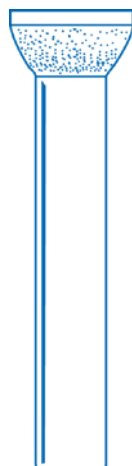
Note: See LG-1045 or LG-4600 for clamps



LG-1041



LG-1042



LG-1043



LG-1044

### Joint, HVS Ball, with Viton® O-Ring

High vacuum inner joints have a groove above the ground zone for a Viton® O-Ring. This forms a vacuum-tight seal when used with a mating socket joint. No lubricants are required - twist to assemble or disassemble.

| Size Joint | Tubing O.D. mm | O-Ring Size | O-Ring LG-1022 | Part Number        | Each Price |
|------------|----------------|-------------|----------------|--------------------|------------|
| 12/5       | 8              | 012         | -506           | <b>LG-1042-102</b> | \$17.89    |
| 18/9       | 13             | 113         | -525           | <b>LG-1042-106</b> | 18.55      |
| 28/12      | 16             | 119         | -535           | <b>LG-1042-108</b> | 22.62      |
| 28/15      | 18             | 119         | -535           | <b>LG-1042-110</b> | 22.62      |
| 35/20      | 22             | 217         | -554           | <b>LG-1042-112</b> | 28.80      |
| 35/25      | 28             | 217         | -554           | <b>LG-1042-114</b> | 28.80      |

### Joint, HVS Socket

High vacuum outer joints have a channel above the ground zone to accept the O-Ring placed on the ball joint. May be used without an O-Ring as a standard socket joint.

| Size  | Tube Size O.D. mm | Part Number        | Each Price |
|-------|-------------------|--------------------|------------|
| 12/5  | 8                 | <b>LG-1043-102</b> | \$18.19    |
| 18/9  | 13                | <b>LG-1043-106</b> | 18.55      |
| 28/12 | 16                | <b>LG-1043-108</b> | 20.13      |
| 28/15 | 18                | <b>LG-1043-110</b> | 20.13      |
| 35/20 | 22                | <b>LG-1043-112</b> | 25.32      |
| 35/25 | 28                | <b>LG-1043-114</b> | 25.32      |

### Joint, Spherical, O-Ring, Ball

Placement of the O-Ring in the ground surface allows for a flexible, grease-free connection. Suitable for high vacuum applications. Supplied complete with LG-1022 Viton® O-Ring.

| Size  | Tube Size O.D. mm | O-Ring Size | O-Ring LG-1022 Code | Part Number        | Each Price |
|-------|-------------------|-------------|---------------------|--------------------|------------|
| 18/9  | 12                | 112         | -524                | <b>LG-1044-116</b> | \$12.39    |
| 28/15 | 22                | 116         | -530                | <b>LG-1044-120</b> | 13.46      |
| 35/20 | 22                | 121         | -534                | <b>LG-1044-122</b> | 16.71      |
| 35/25 | 28                | 121         | -534                | <b>LG-1044-124</b> | 16.71      |
| 50/30 | 35                | 128         | -542                | <b>LG-1044-128</b> | 30.43      |

See LG-1045 for clamps.



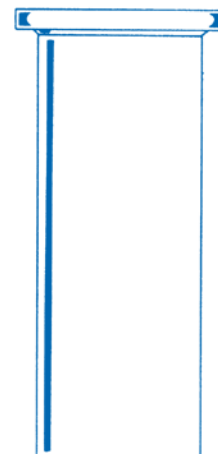
**Joint, O-Ring**

The mating end of joint has a precision tooled unground face with groove that accepts a standard O-Ring. These are vacuum type, will not stick and require no lubricants. Supplied complete with *LG-1022* Viton® O-Ring.

| Size<br>Approx.<br>I.D. mm | Tubing<br>O.D. | O-Ring<br>LG-1022<br>Code | LG-1045<br>Clamp<br>Code | Part<br>Number     | Each<br>Price |
|----------------------------|----------------|---------------------------|--------------------------|--------------------|---------------|
| 5                          | 8mm            | -520                      | -102                     | <b>LG-1021-100</b> | \$7.32        |
| 7                          | 10mm           | -522                      | -106                     | <b>LG-1021-102</b> | 7.81          |
| 9                          | 12mm           | -524                      | -106                     | <b>LG-1021-104</b> | 8.06          |
| 15                         | 18mm           | -530                      | -110                     | <b>LG-1021-106</b> | 8.52          |
| 20                         | 22mm           | -552                      | -112                     | <b>LG-1021-108</b> | 10.34         |
| 25                         | 28mm           | -554                      | -112                     | <b>LG-1021-110</b> | 10.34         |
| 30                         | 35mm           | -558                      | -116                     | <b>LG-1021-112</b> | 17.91         |
| 40                         | 45mm           | -562                      | -118                     | <b>LG-1021-114</b> | 26.33         |
| 50                         | 2 1/4"         | -568                      | -120                     | <b>LG-1021-116</b> | 35.57         |
| 75                         | 3 1/4"         | -574                      | -122                     | <b>LG-1021-118</b> | 47.50         |

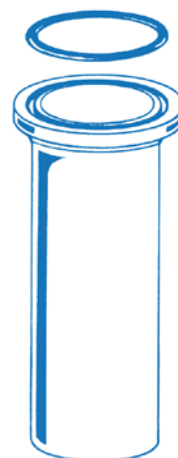
**LG-1021****Joint, Ground, Flat Flange**

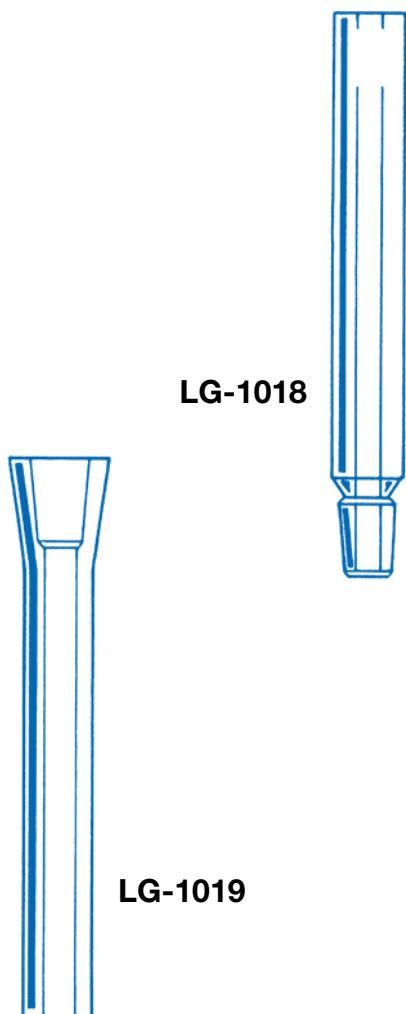
| Size<br>(also<br>Tubing O.D.) | LG-7316<br>Clamp<br>Code | Part<br>Number     | Each<br>Price |
|-------------------------------|--------------------------|--------------------|---------------|
| 32mm                          | -100                     | <b>LG-1023-100</b> | \$33.49       |
| 57mm                          | -102                     | <b>LG-1023-102</b> | 40.64         |
| 80mm                          | -104                     | <b>LG-1023-104</b> | 60.24         |
| 4 1/2"                        | -106                     | <b>LG-1023-106</b> | 79.97         |
| 5 1/2"                        | -108                     | <b>LG-1023-108</b> | 103.86        |

**LG-1023****Joint, O-Ring, Flat**

The mating end of the joint has a precision-formed flat flange with a recessed groove in the face which accepts an O-Ring. O-Rings are not included, but are listed under *LG-1022*. Overall length approximately 8".

| Size<br>(also<br>Tubing O.D.) | LG-1022<br>O-Ring<br>Code | LG-7316<br>Clamp<br>Code | Part<br>Number     | Each<br>Price |
|-------------------------------|---------------------------|--------------------------|--------------------|---------------|
| 32mm                          | -557                      | -100                     | <b>LG-1024-100</b> | \$29.22       |
| 57mm                          | -571                      | -102                     | <b>LG-1024-102</b> | 40.64         |
| 80mm                          | -572                      | -104                     | <b>LG-1024-104</b> | 59.52         |
| 4 1/2"                        | -576                      | -106                     | <b>LG-1024-106</b> | 78.64         |
| 5 1/2"                        | -578                      | -108                     | <b>LG-1024-108</b> | 110.86        |

**LG-1024**



LG-1018

LG-1019

 LG-1047  
 LG-1048  
 LG-1049
**Joint, Ground, Luer, Inner**

| Size   | Approx. Luer Length x Approx. Luer Top O.D. mm | Tip I.D. mm | Part Number        | Each Price |
|--------|------------------------------------------------|-------------|--------------------|------------|
| Small  | 6.5 x 4.35                                     | 1           | <b>LG-1018-100</b> | \$9.37     |
| Medium | 8.0 x 6.3                                      | 2           | <b>LG-1018-102</b> | 9.37       |
| Large  | 5.0 x 8.87                                     | 2 1/2       | <b>LG-1018-104</b> | 9.37       |

**Joint, Ground, Luer, Outer**

| Size   | Approx. Luer Length x Approx. Luer Top O.D. mm | Tip I.D. mm | Part Number        | Each Price |
|--------|------------------------------------------------|-------------|--------------------|------------|
| Small  | 6.5 x 4.35                                     | 1           | <b>LG-1019-110</b> | \$11.31    |
| Medium | 8.0 x 6.3                                      | 2           | <b>LG-1019-112</b> | 11.31      |
| Large  | 5.0 x 8.87                                     | 2 1/2       | <b>LG-1019-114</b> | 11.31      |

**Joint, Rodavis Style**

Connection is made with a threaded outer joint, inner joint, connecting melmine cap, and Viton® O-Ring. If the joint seizes from solute formation, unscrew the connecting cap onto the O-Ring. Joint will easily separate.

| Joint/Cap Size | Supplied                        | Part Number        | Each Price |
|----------------|---------------------------------|--------------------|------------|
| 14/20          | Outer Only                      | <b>LG-1047-100</b> | \$3.94     |
| 19/22          | Outer Only                      | <b>LG-1047-102</b> | 10.23      |
| 24/40          | Outer Only                      | <b>LG-1047-104</b> | 4.04       |
| 29/42          | Outer Only                      | <b>LG-1047-106</b> | 14.20      |
| 14/20          | Inner Only                      | <b>LG-1048-100</b> | 3.94       |
| 19/22          | Inner Only                      | <b>LG-1048-102</b> | 10.13      |
| 24/40          | Inner Only                      | <b>LG-1048-104</b> | 4.09       |
| 29/42          | Inner Only                      | <b>LG-1048-106</b> | 13.67      |
| Size 14        | Connecting Cap w/Viton® O-Rings | <b>LG-1049-100</b> | 6.08       |
| Size 19        | Connecting Cap w/Viton® O-Rings | <b>LG-1049-102</b> | 7.17       |
| Size 24        | Connecting Cap w/Viton® O-Rings | <b>LG-1049-104</b> | 7.79       |
| Size 29        | Connecting Cap w/Viton® O-Rings | <b>LG-1049-106</b> | 9.83       |

**Joint, Connector, Threaded, Glass**

Used instead of ground glass joints, has internal threads. Tubing I.D. below the threaded portion is in mm.

| Thread Size (mm) | Accepts Tubing O.D. mm | Tubing O.D. mm | Part Number        | Each Price |
|------------------|------------------------|----------------|--------------------|------------|
| 7                | 6-7                    | 12.5           | <b>LG-2075-100</b> | \$9.39     |
| 11               | 9-10.5                 | 16             | <b>LG-2075-102</b> | 11.86      |
| 15               | 12.5-14                | 23             | <b>LG-2075-104</b> | 13.19      |
| 18               | 16-17                  | 25             | <b>LG-2075-106</b> | 16.75      |
| 25               | 24-25                  | 32             | <b>LG-2075-108</b> | 17.15      |
| 36               | 34-35                  | 45             | <b>LG-2075-110</b> | 38.30      |
| 50               | 47-48                  | 57             | <b>LG-2075-112</b> | 44.01      |

**Joint, Bushing, Threaded Connector**

For use with *LG-2075* to join end to a reducing end tube. Nylon and PTFE available. One Viton® O-Ring is supplied.

| Threaded Connector Size (mm) | Material | Accepts Tubing O.D. mm | Part Number        | Each Price |
|------------------------------|----------|------------------------|--------------------|------------|
| 7                            | Nylon    | 6-7                    | <b>LG-2079-100</b> | \$2.54     |
| 11                           | Nylon    | 9-10.5                 | <b>LG-2079-102</b> | 9.38       |
| 15                           | Nylon    | 12.5-14                | <b>LG-2079-104</b> | 10.36      |
| 18                           | Nylon    | 16-17                  | <b>LG-2079-106</b> | 16.06      |
| 25                           | Nylon    | 24-25                  | <b>LG-2079-108</b> | 17.60      |
| 36                           | Nylon    | 34-35                  | <b>LG-2079-110</b> | 37.15      |
| 50                           | Nylon    | 47-48                  | <b>LG-2079-112</b> | 51.32      |
| 7                            | PTFE     | 6-7                    | <b>LG-2079-200</b> | 9.68       |
| 11                           | PTFE     | 9-10.5                 | <b>LG-2079-202</b> | 26.48      |
| 15                           | PTFE     | 12.5-14                | <b>LG-2079-204</b> | 27.69      |
| 18                           | PTFE     | 16-17                  | <b>LG-2079-206</b> | 39.07      |
| 25                           | PTFE     | 24-25                  | <b>LG-2079-208</b> | 37.32      |
| 36                           | PTFE     | 34-35                  | <b>LG-2079-210</b> | 84.47      |
| 50                           | PTFE     | 47-48                  | <b>LG-2079-212</b> | 83.57      |

**Joint, Ferrules, PTFE**

For use instead of O-Rings to avoid contamination. Suitable for vacuum conditions.

| Ferrule Size (mm) | Threaded Connector Size | Accepts Tubing O.D. mm | Part Number        | Each Price |
|-------------------|-------------------------|------------------------|--------------------|------------|
| 3                 | 7                       | 3.2                    | <b>LG-2080-100</b> | \$1.52     |
| 7                 | 7                       | 6.4                    | <b>LG-2080-102</b> | 1.79       |
| 11                | 11                      | 9.5                    | <b>LG-2080-104</b> | 2.25       |
| 15                | 15                      | 12.7                   | <b>LG-2080-106</b> | 2.37       |
| 25                | 25                      | 25.4                   | <b>LG-2080-108</b> | 4.97       |
| 50                | 50                      | 50.8                   | <b>LG-2080-110</b> | 6.80       |

**LG-2075****LG-2079****LG-2080**



LG-2088



LG-1005

STAINLESS  
STEEL

LG-1010



QUARTZ

LG-10864

**Joint, Plug, PTFE, Screw Thread**

For use as a stopper with LG-2075. Supplied with one Viton® O-Ring.

| Thread Size<br>mm | Part<br>Number | Each<br>Price |
|-------------------|----------------|---------------|
| 7                 | LG-2088-200    | \$15.39       |
| 11                | LG-2088-202    | 21.66         |
| 15                | LG-2088-204    | 25.28         |
| 25                | LG-2088-206    | 38.53         |
| 50                | LG-2088-208    | 96.33         |

**Joint, Ground, Stainless Steel, Inner**

Type 303 stainless steel. The unground ends correspond in diameter to standard pipe sizes. These ends can be supplied threaded on special order at an additional charge.

| Joint | Pipe<br>ID Size | Part<br>Number | Each<br>Price |
|-------|-----------------|----------------|---------------|
| 10/30 | 1/8"            | LG-1005-102    | \$48.64       |
| 14/35 | 1/4"            | LG-1005-106    | 84.32         |
| 24/40 | 1/2"            | LG-1005-110    | 98.37         |
| 29/42 | 3/4"            | LG-1005-112    | 118.91        |

**Joint, Ground, Stainless Steel, Outer**

Type 303 stainless steel. The unground ends correspond in diameter to standard pipe sizes. These ends can be supplied threaded on special order at an additional charge.

| Joint | Pipe<br>ID Size | Part<br>Number | Each<br>Price |
|-------|-----------------|----------------|---------------|
| 10/30 | 1/8"            | LG-1010-102    | \$60.53       |
| 14/35 | 1/4"            | LG-1010-106    | 109.17        |
| 24/40 | 1/2"            | LG-1010-110    | 114.58        |
| 29/42 | 3/4"            | LG-1010-112    | 139.12        |

**Joint, Ground, Quartz**

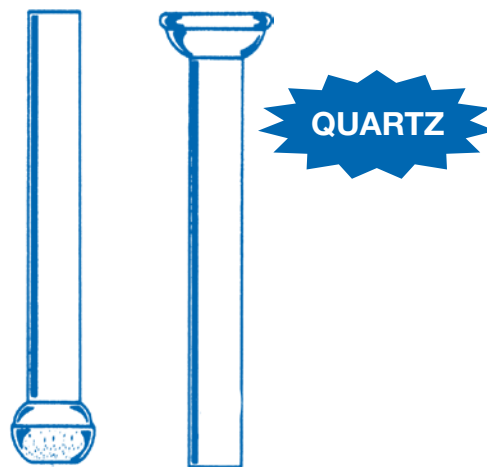
Made from clear quartz tubing.

| Supplied    | Joint | Part<br>Number | Each<br>Price |
|-------------|-------|----------------|---------------|
| Inner Joint | 24/40 | LG-10864-208   | \$48.00       |
| Inner Joint | 29/42 | LG-10864-210   | 49.10         |
| Inner Joint | 34/45 | LG-10864-212   | 69.29         |
| Inner Joint | 45/50 | LG-10864-214   | 105.23        |
| Outer Joint | 24/40 | LG-10864-308   | 55.00         |
| Outer Joint | 29/42 | LG-10864-310   | 56.93         |
| Outer Joint | 34/45 | LG-10864-312   | 121.85        |
| Outer Joint | 45/50 | LG-10864-314   | 94.63         |

**Joint, Ground, Ball and Socket, Quartz**

Made from clear quartz tubing.

| Supplied     | Size Joint | Part Number  | Each Price |
|--------------|------------|--------------|------------|
| Ball Joint   | 12/5       | LG-10865-200 | \$26.29    |
| Ball Joint   | 18/9       | LG-10865-202 | 49.10      |
| Ball Joint   | 28/15      | LG-10865-204 | 46.29      |
| Ball Joint   | 35/25      | LG-10865-206 | 95.75      |
| Socket Joint | 12/5       | LG-10865-300 | 28.04      |
| Socket Joint | 18/9       | LG-10865-302 | 51.21      |
| Socket Joint | 28/15      | LG-10865-304 | 36.48      |
| Socket Joint | 35/25      | LG-10865-306 | 122.21     |

**LG-10865****Joint, Sleeve, PTFE**

These sleeves, nominal thickness 0.003", are fitted onto inner joints to prevent "freezing" of assembled joints.

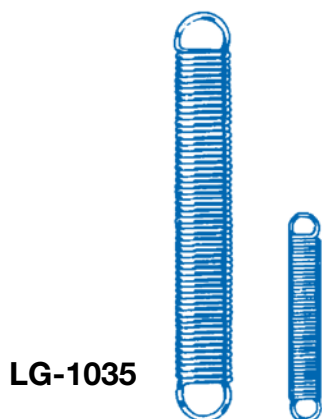
| Size Joint | Part Number  | Each Price |
|------------|--------------|------------|
| 10/30      | LG-1038T-100 | \$8.73     |
| 12/30      | LG-1038T-102 | 8.73       |
| 14/20      | LG-1038T-104 | 8.73       |
| 14/35      | LG-1038T-106 | 9.30       |
| 19/22      | LG-1038T-108 | 9.30       |
| 19/38      | LG-1038T-110 | 9.71       |
| 24/25      | LG-1038T-112 | 9.71       |
| 24/40      | LG-1038T-114 | 10.27      |
| 29/26      | LG-1038T-116 | 11.38      |
| 29/42      | LG-1038T-118 | 11.38      |
| 34/45      | LG-1038T-122 | 12.50      |
| 40/50      | LG-1038T-124 | 13.76      |
| 45/50      | LG-1038T-126 | 14.56      |
| 55/50      | LG-1038T-130 | 19.03      |
| 60/50      | LG-1038T-132 | 26.09      |

**LG-1038T****Joint, Sleeves, PTFE, Rigid**

For grease-free, high vacuum seals using standard ground glass joints. Made from PTFE with substantial shoulder for ease of handling.

| Size Joint | Part Number  | Each Price |
|------------|--------------|------------|
| 10/30      | LG-1039T-100 | \$6.00     |
| 14/20      | LG-1039T-102 | 6.25       |
| 14/35      | LG-1039T-104 | 7.50       |
| 19/22      | LG-1039T-106 | 7.25       |
| 19/38      | LG-1039T-108 | 9.00       |
| 24/40      | LG-1039T-110 | 9.50       |
| 29/42      | LG-1039T-112 | 13.00      |
| 34/45      | LG-1039T-114 | 16.00      |
| 45/50      | LG-1039T-116 | 25.00      |
| 55/50      | LG-1039T-118 | 29.00      |

**LG-1039T**

**LG-9611****LG-9612****LG-9613****LG-9614****LG-1035****Joint, Lubricant, Phynal**

Grease which is used for lubricating ground joints and stopcocks. Insoluble in hydrocarbons but soluble in water. For use up to 50°C.

| Size      | Part Number        | Each Price |
|-----------|--------------------|------------|
| 1 oz. Jar | <b>LG-9611-100</b> | \$27.86    |

**Joint, Lubricant, Graphited Silicone**

A grease used in lubricating ground joints and stopcocks which may be used in high vacuum systems up to 250°C continuously.

| Size      | Part Number        | Each Price |
|-----------|--------------------|------------|
| 2 oz. Jar | <b>LG-9612-100</b> | \$34.84    |

**Joint, Lubricant, Grease, Fluorinated, GPL KRYTOX®**

Superior performance non-contaminating, nonflammable, general purpose grease. Use with joints & stopcocks.

| Size       | Part Number        | Each Price |
|------------|--------------------|------------|
| 2 oz. Tube | <b>LG-9613-100</b> | \$47.48    |

**Joint, Lubricant, Grease, High Vacuum Grease, LVP, KRYTOX®**

Very low vapor pressure, highly inert, nonflammable grease. The grease is for use in high vacuum systems, 260°C.

| Size       | Part Number        | Each Price |
|------------|--------------------|------------|
| 2 oz. Tube | <b>LG-9614-100</b> | \$126.60   |

**Joint, Springs, Stainless, Steel**

Used to connect ware having glass hooks. Sold individually.

| Fits<br>Joint  | Size<br>(Also Coil<br>Length<br>mm) | Overall<br>Length<br>mm | Diameter<br>of Coil<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------------------------|-------------------------|---------------------------|--------------------|---------------|
| 5/20 to 14/20  | 10                                  | 18                      | 4                         | <b>LG-1035-099</b> | \$1.07        |
| 5/20 to 19/22  | 18                                  | 26                      | 5                         | <b>LG-1035-100</b> | 1.11          |
| 19/38 to 34/28 | 24                                  | 32                      | 5                         | <b>LG-1035-102</b> | 1.20          |
| 34/45 to 50/50 | 30                                  | 38                      | 5                         | <b>LG-1035-104</b> | 1.29          |
| 40/50 to 60/50 | 35                                  | 46                      | 8                         | <b>LG-1035-106</b> | 1.51          |
| 71/60          | 45                                  | 56                      | 8                         | <b>LG-1035-108</b> | 1.68          |

### NMR Tubes, Precision, 3mm Thin Walled

3mm O.D. NMR tube, Precision, thin-walled, ASTM, PYREX® or equivalent  
Type 1, Class A Borosilicate Glass

**Specification:**

O.D.: 3.000 +0.000/-0.013mm

I.D.: 2.413 +0.013/-0.000mm

Wall: 0.29mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number     | Each Price |
|------------|---------------|-----------------------|----------------|-----------------|------------|
| 600-800    | 7             | 13                    | 6              | <b>335-PP-7</b> | \$12.88    |
| 600-800    | 8             | 13                    | 6              | <b>335-PP-8</b> | 14.01      |
| 500        | 7             | 25                    | 13             | <b>328-PP-7</b> | 11.02      |
| 500        | 8             | 25                    | 13             | <b>328-PP-8</b> | 12.05      |
| 400        | 7             | 25                    | 25             | <b>327-PP-7</b> | 9.37       |
| 400        | 8             | 25                    | 25             | <b>327-PP-8</b> | 10.40      |
| 300        | 7             | 51                    | 25             | <b>307-PP-7</b> | 8.65       |
| 300        | 8             | 51                    | 25             | <b>307-PP-8</b> | 9.17       |
| 200*       | 7             | 76                    | 51             | <b>305-PS-7</b> | 6.90       |
| 200*       | 8             | 76                    | 51             | <b>305-PS-8</b> | 7.31       |

\*O.D.: 3.000 +0.013/-0.026mm \*ID 2.413 ± 0.026mm

3mm Thin  
Walled

### NMR Tubes, Precision, 5mm Thin Walled

5mm O.D. NMR tube, Precision, thin-walled, ASTM, PYREX® or equivalent  
Type 1, Class A Borosilicate Glass

**Specification:**

O.D.: 4.97 +0.000/-0.013mm

I.D.: 4.20 +0.013/-0.000mm

Wall: 0.38mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number     | Each Price |
|------------|---------------|-----------------------|----------------|-----------------|------------|
| 900        | 7             | 2.5                   | 3.8            | <b>542-PP-7</b> | \$29.77    |
| 900        | 8             | 2.5                   | 3.8            | <b>542-PP-8</b> | 30.28      |
| 800        | 7             | 3.8                   | 3.8            | <b>541-PP-7</b> | 23.59      |
| 800        | 8             | 3.8                   | 3.8            | <b>541-PP-8</b> | 25.13      |
| 600-700    | 7             | 13                    | 6              | <b>535-PP-7</b> | 15.35      |
| 600-700    | 8             | 13                    | 6              | <b>535-PP-8</b> | 16.89      |
| 500        | 7             | 25                    | 13             | <b>528-PP-7</b> | 11.02      |
| 500        | 8             | 25                    | 13             | <b>528-PP-8</b> | 12.46      |
| 400        | 7             | 25                    | 25             | <b>527-PP-7</b> | 9.17       |
| 400        | 8             | 25                    | 25             | <b>527-PP-8</b> | 10.20      |
| 300        | 7             | 51                    | 25             | <b>507-PP-7</b> | 7.42       |
| 300        | 8             | 51                    | 25             | <b>507-PP-8</b> | 8.24       |
| 200        | 7             | 51                    | 51             | <b>506-PP-7</b> | 5.25       |
| 200        | 8             | 51                    | 51             | <b>506-PP-8</b> | 5.97       |
| 100*       | 7             | 76                    | 51             | <b>505-PS-7</b> | 4.94       |
| 100*       | 8             | 76                    | 51             | <b>505-PS-8</b> | 5.05       |

\*O.D.: 4.97 +0.000mm -0.013mm ID: 4.27 ± 0.13mm

5mm Thin  
Walled



**10mm Thin Walled****5mm Series-PRO****NMR Tubes, Precision, 10mm Thin Walled**

10mm O.D. NMR tube, Precision, thin-walled, ASTM, PYREX® or equivalent Type 1, Class A Borosilicate Glass

*Specification:*

O.D.: 10.00 +0.000/-0.013mm

I.D.: 9.07 ± 0.013

Wall: 0.46mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number      | Each Price |
|------------|---------------|-----------------------|----------------|------------------|------------|
| 500-900    | 7             | 38                    | 13             | <b>513-7PP-7</b> | \$24.31    |
| 500-900    | 8             | 38                    | 13             | <b>513-7PP-8</b> | 25.44      |
| 400        | 7             | 51                    | 25             | <b>513-5PP-7</b> | 21.94      |
| 400        | 8             | 51                    | 25             | <b>513-5PP-8</b> | 23.07      |
| 300        | 7             | 76                    | 38             | <b>513-3PP-7</b> | 19.67      |
| 300        | 8             | 76                    | 38             | <b>513-3PP-8</b> | 20.81      |
| 200        | 7             | 254                   | 51             | <b>513-1PP-7</b> | 13.18      |
| 200        | 8             | 254                   | 51             | <b>513-1PP-8</b> | 14.21      |
| 100*       | 7             | 254                   | 51             | <b>513-1PS-7</b> | 10.40      |
| 100*       | 8             | 254                   | 51             | <b>513-1PS-8</b> | 10.71      |

\*O.D.: 10.000 +0.000 -0.013mm \*ID: 8.90 ± 0.13mm

**NMR Tubes, 5mm, Professional Series-PRO**

5mm O.D. NMR tube, ASTM, N51A or equivalent Type 1, Class B Borosilicate Glass

Specifications are between Economy and Precision tubes.

*Specification:*

O.D.: 4.94 ± 0.02mm

I.D.: 4.15 ± 0.02mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number      | Each Price |
|------------|---------------|-----------------------|----------------|------------------|------------|
| 500-700    | 7             | 13                    | 6              | <b>WG-1035-7</b> | \$7.70     |
| 500-700    | 8             | 13                    | 6              | <b>WG-1035-8</b> | 8.80       |
| 400-500    | 7             | 20                    | 13             | <b>WG-1028-7</b> | 4.40       |
| 400-500    | 8             | 20                    | 13             | <b>WG-1028-8</b> | 5.50       |
| 200-300    | 7             | 25                    | 25             | <b>WG-1007-7</b> | 3.60       |
| 200-300    | 8             | 25                    | 25             | <b>WG-1007-8</b> | 3.75       |
| 100*       | 7             | 50                    | 75             | <b>WG-1005-7</b> | 330.00     |
| 100*       | 8             | 50                    | 75             | <b>WG-1005-8</b> | 360.00     |

\*These tubes are supplied in a box of 100 without caps and sandblasting.

### NMR Tubes, 5mm Economy

5mm O.D. NMR tube, Economy, ASTM, N51A or equivalent Type 1, Class B Borosilicate Glass

**Specifications:**

O.D.: 4.90mm to 4.966mm

Wall: 0.43mm ± 0.02mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number      | Each Price |
|------------|---------------|-----------------------|----------------|------------------|------------|
| 700        | 7             | 2.5                   | 3.8            | WG-1242-7        | \$11.33    |
| 700        | 8             | 2.5                   | 3.8            | WG-1242-8        | 12.88      |
| 600        | 7             | 3.8                   | 3.8            | WG-1241-7        | 5.41       |
| 600        | 8             | 3.8                   | 3.8            | WG-1241-8        | 6.44       |
| 500        | 7             | 13                    | 6              | WG-1235-7        | 4.89       |
| 500        | 8             | 13                    | 6              | WG-1235-8        | 5.92       |
| 400        | 7             | 25                    | 13             | WG-1228-7        | 3.45       |
| 400        | 8             | 25                    | 13             | WG-1228-8        | 4.38       |
| 300        | 7             | 51                    | 13             | WG-1226-7        | 3.04       |
| 300        | 8             | 51                    | 13             | WG-1226-8        | 3.81       |
| 200        | 7             | 51                    | 25             | WG-1208-7        | 2.32       |
| 200        | 8             | 51                    | 25             | WG-1208-8        | 2.58       |
| 100        | 7             | 51                    | 50             | WG-1206-7        | 2.11       |
| 100        | 8             | 51                    | 50             | WG-1206-8        | 2.47       |
| 100        | 7             | 76                    | 76             | WG-5MM-ECONOMY-7 | 1.29       |
| 100        | 8             | 76                    | 76             | WG-5MM-ECONOMY-8 | 1.60       |
| 100*       | 7             | 76                    | 76             | WG-1000-7        | 82.40      |
| 100*       | 8             | 76                    | 76             | WG-1000-8        | 103.00     |

\*Bulk: Sold in a pack of 100 without caps and without sandblasting

### NMR Tubes, 5mm Economy

5mm O.D. Economy tube, ASTM, PYREX® or equivalent Type 1, Class A Borosilicate Glass

**Specification:**

O.D.: 4.97 +0.000/-0.013mm

Wall: 0.38mm

| MHz Rating | Length Inches | Concentricity Microns | Camber Microns | Part Number | Each Price |
|------------|---------------|-----------------------|----------------|-------------|------------|
| 100        | 7             | 76                    | 76             | 512-7       | \$2.47     |
| 100        | 8             | 76                    | 76             | 512-8       | 2.58       |

### TECHNICAL INFORMATION

| 5mm NMR Tube Type | Glass Type                                              | Manufacturing Method        | Wall Thickness, mm |
|-------------------|---------------------------------------------------------|-----------------------------|--------------------|
| Precision         | Borosilicate Glass Type 1, Class A PYREX® or equivalent | Shrunk, ground and polished | 0.38               |
| PRO-Series        | Borosilicate Glass Type 1, Class B (N51A) or equivalent | Ground and polished         | 0.40               |
| Economy           | Borosilicate Glass Type 1, Class B (N51A) or equivalent | Selection process           | 0.43               |

5mm Economy  
Class B



5mm Economy  
Class A





### Disposable NMR Tube Caps

Disposable NMR Tube Caps (5mm) are made from molded Ethylene Vinyl Acetate or Polyethylene copolymer.

The 5mm size caps are available in 8 colors and are packaged in bags of 100 or 1000. Please specify the color for 5mm NMR caps when ordering. Assorted colors are also available in bags of 100 or 1000.

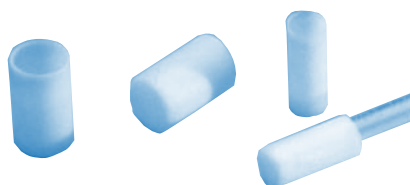
| O.D. mm | Cap Color | Qty. per Pack | Part Number          | Pack Price |
|---------|-----------|---------------|----------------------|------------|
| 3       | Red       | 100           | <b>521-P-100</b>     | \$5.21     |
| 3       | Red       | 1000          | <b>521-P-1000</b>    | 35.48      |
| 5       | Assorted  | 100           | <b>521-ASST-100</b>  | 6.08       |
| 5       | Assorted  | 1000          | <b>521-ASST-1000</b> | 37.84      |
| 5       | Red       | 100           | <b>521-RED-100</b>   | 6.08       |
| 5       | Red       | 1000          | <b>521-RED-1000</b>  | 37.84      |
| 5       | Black     | 100           | <b>521-BLK-100</b>   | 6.08       |
| 5       | Black     | 1000          | <b>521-BLK-1000</b>  | 37.84      |
| 5       | Blue      | 100           | <b>521-BLU-100</b>   | 6.08       |
| 5       | Blue      | 1000          | <b>521-BLU-1000</b>  | 37.84      |
| 5       | Green     | 100           | <b>521-GRN-100</b>   | 6.08       |
| 5       | Green     | 1000          | <b>521-GRN-1000</b>  | 37.84      |
| 5       | Orange    | 100           | <b>521-ORG-100</b>   | 6.08       |
| 5       | Orange    | 1000          | <b>521-ORG-1000</b>  | 37.84      |
| 5       | Purple    | 100           | <b>521-PUR-100</b>   | 6.08       |
| 5       | Purple    | 1000          | <b>521-PUR-1000</b>  | 37.84      |
| 5       | White     | 100           | <b>521-WHT-100</b>   | 6.08       |
| 5       | White     | 1000          | <b>521-WHT-1000</b>  | 37.84      |
| 5       | Yellow    | 100           | <b>521-YLW-100</b>   | 6.08       |
| 5       | Yellow    | 1000          | <b>521-YLW-1000</b>  | 37.84      |
| 10      | Red       | 100           | <b>521-C-100</b>     | 10.40      |
| 10      | Red       | 1000          | <b>521-C-1000</b>    | 50.88      |

*Technical Tip: Ethylene Vinyl Acetate (5mm) tube caps should not be used with chloroform or methylene chloride. Use Teflon tube caps.*

### Teflon Tube Caps

Teflon Caps for 3mm, 5mm and 10mm NMR tubes. Packed in quantities of 25.

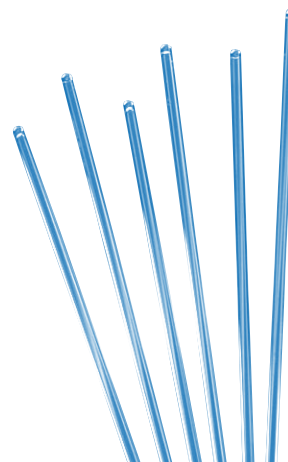
| Tube O.D. mm | Part Number       | Pack Price |
|--------------|-------------------|------------|
| 3            | <b>WG-1264-3</b>  | \$61.90    |
| 5            | <b>WG-1264-5</b>  | 69.22      |
| 10           | <b>WG-1264-10</b> | 80.86      |



### NMR Capillary Tubes

NMR Capillary Tubes, ASTM, PYREX® or equivalent Type 1, Class A Borosilicate Glass

| O.D.<br>mm | ID<br>mm | Length<br>mm | Qty. per<br>Pack | Part<br>Number           | Pack<br>Price |
|------------|----------|--------------|------------------|--------------------------|---------------|
| 1          | 0.8      | 75           | 10               | <b>WG-1364-1</b>         | \$27.81       |
| 1.7        | 1.3      | 100          | 10               | <b>WG-1364-1.7</b>       | 27.81         |
| 1.9        | 1.5      | 110          | 10               | <b>WG-1364-1.9</b>       | 29.87         |
| 2          | 1.6      | 100          | 10               | <b>WG-1364-2</b>         | 29.87         |
| 2.5        | 2.2      | 100          | 10               | <b>WG-1364-2.5A</b>      | 30.90         |
| 1          | 0.8      | 203          | 5                | <b>WG-1364-1-203M</b>    | 13.91         |
| 1.7        | 1.3      | 203          | 5                | <b>WG-1364-1.7-203M</b>  | 13.91         |
| 2          | 1.6      | 203          | 5                | <b>WG-1364-2-203M</b>    | 14.94         |
| 2.5        | 2.2      | 203          | 5                | <b>WG-1364-2.5A-203M</b> | 15.45         |



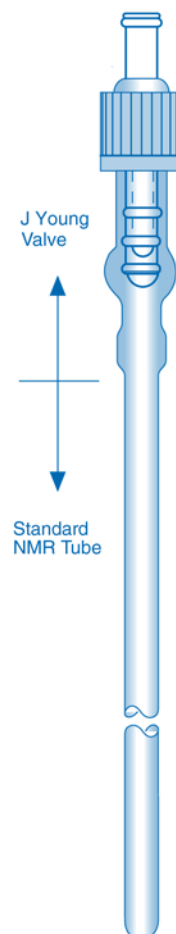
### J Young Precision NMR Tubes

J Young Precision NMR Tubes can be attached to any precision Wilmad NMR Tube. J Young Tubes are commonly used for vacuum and low pressure applications. You can safely seal your sample inside the tube. All materials are chemically inert. The most common applications are: T1 measurements, catalytic studies, volatile solvents, gaseous samples and air sensitive samples.

We also offer custom sizes and lengths of J Young Tubes.

| O.D.<br>mm | MHZ<br>Rating | Length<br>Inch | Part<br>Number   | Each<br>Price |
|------------|---------------|----------------|------------------|---------------|
| 3          | 700-800       | 7              | <b>335-JY-7</b>  | \$91.16       |
| 3          | 700-800       | 8              | <b>335-JY-8</b>  | 91.16         |
| 3          | 500-600       | 7              | <b>328-JY-7</b>  | 82.40         |
| 3          | 500-600       | 8              | <b>328-JY-8</b>  | 82.40         |
| 3          | 300-400       | 7              | <b>307-JY-7</b>  | 80.86         |
| 3          | 300-400       | 8              | <b>307-JY-8</b>  | 80.86         |
| 5          | 700-800       | 7              | <b>535-JY-7</b>  | 91.05         |
| 5          | 700-800       | 8              | <b>535-JY-8</b>  | 91.05         |
| 5          | 500-600       | 7              | <b>528-JY-7</b>  | 86.21         |
| 5          | 500-600       | 8              | <b>528-JY-8</b>  | 86.21         |
| 5          | 300-400       | 7              | <b>507-JY-7</b>  | 82.40         |
| 5          | 300-400       | 8              | <b>507-JY-8</b>  | 82.40         |
| 10         | 400-700       | 7              | <b>513-7JY-7</b> | 93.32         |
| 10         | 400-700       | 8              | <b>513-7JY-8</b> | 93.32         |

*Note: J Young Valve is included with each tube.*





### Quick Pressure Valve (QPV) Tubes

QPV Precision NMR Tubes can be attached to any Precision Wilmad NMR Tube. We can also offer custom sizes and lengths. QPV Tubes are commonly used for catalytical, gas-liquid phase reactions, air sensitive samples and elevated temperature studies. QPV Tubes have been successfully tested for performance at 300 psi\*.

| O.D. mm | MHz Rating | Wall Thickness mm | Part Number      | Each Price |
|---------|------------|-------------------|------------------|------------|
| 5       | 500-700    | 0.38              | <b>528-QPV-7</b> | \$81.32    |
| 5       | 500-700    | 0.38              | <b>528-QPV-8</b> | 81.32      |
| 5       | 200-400    | 0.38              | <b>507-QPV-7</b> | 78.23      |
| 5       | 200-400    | 0.38              | <b>507-QPV-8</b> | 78.23      |
| 5       | 200-400    | 0.77              | <b>524-QPV-7</b> | 83.38      |
| 5       | 200-400    | 0.77              | <b>524-QPV-8</b> | 83.38      |
| 5       | 200-400    | 1.40              | <b>522-QPV-7</b> | 83.38      |
| 5       | 200-400    | 1.40              | <b>522-QPV-8</b> | 83.38      |

*\*Performance of the tubes under pressure cannot be guaranteed due to the nature of glass.*

*Note: Caution should be taken when using glass at elevated pressures. NOT FOR USE WITH AUTOMATED SAMPLE CHANGERS.*

### Stem Coaxial Inserts

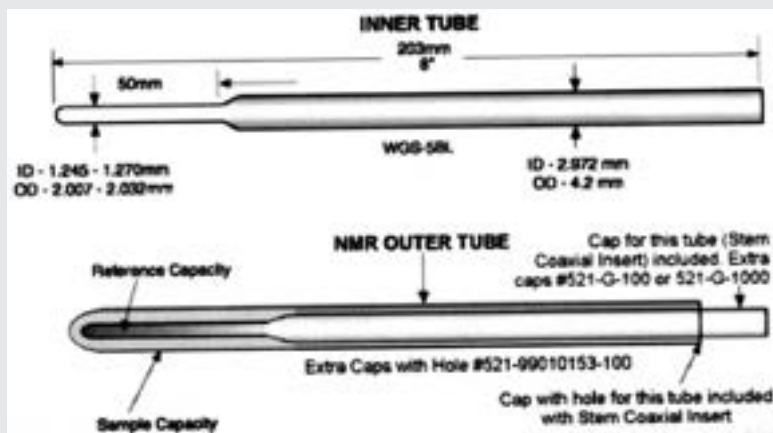
Applications: external referencing, external locking and determining magnetic susceptibility. The coaxial insert can be used for variable temperature because all the parts are made from ASTM, PYREX® or equivalent Type 1, Class A Borosilicate Glass. Stem height: 50mm

| For Outer Tube O.D. mm | Reference Capacity | Sample Capacity | Stem O.D. mm | Use With *Outer Tube | Part Number     | Each Price |
|------------------------|--------------------|-----------------|--------------|----------------------|-----------------|------------|
| 5                      | 60 $\mu$ L         | 530 $\mu$ L     | 2            | 506-PP to 535-PP     | <b>WGS-5BL</b>  | 28.43      |
| 10                     | 410 $\mu$ L        | 2600 $\mu$ L    | 4            | 513-1PP to 513-7PP   | <b>WGS-10BL</b> | 51.50      |

*\*Note: Order 7" outer tube separately.*



Detailed View



### Tip Off Manifold

Applications: air sensitive samples, vacuum transfers, freeze-pump-thaws and sample sealing. All parts of the manifold are chemically resistant.

| Tube<br>O.D. mm | Part<br>Number | Each<br>Price |
|-----------------|----------------|---------------|
| 3               | <b>552-3</b>   | \$118.45      |
| 5               | <b>552-5</b>   | 128.75        |
| 10              | <b>552-10</b>  | 128.75        |



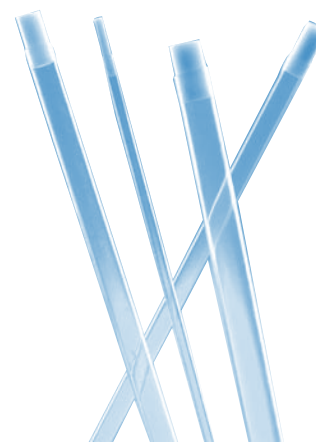
### NMR Tube Liner

Applications: research involving chemical compounds such as hydrofluoric acid, ammonium bifluoride and concentrated hydroxide solutions.

The tube liners have a round bottom and are made from Teflon. The tube liners are inserted into the sample tubes. They fit standard thin-wall 3, 5 and 10mm NMR Tubes.

| Outer<br>Tube<br>O.D. mm | Outer<br>Tube<br>Length Inches | Liner<br>Length<br>Inches | Volume of<br>10mm Height<br>Liner only $\mu$ L | Volume of<br>10mm Height<br>Tube Only $\mu$ L | Part<br>Number | Each<br>Price |
|--------------------------|--------------------------------|---------------------------|------------------------------------------------|-----------------------------------------------|----------------|---------------|
| 3                        | 7                              | 8                         | 30                                             | 45                                            | <b>6003</b>    | \$8.14        |
| 5                        | 7                              | 8                         | 80                                             | 140                                           | <b>6005</b>    | 8.91          |
| 5                        | 8                              | 9                         | 80                                             | 140                                           | <b>6005-8</b>  | 8.91          |
| 10                       | 7                              | 8                         | 440                                            | 630                                           | <b>6010</b>    | 14.52         |

*Note: The tube liners are not recommended for use with elevated temperature. PTFE plug is included with the liners.*



### Long-tip NMR Pipets

NMR Pipets allow for easy adding and removing of liquid samples from the NMR sample Tube. They are also ideal for sample transfer into volumetric flasks with long, narrow necks, and they are great for column chromatography procedures too. You can choose from 3 sizes for different OD and length.

| Description                  | For<br>O.D. Tube         | Overall<br>Length<br>Inches | For<br>Tube Length<br>Inches | Qty.<br>per<br>Pack | Part<br>Number | Pack<br>Price |
|------------------------------|--------------------------|-----------------------------|------------------------------|---------------------|----------------|---------------|
| Short-Tip Pipet              | 5 or larger              | 10 1/2                      | 7                            | 100                 | <b>803</b>     | \$56.24       |
| Long-Tip Pipet               | 5 or larger              | 13 1/2                      | 7, 8 and 9                   | 100                 | <b>803A</b>    | 56.24         |
| <b>NEW</b> Short-Tip Pipet   | Tube OD less<br>than 5mm | 10 1/2                      | 7, 8 and 9                   | 100                 | <b>803B-3</b>  | 56.24         |
| Latex Bulb for<br>All Pipets |                          |                             |                              | 50                  | <b>804</b>     | 22.66         |





**NEW  
SIZES**



**NEW  
SIZES**

### Clear Fused Quartz Precision Sample Tubes

|     | O.D.<br>mm    | I.D.<br>mm   | Wall<br>Thickness<br>mm | Length<br>mm | Concentricity<br>Microns | Camber<br>Microns | Part<br>Number | Each<br>Price |
|-----|---------------|--------------|-------------------------|--------------|--------------------------|-------------------|----------------|---------------|
|     | 1.99 ± 0.013  | 1.02 ± 0.013 | 0.48                    | 100          | 76                       | 76                | 704-PQ-100M    | \$18.75       |
|     | 1.99 ± 0.013  | 1.02 ± 0.013 | 0.48                    | 159          | 76                       | 76                | 704-PQ-6.25    | 22.71         |
|     | 2.97 ± 0.013  | 1.99 ± 0.013 | 0.48                    | 159          | 76                       | 76                | 705-PQ-6.25    | 23.38         |
|     | 3.80 ± 0.013  | 2.79 ± 0.013 | 0.51                    | 241          | 102                      | 102               | 706-PQ-9.50    | 30.18         |
| NEW | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 100          | 51                       | 51                | 714-PQ-100M    | 32.82         |
| NEW | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 178          | 51                       | 51                | 714-PQ-7       | 34.51         |
|     | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 203          | 51                       | 51                | 714-PQ-8       | 40.48         |
|     | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 250          | 51                       | 76                | 715-PQ-250M    | 48.41         |
|     | 4.97 ± 0.013  | 2.16 ± 0.013 | 1.40                    | 178          | 102                      | 102               | 700-PQ-7       | 31.88         |
|     | 4.97 ± 0.013  | 3.43 ± 0.013 | 0.76                    | 178          | 102                      | 102               | 701-PQ-7       | 23.84         |
|     | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 102                      | 102               | 702-PQ-7       | 28.17         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 100          | 51                       | 51                | 703-PQ-100M    | 26.88         |
|     | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 51                       | 51                | 703-PQ-7       | 29.82         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 51                       | 51                | 703-PQ-200M    | 30.75         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 25                       | 13                | 528-PQ-7       | 32.45         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 25                       | 13                | 528-PQ-200M    | 33.48         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 13                       | 6                 | 535-PQ-7       | 35.23         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 13                       | 6                 | 535-PQ-200M    | 36.26         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 76                       | 38                | 713-3PQ-7      | 44.91         |
|     | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 76                       | 38                | 713-3PQ-200M   | 46.30         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 51                       | 25                | 713-5PQ-7      | 51.86         |
|     | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 51                       | 25                | 713-5PQ-200M   | 52.89         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 38                       | 13                | 713-7PQ-7      | 54.44         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 38                       | 13                | 713-7PQ-200M   | 55.47         |

**Technical Tip:** Use Precision EPR Tubes for reproducible positioning of the sample in the resonator and when you must have the same quantity of sample in the resonator from one sample to the other. In most other cases non-precision tubes can be used.

### Clear Fused Quartz Non-Precision Sample Tubes

|     | O.D.<br>mm | I.D.<br>mm | Wall Thickness<br>mm | Length<br>mm | Part<br>Number | Each<br>Price |
|-----|------------|------------|----------------------|--------------|----------------|---------------|
| NEW | 2          | 1          | 0.50                 | 100          | 712-SQ-100M    | \$3.97        |
|     | 2          | 1          | 0.50                 | 250          | 712-SQ-250M    | 4.94          |
| NEW | 4          | 3          | 0.50                 | 100          | 707-SQ-100M    | 5.67          |
|     | 4          | 3          | 0.50                 | 250          | 707-SQ-250M    | 7.16          |
| NEW | 5          | 4          | 0.50                 | 100          | 710-SQ-100M    | 7.16          |
|     | 5          | 4          | 0.50                 | 250          | 710-SQ-250M    | 7.67          |



## Suprasil® Precision Sample Tubes

|     | O.D.<br>mm    | I.D.<br>mm   | Wall<br>Thickness<br>mm | Length<br>mm | Concentricity<br>Microns | Camber<br>Microns | Part<br>Number | Each<br>Price |
|-----|---------------|--------------|-------------------------|--------------|--------------------------|-------------------|----------------|---------------|
|     | 2.96 ± 0.013  | 1.99 ± 0.013 | 0.48                    | 159          | 76                       | 76                | 725-PQ-159M    | \$35.38       |
|     | 3.80 ± 0.013  | 2.79 ± 0.013 | 0.51                    | 241          | 76                       | 102               | 726-PQ-9.50    | 55.47         |
| NEW | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 178          | 51                       | 51                | 734-PQ-7       | 77.30         |
|     | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 203          | 51                       | 51                | 734-PQ-8       | 79.36         |
| NEW | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 100          | 51                       | 76                | 735-PQ-100M    | 81.30         |
|     | 4.00 ± 0.013  | 3.20 ± 0.013 | 0.40                    | 250          | 51                       | 76                | 735-PQ-250M    | 88.17         |
|     | 4.97 ± 0.013  | 3.43 ± 0.013 | 0.76                    | 178          | 102                      | 102               | 721-PQ-7       | 49.39         |
|     | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 102                      | 102               | 722-PQ-7       | 66.13         |
|     | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 51                       | 51                | 723-PQ-7       | 68.44         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 100          | 51                       | 51                | 723-PQ-100M    | 65.10         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 51                       | 51                | 723-PQ-200M    | 70.50         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 25                       | 13                | 728-PQ-7       | 74.01         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 25                       | 13                | 728-PQ-200M    | 76.22         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 178          | 13                       | 6                 | 729-PQ-7       | 80.03         |
| NEW | 4.97 ± 0.013  | 4.20 ± 0.013 | 0.38                    | 200          | 13                       | 6                 | 729-PQ-200M    | 82.40         |
|     | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 76                       | 38                | 733-3PQ-7      | 91.00         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 76                       | 38                | 733-3PQ-200M   | 92.03         |
|     | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 51                       | 25                | 733-5PQ-7      | 93.88         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 51                       | 25                | 733-5PQ-200M   | 94.91         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 178          | 38                       | 13                | 733-7PQ-7      | 96.67         |
| NEW | 10.00 ± 0.013 | 9.07 ± 0.013 | 0.46                    | 200          | 38                       | 13                | 733-7PQ-200M   | 97.70         |

**Technical Tip:** Use Suprasil (Synthetic Quartz) when applying ionizing radiation to generate radical species and for sample with very low signal.

NEW  
SIZES

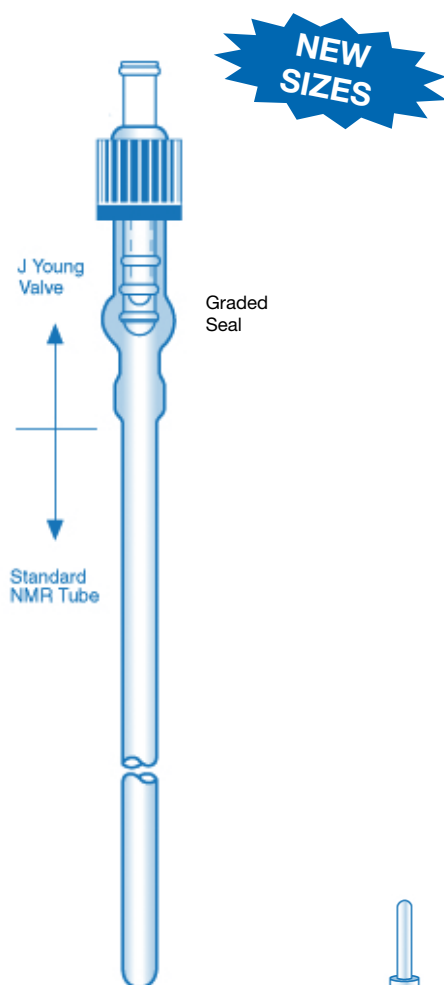
## Suprasil® Non-Precision Sample Tubes

|     | O.D.<br>mm | I.D.<br>mm | Wall Thickness,<br>mm | Length<br>mm | Part<br>Number | Each<br>Price |
|-----|------------|------------|-----------------------|--------------|----------------|---------------|
| NEW | 2          | 1          | 0.50                  | 100          | 724-SQ-100M    | \$22.97       |
|     | 2          | 1          | 0.50                  | 159          | 724-SQ-159M    | 24.21         |
| NEW | 4          | 2.4        | 0.80                  | 250          | 727-SQ-100M    | 23.50         |
|     | 4          | 2.4        | 0.80                  | 250          | 727-SQ-250M    | 28.02         |
| NEW | 5          | 3.4        | 0.80                  | 100          | 730-SQ-100M    | 25.96         |
|     | 5          | 3.4        | 0.80                  | 250          | 730-SQ-250M    | 29.97         |

**Technical Tip**

Many background signals found in Quartz result from “matrix” effect that may not be associated with impurities. Ionizing radiation generates many of these signals (E’signals) which result from electrons in the SiO<sub>2</sub> “matrix” of the glass. They develop at elevated temperature or when exposed to ionizing radiation. The E’signal can be removed by heating the tube to 550°-600°C.

NEW  
SIZES



**NEW  
SIZES**

### J Young EPR Sample Tubes

J Young valve can be attached to any Precision EPR Tube. The J Young adapter is made from Pyrex or equivalent glass. In order to seal the Pyrex adapter to the quartz tube a graded seal is used. Applications: air-sensitive samples, catalytic studies, gaseous samples and volatile samples.

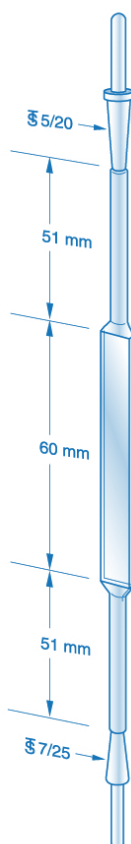
|            | O.D.<br>mm | Part<br>Number     | Each<br>Price |
|------------|------------|--------------------|---------------|
|            | 5          | <b>702-JY-7</b>    | \$118.45      |
|            | 5          | <b>703-JY-7</b>    | 124.63        |
| <b>NEW</b> | 5          | <b>528-PQ-JY-7</b> | 131.84        |
| <b>NEW</b> | 5          | <b>535-PQ-JY-7</b> | 139.05        |
|            | 10         | <b>713-3JY-7</b>   | 137.40        |
|            | 10         | <b>713-5JY-7</b>   | 144.54        |
| <b>NEW</b> | 10         | <b>713-7JY-7</b>   | 151.41        |

*J Young tubes are also available in 8 and 9-inch (203 and 229mm) length or custom lengths. Contact customer service for pricing.*

### Standard TE<sub>102</sub> Cavity Aqueous Cells

| Plate<br>Material | Flat<br>Section | Upper Tube<br>ID/OD mm | Lower Tube<br>ID/OD mm | Part<br>Number    | Each<br>Price |
|-------------------|-----------------|------------------------|------------------------|-------------------|---------------|
| QUARTZ            | 10.5/60         | 5/7                    | 1.5-2.0/7-9            | <b>WG-812</b>     | \$302.82      |
| QUARTZ            | 10.5/60         | 5/7                    | 1.5-2.0/7-9            | <b>WG-812-S</b>   | 904.50        |
| SUPRASIL          | 10.5/60         | 5/7                    | 1.5-2.0/7-9            | <b>WG-812-Q</b>   | 367.71        |
| SUPRASIL          | 10.5/60         | 5/7                    | 1.5-2.0/7-9            | <b>WG-812-S-Q</b> | 1024.85       |
| QUARTZ            | 10.5/60         | 0.5-1/5-7              | 0.5-1/5-7              | <b>WG-814</b>     | 302.82        |
| QUARTZ            | 10.5/60         | 0.5-1/5-7              | 0.5-1/5-7              | <b>WG-814-S</b>   | 904.50        |
| SUPRASIL          | 10.5/60         | 0.5-1/5-7              | 0.5-1/5-7              | <b>WG-814-Q</b>   | 367.71        |
| SUPRASIL          | 10.5/60         | 0.5-1/5-7              | 0.5-1/5-7              | <b>WG-814-S-Q</b> | 1024.85       |

**Technical Tip:** When the sample contains water use the flat aqueous cell to confine the sample to a 0.3 mm space of the cell that is optimized for TE<sub>102</sub> resonators.



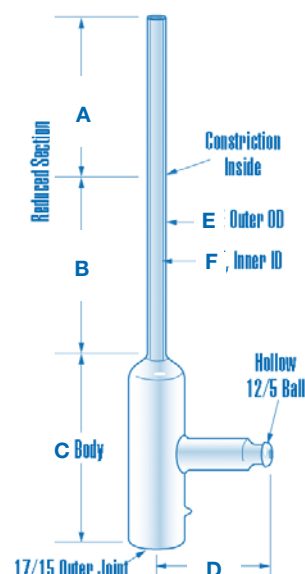
### Dewar Inserts For Variable Temperature (VT)

Applications: to connect to variable-temperature apparatus for temperature range  $-178^{\circ}\text{C}$  to  $+300^{\circ}\text{C}$ . For room-temperature experiments to boost the sensitivity.

| Upper Material | A   | B  | Dimensions mm |    |       | F        | Part Number | Each Price |
|----------------|-----|----|---------------|----|-------|----------|-------------|------------|
| QUARTZ         | 84  | 63 | 72            | 48 | 5 min | 11.4 max | WG-821      | \$457.06   |
| SUPRASIL       | 84  | 63 | 72            | 48 | 5 min | 11.4 max | WG-821-Q    | 552.44     |
| QUARTZ         | 147 |    | 72            | 48 | 6 min | 10.5 max | WG-821-F    | 420.14     |
| SUPRASIL       | 147 |    | 72            | 48 | 6 min | 10.5 max | WG-821-F-Q  | 495.95     |

**Note:** The lower section of the Dewar Insert is made from Quartz and the reduced section can be Quartz or Suprasil

WG-821 and WG-821-Q are silvered and dimpled. WG-821-F and WG-821-F-Q are not.

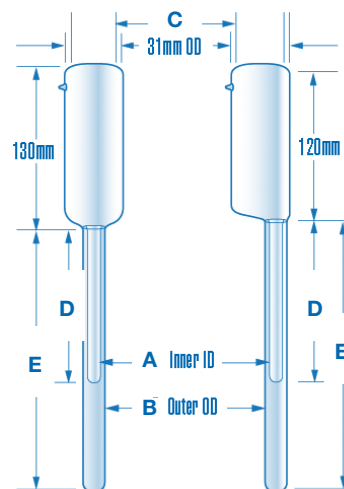


### Dewar Flasks, Small 50mL

Dewar Flasks are a convenient alternative to VT systems for studies at  $-195^{\circ}\text{C}$  (b.p. of liquid N<sub>2</sub>). All Dewar Flasks are silvered around the reservoir. Flasks listed below are 50mL capacity.

| Finger Material | A       | B        | Dimensions mm |     |     | Part Number | Each Price |
|-----------------|---------|----------|---------------|-----|-----|-------------|------------|
| QUARTZ          | 4.9 min | 11.4 max | 22            | 86  | 162 | WG-816      | \$314.77   |
| SUPRASIL        | 4.9 min | 11.4 max | 22            | 86  | 162 | WG-816-Q    | 399.43     |
| QUARTZ          | 5.4     | 10.50    | 22            | 86  | 162 | WG-816-B    | 347.47     |
| SUPRASIL        | 5.4     | 10.50    | 22            | 86  | 162 | WG-816-B-Q  | 425.91     |
| QUARTZ          | 4.9 min | 11.4 max | 22            | 105 | 178 | WG-819      | 353.24     |
| SUPRASIL        | 4.9 min | 11.4 max | 22            | 105 | 178 | WG-819-Q    | 416.74     |
| QUARTZ          | 5.4     | 10.50    | 22            | 105 | 178 | WG-819-B    | 357.87     |
| SUPRASIL        | 5.4     | 10.50    | 22            | 105 | 178 | WG-819-B-Q  | 434.35     |

**Technical Tip:** use small Dewar Flasks when the hold time of the experiment is between 15-25 minutes.

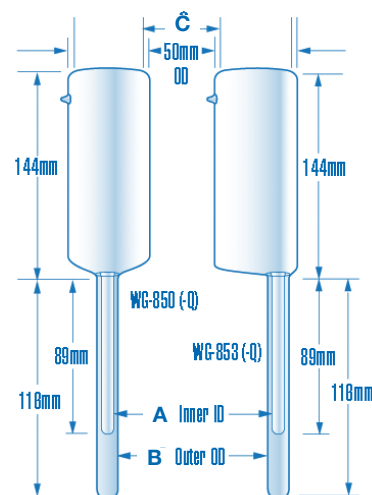


### Dewar Flasks, Large 150mL

| Finger Material | A       | B        | Dimensions mm |  |  | Part Number | Each Price |
|-----------------|---------|----------|---------------|--|--|-------------|------------|
| QUARTZ          | 4.9 min | 11.4 max | 22            |  |  | WG-850      | \$505.94   |
| SUPRASIL        | 4.9 min | 11.4 max | 22            |  |  | WG-850-Q    | 639.89     |
| QUARTZ          | 5.4     | 10.50    | 22            |  |  | WG-850-B    | 562.07     |
| SUPRASIL        | 5.4     | 10.50    | 22            |  |  | WG-850-B-Q  | 639.89     |
| QUARTZ          | 4.9 min | 11.4 max | 22            |  |  | WG-853      | 575.15     |
| SUPRASIL        | 4.9 min | 11.4 max | 22            |  |  | WG-853-Q    | 658.12     |
| QUARTZ          | 5.4     | 10.50    | 22            |  |  | WG-853-B    | 638.75     |
| SUPRASIL        | 5.4     | 10.50    | 22            |  |  | WG-853-B-Q  | 651.78     |

**Technical Tip:** use large Dewar Flasks when the hold time of the experiment is greater than 30 minutes.

The series WG-819 and WG-853 are offset Dewar flasks, which are used when the control is too close to the reservoir of the flask.





### Sample Tube Caps

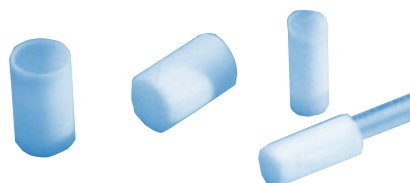
| Tube OD mm | Qty. per Pack | Color                                                  | Part Number        | Each Price |
|------------|---------------|--------------------------------------------------------|--------------------|------------|
| 3          | 100           | Red                                                    | <b>521-P-100</b>   | \$5.21     |
| 4          | 100           | Blue                                                   | <b>521-G-100</b>   | 6.08       |
| 5          | 100           | Red, Yellow, Blue, Green, Black, Purple, Orange, White | <b>521-RED-100</b> | 6.08       |
| 10         | 100           | Red                                                    | <b>521-C-100</b>   | 10.40      |

*Technical Tip: Ethylene Vinyl Acetate (5mm) tube caps should not be used with chloroform or methylene chloride. Use Teflon tube caps.*

### Teflon Tube Caps

Teflon Caps for 3mm, 4mm, 5mm and 10mm NMR tubes. Packed in quantities of 25.

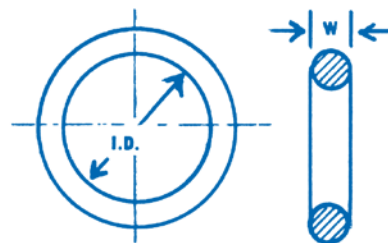
| Tube OD mm | Part Number       | Pack Price |
|------------|-------------------|------------|
| 3          | <b>WG-1264-3</b>  | \$61.90    |
| 4          | <b>WG-1264-4</b>  | 61.90      |
| 5          | <b>WG-1264-5</b>  | 69.22      |
| 10         | <b>WG-1264-10</b> | 80.86      |

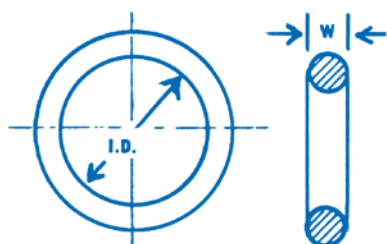


**O-Ring, PTFE**

**PTFE** - Polytetrafluoroethylene (PTFE) has excellent chemical resistance. It is opaque white and has the lowest coefficient of friction of any solid. Useful temperature range is - 180°C to 260°C. Virtually inert but not recommended for use with fluorine, gaseous or molten alkali metals. Density: 2.20

| Material | Size | I.D.<br>mm | Width<br>mm | Part<br>Number     | Each<br>Price |
|----------|------|------------|-------------|--------------------|---------------|
| PTFE     | 007  | 3.7        | 1.78        | <b>LG-1022-400</b> | \$1.29        |
| PTFE     | 008  | 4.5        | 1.78        | <b>LG-1022-402</b> | 1.41          |
| PTFE     | 011  | 7.6        | 1.78        | <b>LG-1022-404</b> | 1.53          |
| PTFE     | 012  | 9.2        | 1.78        | <b>LG-1022-406</b> | 1.60          |
| PTFE     | 013  | 10.8       | 1.78        | <b>LG-1022-408</b> | 1.60          |
| PTFE     | 014  | 12.4       | 1.78        | <b>LG-1022-410</b> | 1.64          |
| PTFE     | 015  | 13.9       | 1.78        | <b>LG-1022-412</b> | 1.68          |
| PTFE     | 016  | 15.6       | 1.78        | <b>LG-1022-414</b> | 1.76          |
| PTFE     | 018  | 18.8       | 1.78        | <b>LG-1022-416</b> | 1.86          |
| PTFE     | 020  | 21.9       | 1.78        | <b>LG-1022-417</b> | 2.05          |
| PTFE     | 110  | 9.2        | 2.6         | <b>LG-1022-420</b> | 2.03          |
| PTFE     | 111  | 10.8       | 2.6         | <b>LG-1022-422</b> | 1.78          |
| PTFE     | 112  | 10.8       | 2.6         | <b>LG-1022-424</b> | 1.78          |
| PTFE     | 114  | 15.5       | 2.6         | <b>LG-1022-426</b> | 2.44          |
| PTFE     | 115  | 17.1       | 2.6         | <b>LG-1022-428</b> | 2.64          |
| PTFE     | 116  | 18.7       | 2.6         | <b>LG-1022-430</b> | 2.05          |
| PTFE     | 118  | 21.9       | 2.6         | <b>LG-1022-432</b> | 3.13          |
| PTFE     | 121  | 26.6       | 2.6         | <b>LG-1022-434</b> | 3.52          |
| PTFE     | 123  | 29.8       | 2.6         | <b>LG-1022-438</b> | 4.05          |
| PTFE     | 124  | 31.4       | 2.6         | <b>LG-1022-439</b> | 3.15          |
| PTFE     | 128  | 37.8       | 2.6         | <b>LG-1022-442</b> | 3.95          |
| PTFE     | 136  | 50.5       | 2.6         | <b>LG-1022-444</b> | 4.05          |
| PTFE     | 210  | 18.6       | 3.5         | <b>LG-1022-446</b> | 3.60          |
| PTFE     | 212  | 21.8       | 3.5         | <b>LG-1022-450</b> | 4.09          |
| PTFE     | 214  | 25.0       | 3.5         | <b>LG-1022-452</b> | 4.87          |
| PTFE     | 217  | 29.7       | 3.5         | <b>LG-1022-454</b> | 5.55          |
| PTFE     | 222  | 37.7       | 3.5         | <b>LG-1022-457</b> | 3.68          |
| PTFE     | 223  | 40.9       | 3.5         | <b>LG-1022-458</b> | 9.23          |
| PTFE     | 225  | 40.9       | 3.5         | <b>LG-1022-460</b> | 8.31          |
| PTFE     | 226  | 50.4       | 3.5         | <b>LG-1022-462</b> | 4.85          |
| PTFE     | 227  | 53.6       | 3.5         | <b>LG-1022-464</b> | 9.62          |
| PTFE     | 229  | 59.9       | 3.5         | <b>LG-1022-468</b> | 5.34          |
| PTFE     | 331  | 56.5       | 5.3         | <b>LG-1022-471</b> | 20.51         |
| PTFE     | 339  | 81.9       | 5.3         | <b>LG-1022-472</b> | 23.58         |
| PTFE     | 348  | 110.5      | 5.3         | <b>LG-1022-476</b> | 42.24         |
| PTFE     | 359  | 145.4      | 5.3         | <b>LG-1022-478</b> | 50.24         |

**LG-1022**



LG-1020

**O-Ring, Chemraz®**

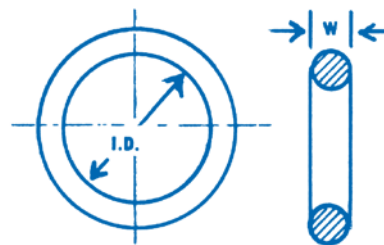
**Chemraz®** is a low cost alternative to Kalrez®. It has the broadest chemical resistance of any elastometric material. This perfluoroelastomer can be used at a wide range of temperature (-20°F to 615°F).

| Material | Size | ID mm | Width mm | Part Number        | Each Price |
|----------|------|-------|----------|--------------------|------------|
| Chemraz® | 006  | 2.9   | 1.78     | <b>LG-1020-506</b> | \$40.40    |
| Chemraz® | 008  | 4.5   | 1.78     | <b>LG-1020-508</b> | 39.64      |
| Chemraz® | 010  | 6.1   | 1.78     | <b>LG-1020-510</b> | 44.19      |
| Chemraz® | 011  | 7.6   | 1.78     | <b>LG-1020-511</b> | 41.57      |
| Chemraz® | 012  | 9.25  | 1.78     | <b>LG-1020-512</b> | 41.12      |
| Chemraz® | 014  | 12.4  | 1.78     | <b>LG-1020-514</b> | 44.12      |
| Chemraz® | 019  | 20.3  | 1.78     | <b>LG-1020-519</b> | 58.61      |
| Chemraz® | 020  | 21.9  | 1.78     | <b>LG-1020-520</b> | 57.88      |
| Chemraz® | 108  | 6.0   | 2.62     | <b>LG-1020-608</b> | 57.10      |
| Chemraz® | 110  | 9.2   | 2.62     | <b>LG-1020-610</b> | 54.01      |
| Chemraz® | 111  | 10.8  | 2.62     | <b>LG-1020-611</b> | 56.01      |
| Chemraz® | 112  | 12.4  | 2.62     | <b>LG-1020-612</b> | 59.23      |
| Chemraz® | 116  | 18.7  | 2.62     | <b>LG-1020-616</b> | 71.75      |
| Chemraz® | 118  | 21.9  | 2.62     | <b>LG-1020-618</b> | 80.53      |
| Chemraz® | 120  | 25.1  | 2.62     | <b>LG-1020-620</b> | 93.73      |
| Chemraz® | 121  | 26.6  | 2.62     | <b>LG-1020-621</b> | 96.23      |
| Chemraz® | 136  | 50.5  | 2.62     | <b>LG-1020-636</b> | 204.63     |
| Chemraz® | 153  | 88.3  | 5.33     | <b>LG-1020-653</b> | 363.82     |
| Chemraz® | 211  | 20.3  | 3.50     | <b>LG-1020-711</b> | 112.36     |
| Chemraz® | 217  | 29.7  | 3.50     | <b>LG-1020-717</b> | 157.91     |
| Chemraz® | 222  | 37.7  | 3.50     | <b>LG-1020-722</b> | 126.20     |
| Chemraz® | 225  | 47.2  | 3.50     | <b>LG-1020-725</b> | 162.75     |
| Chemraz® | 349  | 113.7 | 5.33     | <b>LG-1020-849</b> | 610.44     |

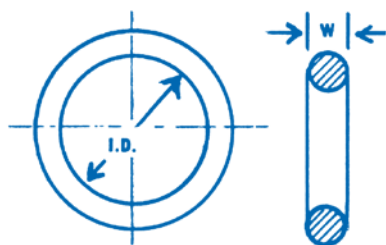
**O-Ring, Viton®**

**Viton®** has low gas permeability. This property makes it a good selection for high vacuum applications. This fluorocarbon has excellent chemical resistance over a wide temperature range (-20°C to 200°C). Resists aliphatic and aromatic compounds, but not recommended for use with ketones, esters and ethers. Viton® is a copolymer of hexafluoropropylene and 1, 1-difluoroethylene and has good mechanical and electrical properties.

| Material | Size | I.D.<br>mm | Width<br>mm | Part<br>Number     | Each<br>Price |
|----------|------|------------|-------------|--------------------|---------------|
| Viton®   | 007  | 3.7        | 1.78        | <b>LG-1022-500</b> | \$.83         |
| Viton®   | 008  | 4.5        | 1.78        | <b>LG-1022-502</b> | .84           |
| Viton®   | 011  | 7.6        | 1.78        | <b>LG-1022-504</b> | .88           |
| Viton®   | 012  | 9.2        | 1.78        | <b>LG-1022-506</b> | 1.17          |
| Viton®   | 013  | 10.8       | 1.78        | <b>LG-1022-508</b> | 1.17          |
| Viton®   | 014  | 12.4       | 1.78        | <b>LG-1022-510</b> | 1.16          |
| Viton®   | 015  | 13.9       | 1.78        | <b>LG-1022-512</b> | 1.17          |
| Viton®   | 016  | 15.6       | 1.78        | <b>LG-1022-514</b> | 1.17          |
| Viton®   | 018  | 18.8       | 1.78        | <b>LG-1022-516</b> | 1.17          |
| Viton®   | 020  | 21.9       | 1.78        | <b>LG-1022-517</b> | 1.17          |
| Viton®   | 022  | 25.1       | 1.78        | <b>LG-1022-518</b> | 1.17          |
| Viton®   | 110  | 9.2        | 2.6         | <b>LG-1022-520</b> | 1.17          |
| Viton®   | 111  | 10.8       | 2.6         | <b>LG-1022-522</b> | 1.17          |
| Viton®   | 112  | 12.4       | 2.6         | <b>LG-1022-524</b> | 1.23          |
| Viton®   | 114  | 15.5       | 2.6         | <b>LG-1022-526</b> | 1.39          |
| Viton®   | 115  | 17.1       | 2.6         | <b>LG-1022-528</b> | 1.47          |
| Viton®   | 116  | 18.7       | 2.6         | <b>LG-1022-530</b> | 1.56          |
| Viton®   | 118  | 21.9       | 2.6         | <b>LG-1022-532</b> | 1.76          |
| Viton®   | 121  | 26.6       | 2.6         | <b>LG-1022-534</b> | 2.27          |
| Viton®   | 122  | 28.2       | 2.6         | <b>LG-1022-536</b> | 2.27          |
| Viton®   | 123  | 29.8       | 2.6         | <b>LG-1022-538</b> | 2.27          |
| Viton®   | 124  | 31.4       | 2.6         | <b>LG-1022-539</b> | 2.27          |
| Viton®   | 125  | 33.0       | 2.6         | <b>LG-1022-540</b> | 2.27          |
| Viton®   | 128  | 37.8       | 2.6         | <b>LG-1022-542</b> | 2.27          |
| Viton®   | 136  | 50.5       | 2.6         | <b>LG-1022-544</b> | 4.77          |
| Viton®   | 210  | 18.6       | 3.5         | <b>LG-1022-546</b> | 2.78          |
| Viton®   | 211  | 20.2       | 3.5         | <b>LG-1022-548</b> | 2.78          |
| Viton®   | 212  | 21.8       | 3.5         | <b>LG-1022-550</b> | 2.78          |
| Viton®   | 214  | 25.0       | 3.5         | <b>LG-1022-552</b> | 2.78          |
| Viton®   | 217  | 29.7       | 3.5         | <b>LG-1022-554</b> | 3.83          |
| Viton®   | 220  | 34.5       | 3.5         | <b>LG-1022-556</b> | 4.65          |
| Viton®   | 222  | 37.7       | 3.5         | <b>LG-1022-557</b> | 4.65          |
| Viton®   | 223  | 40.9       | 3.5         | <b>LG-1022-558</b> | 4.46          |
| Viton®   | 225  | 47.2       | 3.5         | <b>LG-1022-560</b> | 5.30          |
| Viton®   | 226  | 50.4       | 3.5         | <b>LG-1022-562</b> | 5.30          |
| Viton®   | 227  | 53.6       | 3.5         | <b>LG-1022-564</b> | 5.85          |
| Viton®   | 228  | 56.7       | 3.5         | <b>LG-1022-566</b> | 5.91          |
| Viton®   | 229  | 59.9       | 3.5         | <b>LG-1022-568</b> | 6.02          |
| Viton®   | 230  | 63.1       | 3.5         | <b>LG-1022-570</b> | 7.39          |
| Viton®   | 331  | 56.5       | 5.3         | <b>LG-1022-571</b> | 7.14          |
| Viton®   | 339  | 81.9       | 5.3         | <b>LG-1022-572</b> | 7.37          |
| Viton®   | 341  | 88.3       | 5.3         | <b>LG-1022-574</b> | 13.61         |
| Viton®   | 348  | 110.5      | 5.3         | <b>LG-1022-576</b> | 17.54         |
| Viton®   | 359  | 145.4      | 5.3         | <b>LG-1022-578</b> | 20.83         |

**LG-1022**





LG-1020



## O-Ring, Kalrez®

Kalrez® O-rings are a perfluoroelastomer with chemical resistance similar to PTFE, but with mechanical properties similar to Viton®, within the temperature limits of -37°C to +260°C, and limited use up to 316°C for short durations.

| Material | Size | ID mm | Width mm | Part Number | Each Price |
|----------|------|-------|----------|-------------|------------|
| Kalrez®  | 006  | 2.9   | 1.78     | LG-1020-006 | \$28.82    |
| Kalrez®  | 007  | 3.7   | 1.78     | LG-1020-007 | 28.82      |
| Kalrez®  | 008  | 4.5   | 1.78     | LG-1020-008 | 30.44      |
| Kalrez®  | 009  | 5.3   | 1.78     | LG-1020-009 | 31.03      |
| Kalrez®  | 011  | 7.6   | 1.78     | LG-1020-011 | 29.63      |
| Kalrez®  | 012  | 9.25  | 1.78     | LG-1020-012 | 34.60      |
| Kalrez®  | 014  | 12.4  | 1.78     | LG-1020-014 | 34.84      |
| Kalrez®  | 016  | 15.5  | 1.78     | LG-1020-016 | 46.53      |
| Kalrez®  | 019  | 20.3  | 1.78     | LG-1020-019 | 57.81      |
| Kalrez®  | 020  | 21.9  | 1.78     | LG-1020-020 | 57.08      |
| Kalrez®  | 030  | 40.9  | 1.78     | LG-1020-030 | 130.83     |
| Kalrez®  | 107  | 5.2   | 2.62     | LG-1020-107 | 41.79      |
| Kalrez®  | 108  | 6.0   | 2.62     | LG-1020-108 | 42.95      |
| Kalrez®  | 109  | 7.6   | 2.62     | LG-1020-109 | 43.07      |
| Kalrez®  | 110  | 9.2   | 2.62     | LG-1020-110 | 43.52      |
| Kalrez®  | 111  | 10.8  | 2.62     | LG-1020-111 | 43.99      |
| Kalrez®  | 112  | 12.4  | 2.62     | LG-1020-112 | 46.65      |
| Kalrez®  | 114  | 15.5  | 2.62     | LG-1020-114 | 49.90      |
| Kalrez®  | 116  | 18.7  | 2.62     | LG-1020-116 | 57.18      |
| Kalrez®  | 117  | 20.3  | 2.62     | LG-1020-117 | 60.31      |
| Kalrez®  | 118  | 21.9  | 2.62     | LG-1020-118 | 63.21      |
| Kalrez®  | 121  | 26.6  | 2.62     | LG-1020-121 | 94.91      |
| Kalrez®  | 124  | 31.4  | 2.62     | LG-1020-124 | 101.19     |
| Kalrez®  | 212  | 21.8  | 3.50     | LG-1020-212 | 93.77      |
| Kalrez®  | 216  | 28.6  | 3.50     | LG-1020-216 | 143.46     |
| Kalrez®  | 223  | 40.9  | 3.50     | LG-1020-223 | 158.60     |
| Kalrez®  | 229  | 59.9  | 59.9     | LG-1020-229 | 215.34     |
| Kalrez®  | 331  | 56.5  | 56.5     | LG-1020-331 | 363.54     |

### Pipet, Measuring (Mohr), Color-Coded

Calibrated to deliver at 20°C. Pipet has a permanent brown stain scale with the zero line at the top. Capacity of unit is just above the tapered delivery tip. Diameter is reduced at the top in 5 to 25mL sizes for ease in manipulation.

Reference: ASTM E1293 Style 1, Class B

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Color<br>Band | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|---------------|--------------------|---------------|
| 1/10           | 1/100             | 0.005             | White         | <b>LG-9285-100</b> | \$7.57        |
| 1              | 1/10              | 0.02              | Red           | <b>LG-9285-104</b> | 7.22          |
| 2              | 1/10              | 0.02              | Green         | <b>LG-9285-108</b> | 8.08          |
| 5              | 1/10              | 0.04              | Blue          | <b>LG-9285-110</b> | 8.08          |
| 10             | 1/10              | 0.06              | Orange        | <b>LG-9285-112</b> | 9.33          |
| 25             | 1/10              | 0.10              | White         | <b>LG-9285-114</b> | 14.53         |



**LG-9285**

### Pipet, Measuring (Mohr), Color-Coded, with White Graduations

Similar to LG-9285 except with white scale.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Color<br>Band | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|---------------|--------------------|---------------|
| 1              | 1/10              | 0.02              | Red           | <b>LG-9287-104</b> | \$6.02        |
| 1              | 1/100             | 0.02              | Yellow        | <b>LG-9287-106</b> | 6.69          |
| 2              | 1/10              | 0.02              | Green         | <b>LG-9287-108</b> | 6.79          |
| 2              | 1/100             | 0.02              | 2 White       | <b>LG-9287-110</b> | 6.90          |
| 5              | 1/10              | 0.04              | Blue          | <b>LG-9287-112</b> | 6.79          |
| 10             | 1/10              | 0.06              | Orange        | <b>LG-9287-114</b> | 7.80          |
| 25             | 1/10              | 0.10              | White         | <b>LG-9287-116</b> | 12.20         |



**LG-9287**

### Pipet, Serological, Color-Coded, Laboratory Grade

Calibrated to deliver to the tip at 20°C. With permanent brown stain scale having zero line at the top. The small amount remaining in the tip after free delivery has stopped is to be blown out and added to the main delivery volume. The 5mL, 10mL and 25mL sizes have openings of reduced diameter. Reference: ASTM E1044.

| Capacity<br>mL | Subdivision<br>mL | Tolerance<br>± mL | Color<br>Band | Part<br>Number     | Each<br>Price |
|----------------|-------------------|-------------------|---------------|--------------------|---------------|
| 1              | 1/10              | 0.02              | Red           | <b>LG-9335-108</b> | 6.59          |
| 1              | 1/100             | 0.02              | Yellow        | <b>LG-9335-110</b> | 7.37          |
| 2              | 1/10              | 0.02              | Green         | <b>LG-9335-112</b> | 7.37          |
| 5              | 1/10              | 0.04              | Blue          | <b>LG-9335-116</b> | 7.67          |
| 10             | 1/10              | 0.06              | Orange        | <b>LG-9335-118</b> | 9.07          |
| 25             | 1/10              | 0.10              | White         | <b>LG-9335-120</b> | 14.26         |



**LG-9335**



**LG-9350**



**LG-9355**

### Pipet, Volumetric, Color-Coded, Class A

Calibrated to deliver at 20°C. Fabricated to meet the requirements for accuracy, appearance, glass quality, and calibration line accuracy. Reference: ASTM E969.

| Capacity<br>mL | Tolerance<br>± mL | Color<br>Band | Part<br>Number     | Each<br>Price |
|----------------|-------------------|---------------|--------------------|---------------|
| 1/2            | 0.006             | 2 Black       | <b>LG-9350-100</b> | \$12.32       |
| 1              | 0.006             | Blue          | <b>LG-9350-101</b> | 14.04         |
| 2              | 0.006             | Orange        | <b>LG-9350-102</b> | 14.04         |
| 3              | 0.01              | Black         | <b>LG-9350-104</b> | 14.04         |
| 4              | 0.01              | 2 Red         | <b>LG-9350-106</b> | 14.04         |
| 5              | 0.01              | White         | <b>LG-9350-108</b> | 14.06         |
| 6              | 0.01              | 2 Orange      | <b>LG-9350-110</b> | 14.35         |
| 7              | 0.01              | 2 Green       | <b>LG-9350-112</b> | 14.35         |
| 8              | 0.02              | Blue          | <b>LG-9350-114</b> | 14.35         |
| 9              | 0.02              | Black         | <b>LG-9350-116</b> | 14.35         |
| 10             | 0.02              | Red           | <b>LG-9350-118</b> | 16.37         |
| 12.5           | 0.03              | Orange        | <b>LG-9350-119</b> | 22.82         |
| 15             | 0.03              | Green         | <b>LG-9350-120</b> | 17.16         |
| 20             | 0.03              | Yellow        | <b>LG-9350-122</b> | 17.70         |
| 25             | 0.03              | Blue          | <b>LG-9350-124</b> | 19.25         |
| 30             | 0.03              | Black         | <b>LG-9350-126</b> | 24.50         |
| 40             | 0.05              | White         | <b>LG-9350-128</b> | 24.50         |
| 50             | 0.05              | Red           | <b>LG-9350-130</b> | 24.49         |
| 80             | 0.08              | Blue          | <b>LG-9350-131</b> | 33.65         |
| 75             | 0.08              | Green         | <b>LG-9350-132</b> | 33.65         |
| 100            | 0.08              | Yellow        | <b>LG-9350-134</b> | 34.60         |
| 200            | 0.10              | Blue          | <b>LG-9350-136</b> | 63.22         |

### Pipet, Volumetric, Color-Coded

Similar to *LG-9350* except laboratory grade with larger tip opening. Reference: ASTM E969.

| Capacity<br>mL | Tolerance<br>± mL | Color<br>Band | Tip<br>Opening (mm) | Part<br>Number     | Each<br>Price |
|----------------|-------------------|---------------|---------------------|--------------------|---------------|
| 1/2            | 0.012             | 2 Black       | 1/2                 | <b>LG-9355-100</b> | \$10.50       |
| 1              | 0.012             | Blue          | 1/2                 | <b>LG-9355-102</b> | 10.50         |
| 2              | 0.012             | Orange        | 3/4 - 1             | <b>LG-9355-104</b> | 10.50         |
| 3              | 0.02              | Black         | 3/4 - 1             | <b>LG-9355-106</b> | 11.21         |
| 5              | 0.02              | White         | 3/4 - 1             | <b>LG-9355-110</b> | 11.21         |
| 10             | 0.04              | Red           | 3/4 - 1             | <b>LG-9355-120</b> | 14.69         |
| 15             | 0.06              | Green         | 1                   | <b>LG-9355-122</b> | 16.02         |
| 20             | 0.06              | Yellow        | 1                   | <b>LG-9355-124</b> | 16.58         |
| 25             | 0.06              | Blue          | 1                   | <b>LG-9355-126</b> | 17.27         |
| 50             | 0.1               | Red           | 1 - 1 1/4           | <b>LG-9355-132</b> | 22.10         |
| 100            | 0.2               | Yellow        | 1 3/4 - 2 1/4       | <b>LG-9355-136</b> | 29.63         |
| 5              | 0.02              | None          | 3                   | <b>LG-9355-200</b> | 13.74         |
| 10             | 0.04              | None          | 3                   | <b>LG-9355-202</b> | 17.98         |
| 12.5           | 0.06              | None          | 3                   | <b>LG-9355-204</b> | 17.98         |
| 15             | 0.06              | None          | 3                   | <b>LG-9355-206</b> | 17.98         |
| 25             | 0.06              | None          | 3                   | <b>LG-9355-208</b> | 18.83         |
| 50             | 0.1               | None          | 3                   | <b>LG-9355-210</b> | 22.03         |
| 100            | 0.2               | None          | 3                   | <b>LG-9355-212</b> | 32.14         |

Replaces LX6090

**Pipet, Volumetric, Short Form, Lab Grade**

| Capacity<br>mL | Tolerance<br>± mL | Color<br>Coded | Overall<br>Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-------------------|----------------|-------------------------|--------------------|---------------|
| 10             | .04               | Red            | 265                     | <b>LG-9360-100</b> | \$14.74       |
| 25             | .06               | Blue           | 275                     | <b>LG-9360-102</b> | 17.27         |



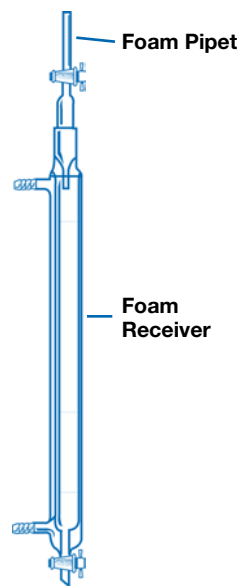
**LG-9360**

**Ross-Miles Pour Foam Test Apparatus, ASTM**

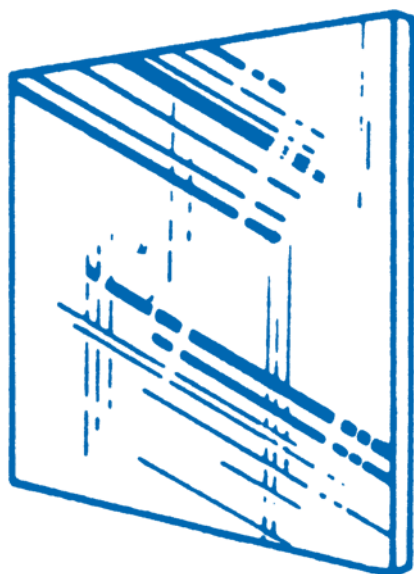
Designed for testing foaming properties of surface active agents. Apparatus consists of a 200mL foam pipet with a 2mm PTFE straight bore stopcock. A foam receiver with graduations at 50mL and 250mL are above a 6mm PTFE straight bore stopcock which completes the assembly.

*Reference: ASTM D1173.*

| Supplied           | Part<br>Number     | Each<br>Price |
|--------------------|--------------------|---------------|
| Complete Apparatus | <b>LG-3941-100</b> | \$657.86      |
| Foam Pipet, 200mL  | <b>LG-3941-102</b> | 219.29        |
| Foam Receiver      | <b>LG-3941-104</b> | 445.02        |



**LG-3941**



**LG-9395**

### Plate Glass, Square, Borosilicate

Squares of heat and chemically resistant borosilicate glass, ground and polished on both sides. Special sizes and thicknesses available upon request. Also available in rectangular shapes.

| Thickness<br>in Inches | Dimensions<br>inches | Part<br>Number     | Each<br>Price |
|------------------------|----------------------|--------------------|---------------|
| 1/8" ± 1/32"           | 2x2                  | <b>LG-9395-100</b> | \$5.05        |
| 1/8" ± 1/32"           | 3x3                  | <b>LG-9395-102</b> | 6.65          |
| 1/8" ± 1/32"           | 4x4                  | <b>LG-9395-104</b> | 10.46         |
| 1/8" ± 1/32"           | 6x6                  | <b>LG-9395-108</b> | 22.72         |
| 1/8" ± 1/32"           | 8x8                  | <b>LG-9395-112</b> | 38.24         |
| 1/8" ± 1/32"           | 11x11                | <b>LG-9395-118</b> | 68.21         |
| 1/8" ± 1/32"           | 12x12                | <b>LG-9395-120</b> | 77.84         |
| 1/4" ± 1/32"           | 6x6                  | <b>LG-9395-138</b> | 21.76         |
| 1/4" ± 1/32"           | 8x8                  | <b>LG-9395-142</b> | 38.24         |

## Reaction Flasks (LG-8010 through LG-8070) (ML-1281 through ML-1284)

Wilmad/LabGlass reaction flasks are offered in a wide variety of styles of body and closure. This apparatus is designed especially for laboratory reactions and synthesis involving viscous materials, such as resins. Flasks with their heads and clamps are listed from *LG-8010* through *ML-1284*. Wilmad/LabGlass flasks offer a number of important advantages:

- **Versatility.** The large number of different flasks and covers, interchangeable in each general class, affords the opportunity to build almost an infinite variety of apparatus assemblies.
- **Spaciousness.** Each cover has a comparatively large surface area. The openings in the top can be far enough apart to avoid crowding when inserting auxiliary ware into base openings... addition funnels, condensers, stirrers, bleed tubes, etc.
- **Rapid Assembly and Disassembly.** Only a single clamp is required to attach the cover with all its attachments to the body.
- **Ease of Cleaning.** The wide mouth, a common feature of all bodies, provides easy access to the entire interior for cleaning. The absence of sharp corners on flasks also is an advantage in this respect.
- **Ruggedness.** The simple design permits construction of durable, long-lasting ware.

| FLASK BODY | FLASK COVER        | CLAMP         | HEATING MANTLE |
|------------|--------------------|---------------|----------------|
| LG-8010    | All Can Use Covers | All Use Clamp | LG-8879        |
| LG-8011    |                    |               | LG-8879        |
| LG-8012    |                    |               | Not Available  |
| LG-8013    |                    |               | Not Available  |
| LG-8014    |                    |               | Not Available  |
| LG-8020    |                    |               | LG-8800        |
| LG-8021    |                    |               | LG-8825        |
| LG-8022    |                    |               | Not Available  |
| LG-8023    |                    |               | LG-8877        |
| LG-8024    |                    |               | LG-8877        |
| LG-8025    |                    |               | Not Available  |
| LG-8026    |                    |               | Not Available  |
| ML-1281    | All Can Use Covers | All Use Clamp | LG-8879        |
| ML-1282    |                    |               | Not Available  |
| ML-1283    |                    |               | LG-8800        |
| ML-1284    |                    |               | Not Available  |

## Reaction Kettles LG-8071 through LG-8089

Two standard series of kettles are described in the listings below. *LG-8080* through *LG-8089* are versions with flat flanges having ground faces. Light lubrication of these faces is generally done to obtain a leak-proof assembly.

*LG-8071* through *LG-8079C* bodies and covers have flat flanges tooled with an annular recess for an O-Ring. A positive seal is accomplished without grease, and the joint will not “freeze”.

The table below will facilitate a selection of a suitable combination of body and cover, together with proper clamp, O-Ring and heating mantle.

Please note kettles and covers are grouped by capacity with the 500 and 1000mL sizes having a 5 3/8” flange and the 2000,3000 and 4000mL sizes having a 6 5/8” flange.

| Kettle Body                               | Kettle Cover               | Clamp LG-7316 | Heating Mantle | O-Ring Size |
|-------------------------------------------|----------------------------|---------------|----------------|-------------|
| <i>For 500 &amp; 1000mL Bodies</i>        |                            |               |                |             |
| LG-8080                                   | LG-8081 LG-8087            | -106          | LG-8881        | 348         |
|                                           | LG-8086 LG-8088 LG-8086C   |               | LG-8882        |             |
| LG-8071                                   | LG-8072 LG-8073            | -106          | LG-8881        | 348         |
|                                           | LG-8072C LG-8074           |               | LG-8882        |             |
| LG-8079A                                  | LG-8072 LG-8073            | -106          | LG-8881        | 348         |
|                                           | LG-8072C LG-8074           |               | LG-8882        |             |
| LG-8079B                                  | LG-8072 LG-8073            | -106          | LG-8881        | 348         |
|                                           | LG-8072C LG-8074           |               | LG-8882        |             |
| LG-8079C                                  | LG-8072C LG-8077           | -106          | LG-8881        | 348         |
|                                           | LG-8076 LG-8078            |               | LG-8882        |             |
| LG-8084                                   | LG-8086A LG-8087A          | -106          | LG-8881        | 348         |
|                                           | LG-8086C LG-8088A          |               | LG-8882        |             |
| LG-8085                                   | LG-8086A LG-8087A          | -106          | LG-8881        | 348         |
|                                           | LG-8086C LG-8088A          |               | LG-8882        |             |
| LG-8089                                   | LG-8086A LG-8087A          | -106          | LG-8881        | 348         |
|                                           | LG-8086C LG-8088A          |               | LG-8882        |             |
| <i>For 2000, 3000 &amp; 4000mL Bodies</i> |                            |               |                |             |
| LG-8075                                   | LG-8072C LG-8077           | -108          | LG-8881        | 359         |
|                                           | LG-8076 LG-8078            |               | LG-8882        |             |
| LG-8079A                                  | LG-8072C LG-8077           | -108          | LG-8881        | 359         |
|                                           | LG-8076 LG-8078            |               | LG-8882        |             |
| LG-8079B                                  | LG-8072C LG-8077           | -108          | LG-8881        | 359         |
|                                           | LG-8076 LG-8078            |               | LG-8882        |             |
| LG-8079C                                  | LG-8072C LG-8077           | -108          | LG-8881        |             |
|                                           | LG-8076 LG-8078            |               | LG-8882        |             |
| LG-8082                                   | LG-8083 LG-8087A           | -108          | LG-8881        | 359         |
|                                           | LG-8086A LG-8088A LG-8066C |               | LG-8882        |             |
| LG-8084                                   | LG-8083 LG-8087A           | -108          | LG-8881        |             |
|                                           | LG-8086A LG-8088A LG-8086C |               | LG-8882        |             |
| LG-8085                                   | LG-8083 LG-8087A           | -108          | LG-8881        | 359         |
|                                           | LG-8066A LG-8088A LG-8066C |               | LG-8882        |             |
| LG-8089                                   | LG-8083 LG-8087A           | -108          | LG-8881        | 359         |
|                                           | LG-8086A LG-8088A LG-8086C |               | LG-8882        |             |

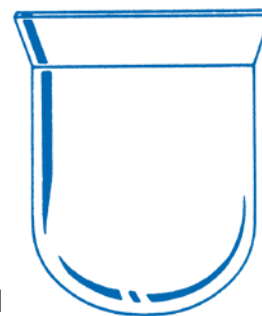


### Reaction Vessel, Cylindrical, Conical Flange

Upper end is tooled to obtain a thickened portion and flat top. Top is finely ground to provide for a leak-proof fit with covers *LG-8030* to *LG-8050* and *ML-1285* and *ML-1286*.

| Capacity<br>mL | Inside<br>Diameter<br>in. | Approx.<br>Overall<br>Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|---------------------------------|--------------------|---------------|
| 50             | 2                         | 65                              | <b>ML-1281-700</b> | \$36.86       |
| 100            | 2                         | 95                              | <b>ML-1281-702</b> | 39.31         |
| 500            | 4                         | 118                             | <b>LG-8010-100</b> | 99.83         |
| 1000           | 4                         | 175                             | <b>LG-8010-102</b> | 106.52        |
| 2000           | 4                         | 285                             | <b>LG-8010-106</b> | 118.78        |
| 3000           | 4                         | 400                             | <b>LG-8010-108</b> | 122.34        |

*Note: ML-1288-700 clamp is used with the 50mL and 100mL flasks.  
LG-8070-100 clamp is used with the 500mL to 3000mL flasks.*



**ML-1281  
LG-8010**

### Reaction Vessel, Cylindrical, Indented, Conical Flange

Similar to *LG-8010*, except with indentations in side for improved stirring. Top is finely ground to provide a leak-proof fit with covers *LG-8030* to *LG-8050*.

| Capacity<br>mL | Approx.<br>Overall<br>Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------|--------------------|---------------|
| 500            | 140                             | <b>LG-8011-100</b> | \$123.51      |
| 1000           | 205                             | <b>LG-8011-102</b> | 132.78        |
| 3000           | 450                             | <b>LG-8011-108</b> | 203.02        |

*Note: LG-8070-100 clamp is used with these flasks.*



**LG-8011**

### Heating Mantle, Reaction Flask

For use with *LG-8010* and *LG-8011* reaction flasks.

| Flask<br>Capacity<br>mL | Wattage | Part<br>Number     | Each<br>Price |
|-------------------------|---------|--------------------|---------------|
| 500                     | 250     | <b>LG-8879-100</b> | \$277.00      |
| 1000                    | 300     | <b>LG-8879-102</b> | 302.00        |
| 1500                    | 380     | <b>LG-8879-104</b> | 307.00        |
| 2000                    | 450     | <b>LG-8879-106</b> | 327.00        |
| 3000                    | 600     | <b>LG-8879-108</b> | 332.00        |
| 5000                    | 600     | <b>LG-8879-110</b> | 485.00        |

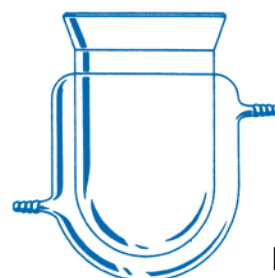


**LG-8879**

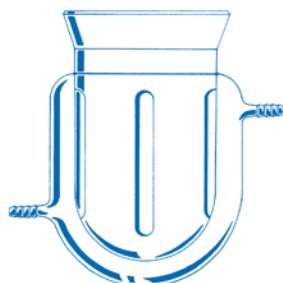
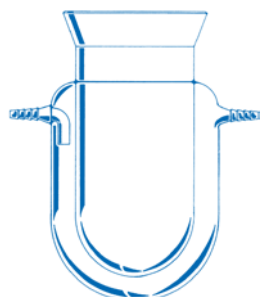
### Reaction Vessel, Cylindrical, Jacketed, Conical Flange

Similar to *LG-8010*, except jacket has 1/2" hose connections. The heights given below include the jacket. Uses *LG-8070-100* clamp.

| Capacity<br>mL | Inside<br>Diameter<br>in. | Approx.<br>Overall<br>Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|---------------------------------|--------------------|---------------|
| 500            | 4                         | 160                             | <b>LG-8012-100</b> | \$263.83      |
| 1000           | 4                         | 230                             | <b>LG-8012-102</b> | 287.74        |
| 3000           | 4                         | 465                             | <b>LG-8012-108</b> | 369.43        |



**LG-8012**

**LG-8013****ML-1282  
LG-8014****LG-8023****LG-8877****Reaction Vessel, Cylindrical, Jacketed, Indented, Conical Flange**

Similar to *LG-8012*, except with indentations for improved stirring. Jacket has 1/2" hose connections. Uses *LG-8070-100* clamp.

| Capacity<br>mL | Inside<br>Diameter<br>in. | Approx.<br>Overall<br>Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|---------------------------------|--------------------|---------------|
| 500            | 4                         | 175                             | <b>LG-8013-100</b> | \$346.55      |
| 1000           | 4                         | 205                             | <b>LG-8013-102</b> | 370.85        |
| 3000           | 4                         | 500                             | <b>LG-8013-108</b> | 449.89        |

**Reaction Vessel, Cylindrical, Steam/Water Jacketed, Conical Flange**

Similar to *LG-8012*, but with jacket inlet positioned to provide optimum distribution of thermal liquid. Jacket on *ML-1282-700* has 3/8" hose connections; jacket on *LG-8014* series has 1/2" hose connections. Top is ground to provide leak-proof fit with reaction vessel lids *LG-8030*, *LG-8031*, *LG-8033*, *ML-1285* and *ML-1286*.

| Capacity<br>mL | Inside<br>Diameter<br>in. | Approx.<br>Overall<br>Height mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|---------------------------------|--------------------|---------------|
| 100            | 2                         | 125                             | <b>ML-1282-700</b> | \$158.34      |
| 500            | 4                         | 160                             | <b>LG-8014-100</b> | 386.72        |
| 1000           | 4                         | 230                             | <b>LG-8014-102</b> | 411.66        |
| 2000           | 4                         | 350                             | <b>LG-8014-106</b> | 449.08        |
| 3000           | 4                         | 465                             | <b>LG-8014-108</b> | 498.99        |

*Note: ML-1288-700 clamp is used on the 100mL flask. LG-8070-100 clamp is used with the 500mL to 3000mL flasks.*

**Reaction Vessel, Cylindrical, Conical Flange**

Vessel has a 28/15 ball joint for connection to *LG-8028T* or *LG-8027* take-off adapter. Inside diameter of neck is 4 inches. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050*.

| Capacity<br>mL | Approx.<br>Overall<br>Height mm | Approx.<br>Overall Height<br>With Joint | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------|-----------------------------------------|--------------------|---------------|
| 500            | 110                             | 150                                     | <b>LG-8023-100</b> | \$131.68      |
| 1000           | 175                             | 215                                     | <b>LG-8023-102</b> | 134.15        |
| 2000           | 285                             | 325                                     | <b>LG-8023-106</b> | 149.64        |
| 3000           | 400                             | 440                                     | <b>LG-8023-108</b> | 177.15        |

*Note: LG-8070-100 clamp is used with these flasks.*

**Heating Mantle, Reaction Flask, with 1 1/4" Opening at Bottom**

Similar to *LG-8879* mantles, except with 1 1/4" opening to accommodate bottom take-off tube and zipper for easy on and off.

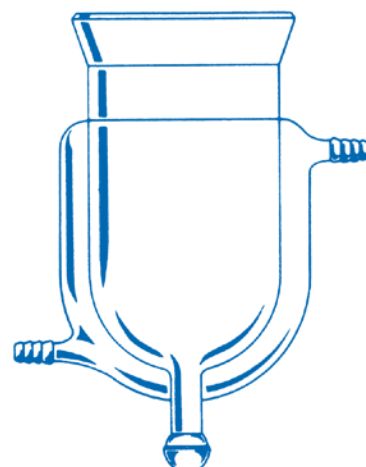
| Flask<br>Capacity<br>mL | Inside<br>Diam.<br>Inches | Inside<br>Depth<br>Inches | Wattage | Part<br>Number     | Each<br>Price |
|-------------------------|---------------------------|---------------------------|---------|--------------------|---------------|
| 500                     | 4 5/8                     | 2 1/2                     | 250     | <b>LG-8877-100</b> | \$312.00      |
| 1000                    | 4 5/8                     | 5 5/8                     | 300     | <b>LG-8877-102</b> | 337.00        |
| 1500                    | 4 5/8                     | 6 5/8                     | 380     | <b>LG-8877-104</b> | 342.00        |
| 2000                    | 4 5/8                     | 8 7/8                     | 450     | <b>LG-8877-106</b> | 362.00        |
| 3000                    | 4 5/8                     | 10                        | 600     | <b>LG-8877-108</b> | 367.00        |
| 3000                    | 4 5/8                     | 13                        | 600     | <b>LG-8877-110</b> | 520.00        |

**Reaction Vessel, Cylindrical, Jacketed, Conical Flange**

Unit has sealed-on jacket with hose connections for circulating a heating or cooling liquid. See *LG-8028T* or *LG-8027* for take-off adapter to complete lower part of this apparatus. Inside diameter of neck is 4 inches. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050*. Jacket has 1/2" hose connections.

| Capacity<br>mL | Approx.<br>Overall<br>Height (mm) | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------------|--------------------|---------------|
| 1000           | 275                               | <b>LG-8025-100</b> | \$309.89      |
| 2000           | 385                               | <b>LG-8025-104</b> | 342.66        |
| 3000           | 500                               | <b>LG-8025-106</b> | 383.85        |

*Note: LG-8070-100 clamp is used with these flasks.*

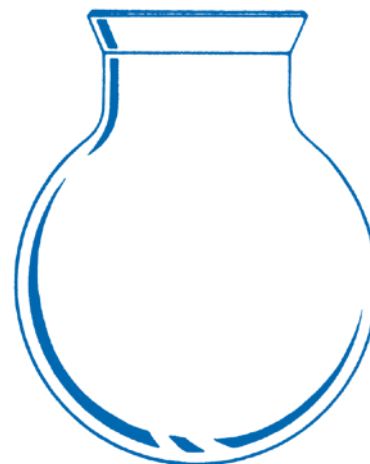
**LG-8025****Reaction Vessel, Spherical, Conical Flange**

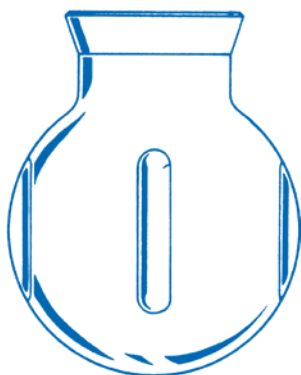
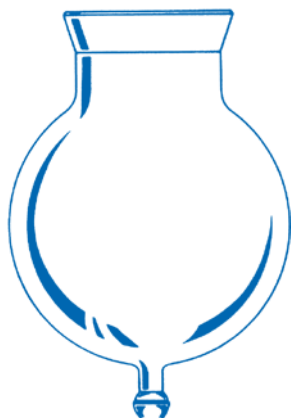
Vessel has a spherical body. Upper end of neck is tooled to obtain a thickened portion and flat top. Top is finely ground to provide for a leak-proof fit with lids. *LG-8030* to *LG-8050* & *ML-1285*, *ML-1286*.

| Capacity<br>mL | Approx.<br>Overall<br>Height (mm) | Neck<br>Inside Diam.<br>Inches | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------------|--------------------------------|--------------------|---------------|
| 200            | 90                                | 2                              | <b>ML-1283-700</b> | \$44.10       |
| 250            | 105                               | 2                              | <b>ML-1283-702</b> | 44.10         |
| 500            | 130                               | 2                              | <b>ML-1283-706</b> | 49.71         |
| 2000           | 225                               | 4                              | <b>LG-8020-100</b> | 128.46        |
| 3000           | 255                               | 4                              | <b>LG-8020-102</b> | 144.04        |
| 5000           | 285                               | 4                              | <b>LG-8020-104</b> | 160.74        |
| 12000          | 355                               | 4                              | <b>LG-8020-106</b> | 246.41        |
| 22000          | 410                               | 4                              | <b>LG-8020-108</b> | 413.16        |
| 50000          | 540                               | 4                              | <b>LG-8020-110</b> | 793.80        |
| 72000          | 600                               | 4                              | <b>LG-8020-112</b> | 1,252.41      |

*Note: ML-1288-700 clamp is used with the 200mL to 500mL reaction vessels.*

*LG-8070-100 clamp is used with the 2,000mL to 72,000mL reaction vessels.*

**ML-1283  
LG-8020**

**LG-8021****ML-1284  
LG-8022****LG-8024****Reaction Vessel, Spherical, Indented, Conical Flange**

Similar to *LG-8020*, except with indentations for improved stirring. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050*.

| Capacity<br>mL | Approx.<br>Overall<br>Height (mm) | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------------|--------------------|---------------|
| 2000           | 225                               | <b>LG-8021-096</b> | \$178.17      |
| 3000           | 255                               | <b>LG-8021-098</b> | 182.06        |
| 5000           | 285                               | <b>LG-8021-100</b> | 213.03        |
| 12000          | 355                               | <b>LG-8021-102</b> | 355.08        |
| 22000          | 410                               | <b>LG-8021-104</b> | 629.07        |

*Note: LG-8070-100 clamp is used with these reaction vessels. 50 and 72 liter reaction vessels are available upon request..*

**Reaction Vessel, Spherical, Half-Jacketed, Conical Flange**

Vessel is half jacketed with hose connectors for circulating heating or cooling medium. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050* and *ML-1285*, *ML-1286*. Jacket has 1/2" hose connections.

| Capacity<br>mL | Inside<br>Diameter<br>in. | Part<br>Number     | Each<br>Price |
|----------------|---------------------------|--------------------|---------------|
| 200            | 2                         | <b>ML-1284-700</b> | \$172.71      |
| 300            | 2                         | <b>ML-1284-702</b> | 183.53        |
| 500            | 2                         | <b>ML-1284-704</b> | 205.11        |
| 2000           | 4                         | <b>LG-8022-098</b> | 437.21        |
| 3000           | 4                         | <b>LG-8022-100</b> | 510.00        |
| 5000           | 4                         | <b>LG-8022-102</b> | 764.41        |
| 12000          | 4                         | <b>LG-8022-104</b> | 960.76        |

*Note: ML-1288-700 clamp is used with the 200mL to 500mL flask.  
LG-8070-100 clamp is used with the 2000mL to 12000mL flasks.*

**Reaction Vessel, Spherical, Conical Flange**

Spherical vessel with a 28/15 ball joint for bottom outlet. Used with *LG-8027* or *LG-8028T* adapter. Inside diameter of neck is 4 inches. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050*.

| Capacity<br>mL | Approx.<br>Overall<br>Height (mm) | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------------|--------------------|---------------|
| 2000           | 225                               | <b>LG-8024-098</b> | \$172.75      |
| 3000           | 255                               | <b>LG-8024-100</b> | 177.78        |
| 5000           | 285                               | <b>LG-8024-102</b> | 208.32        |
| 12000          | 355                               | <b>LG-8024-104</b> | 332.46        |
| 22000          | 410                               | <b>LG-8024-106</b> | 451.63        |

*Note: LG-8070-100 clamp is used with these flasks.*

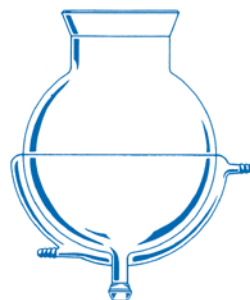
*Heating mantles for this product are supplied on special order.*

**Reaction Vessel, Spherical, Half-Jacketed, Conical Flange**

Hemisphere is jacketed to provide either heating or cooling. Use *LG-8028T* or *LG-8027* take-off adapter to complete this apparatus. Bottom take-off tube has a 28/15 ball joint. Top is finely ground to provide for a leak-proof fit with lids *LG-8030* to *LG-8050*. Jacket has 1/2" hose connections.

| Capacity<br>mL | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| 2000           | <b>LG-8026-098</b> | \$455.44      |
| 3000           | <b>LG-8026-100</b> | 561.37        |
| 5000           | <b>LG-8026-102</b> | 735.96        |
| 12000          | <b>LG-8026-104</b> | 901.00        |

*Note: LG-8070-100 clamp is used with these flasks.*

**LG-8026****Reaction Apparatus, Adapter, Take-off, Stopcock, Glass Plug**

With a 28/15 socket joint and pressure type stopcock. For use with reaction vessels having bottom take-off tubes equipped with 28/15 ball joints (*LG-8023*, *LG-8024*, *LG-8025* and *LG-8026*.) An *LG-1045-110* clamp, size 28 is used to attach the adapter to the flask.

| Stopcock<br>Size (mm) | Part<br>Number     | Each<br>Price |
|-----------------------|--------------------|---------------|
| 4                     | <b>LG-8027-100</b> | \$98.16       |
| 6                     | <b>LG-8027-102</b> | 163.61        |

**LG-8027****Reaction Apparatus, Adapter, Take-off, Stopcock, PTFE Plug**

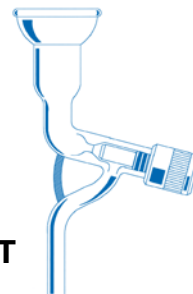
Used with reaction vessels having a 28/15 bottom outlet. Use an *LG-1045-110* clamp to connect to bottom outlet of kettle.

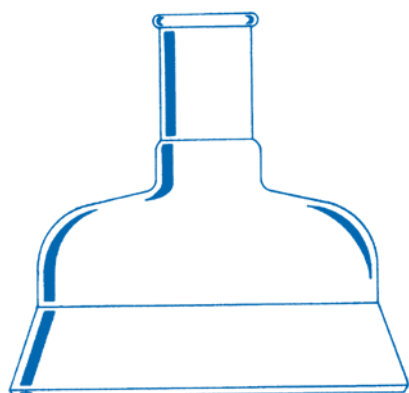
| Stopcock<br>Size (mm) | Part<br>Number      | Each<br>Price |
|-----------------------|---------------------|---------------|
| 4                     | <b>LG-8028T-100</b> | \$122.96      |
| 6                     | <b>LG-8028T-102</b> | 164.62        |

**LG-8028T****Reaction Apparatus, Adapter, Take-Off, Drain Valve**

Similar to *LG-8027* and *LG-8028T* except supplied with Teflon drain valve.

| Valve<br>Bore Size | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| 0-4mm              | <b>LG-8027T-100</b> | \$149.15      |
| 0-8mm              | <b>LG-8027T-102</b> | 190.51        |
| 0-12mm             | <b>LG-8027T-104</b> | 209.12        |

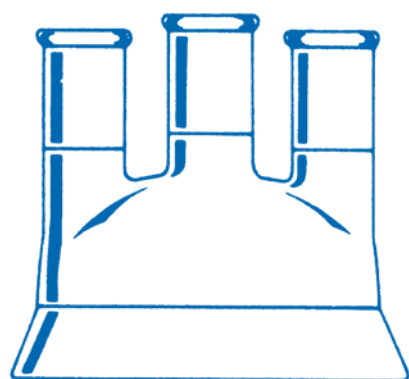
**LG-8027T**

**LG-8033****Reaction Vessel Lid, Single Neck, Conical Flange**

Inside diameter of flange is 4 inches. Bottom part of lid is finely ground for a leak-proof fit with flask. For use with all conical flanged vessels having a 4 inch flange opening.

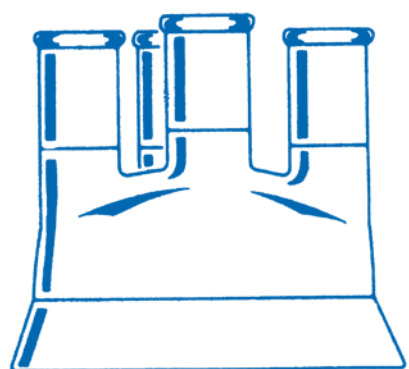
| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 24/40      | <b>LG-8033-100</b> | \$159.32   |
| 29/42      | <b>LG-8033-102</b> | 163.70     |
| 45/50      | <b>LG-8033-104</b> | 165.24     |

*Note: LG-8070-100 clamp is used with this cover.*

**ML-1285**  
**LG-8030****Reaction Vessel Lid, Three Neck, Conical Flange**

*ML-1285* is supplied with center neck and two side necks 180° apart. Flange I.D. is 2 inches and can be used with flasks *ML-1281* through *ML-1284*. Flask and cover are clamped using *ML-1288-700*. *LG-8030* is for use with cylindrical or spherical reaction vessels having a 4" inside diameter flange. Flask and lid are clamped using *LG-8070-100*.

| Center Neck Size Joint | Side Necks Size Joint | Flange Inside Diameter Inches | Part Number        | Each Price |
|------------------------|-----------------------|-------------------------------|--------------------|------------|
| 14/20                  | 14/20                 | 2                             | <b>ML-1285-700</b> | \$104.78   |
| 19/22                  | 14/20                 | 2                             | <b>ML-1285-702</b> | 106.03     |
| 19/22                  | 19/22                 | 2                             | <b>ML-1285-704</b> | 107.28     |
| 24/40                  | 24/40                 | 4                             | <b>LG-8030-100</b> | 169.11     |
| 29/42                  | 24/40                 | 4                             | <b>LG-8030-102</b> | 173.94     |
| 29/42                  | 29/42                 | 4                             | <b>LG-8030-104</b> | 175.12     |

**LG-8031****Reaction Vessel Lid, Four Neck, Conical Flange**

For use with reaction vessels *LG-8010* through *LG-8026*. With a center neck and three side necks 120° apart. All four necks have outer joints. The bottom of lid is the same as that of *LG-8030* with flange inside diameter of 4 inches, and ground for leak-proof fit with a reaction flask.

| Center Neck Size Joint | Side Necks Size Joint | Part Number        | Each Price |
|------------------------|-----------------------|--------------------|------------|
| 24/40                  | 24/40                 | <b>LG-8031-100</b> | \$193.67   |
| 29/42                  | 24/40                 | <b>LG-8031-102</b> | 202.71     |
| 29/42                  | 29/42                 | <b>LG-8031-104</b> | 218.20     |

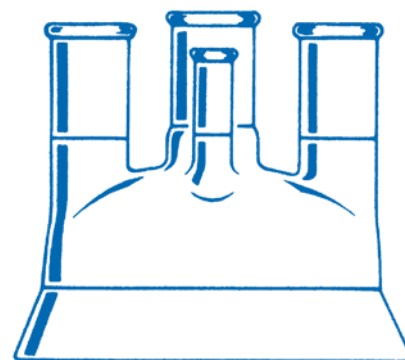
*Note: LG-8070-100 clamp is used with this cover.*

**Reaction Vessel Lid, Four Neck, with Thermometer Joint, Conical Flange**

*ML-1286* is similar to *ML-1285* but has an additional 10/18 thermometer neck. *LG-8050* is similar to *LG-8030* but has an additional 10/30 neck. Base of lid is finely ground to assure a tight seal. Use *LG-8050* on *LG-8010* to *LG-8026* kettles. Use *ML-1286* on *ML-1281* to *ML-1284* kettles.

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | Thermometer Neck<br>\$ Joint | Flange Inside Diameter<br>Inches | Part Number        | Each Price |
|-------------------------|------------------------|------------------------------|----------------------------------|--------------------|------------|
| 14/20                   | 14/20                  | 10/18                        | 2                                | <b>ML-1286-700</b> | \$121.01   |
| 19/22                   | 14/20                  | 10/18                        | 2                                | <b>ML-1286-702</b> | 122.26     |
| 19/22                   | 19/22                  | 10/18                        | 2                                | <b>ML-1286-704</b> | 123.49     |
| 24/40                   | 24/40                  | 10/30                        | 4                                | <b>LG-8050-100</b> | 177.99     |
| 29/42                   | 24/40                  | 10/30                        | 4                                | <b>LG-8050-102</b> | 183.00     |
| 29/42                   | 29/42                  | 10/30                        | 4                                | <b>LG-8050-104</b> | 188.02     |

*Note: ML-1288-700 clamps are used with covers having a 2" I.D. LG-8070-100 clamps are used with covers having a 4" I.D.*

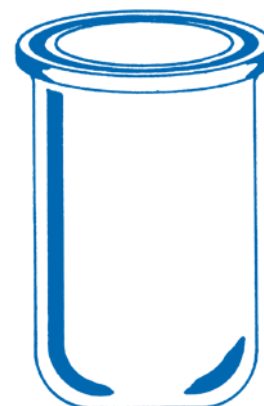


**ML-1286  
LG-8050**

**Reaction Vessel, Cylindrical, O-Ring Flange**

Reaction vessel has a tooled flat flange with a groove to accept an O-Ring for a greaseless seal. Suitable for vacuum operation. Wall thickness is uniform throughout flask.

| Capacity<br>mL | Body Diameter<br>Inches | Overall Height<br>Inches | Flange Outside Diameter<br>Inches | O-Ring Size | Clamp LG-7316 Code | Part Number        | Each Price |
|----------------|-------------------------|--------------------------|-----------------------------------|-------------|--------------------|--------------------|------------|
| 500            | 3 3/4                   | 6                        | 5 3/8                             | 348         | -106               | <b>LG-8071-100</b> | \$135.38   |
| 1000           | 4 1/4                   | 6 1/2                    | 5 3/8                             | 348         | -106               | <b>LG-8071-102</b> | 137.88     |
| 2000           | 5 1/2                   | 7 1/8                    | 6 5/8                             | 359         | -108               | <b>LG-8075-100</b> | 156.70     |
| 3000           | 5 1/2                   | 10 1/8                   | 6 5/8                             | 359         | -108               | <b>LG-8075-102</b> | 167.98     |
| 4000           | 5 1/2                   | 13 1/4                   | 6 5/8                             | 359         | -108               | <b>LG-8075-104</b> | 190.53     |



**LG-8071  
LG-8075**

**Reaction Vessel, Cylindrical, Indented, O-Ring Flange**

Vessel has four indentations for improved stirring.

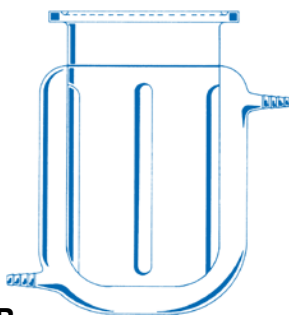
| Capacity<br>mL | Body Diameter<br>Inches | Overall Height<br>Inches | Flange Outside Diameter<br>Inches | O-Ring Size | Clamp LG-7316 Code | Part Number         | Each Price |
|----------------|-------------------------|--------------------------|-----------------------------------|-------------|--------------------|---------------------|------------|
| 500            | 3 3/4                   | 6 1/2                    | 5 3/8                             | 348         | -106               | <b>LG-8079A-100</b> | \$167.72   |
| 1000           | 4 1/4                   | 7                        | 5 3/8                             | 348         | -106               | <b>LG-8079A-102</b> | 174.37     |
| 2000           | 5 1/2                   | 8 1/8                    | 6 5/8                             | 359         | -108               | <b>LG-8079A-104</b> | 183.39     |
| 3000           | 5 1/2                   | 11 1/2                   | 6 5/8                             | 359         | -108               | <b>LG-8079A-106</b> | 239.08     |
| 4000           | 5 1/2                   | 14 1/4                   | 6 5/8                             | 359         | -108               | <b>LG-8079A-108</b> | 280.99     |



**LG-8079A**

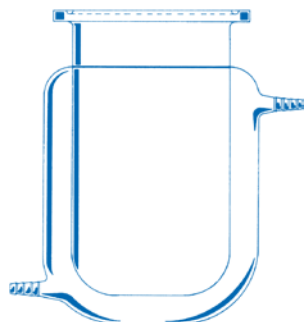


LG-8079B

**Reaction Vessel, Cylindrical, Indented, Jacketed, O-Ring Flange**

Similar to LG-8079A, except with jacket. Jacket has 1/2" hose connections.

| Capacity<br>mL | Body<br>Diameter<br>Inches | Flange<br>Outside<br>Diameter<br>Inches | Overall<br>Height<br>Inches | O-Ring<br>Size | Clamp<br>LG-7316<br>Code | Part<br>Number      | Each<br>Price |
|----------------|----------------------------|-----------------------------------------|-----------------------------|----------------|--------------------------|---------------------|---------------|
| 500            | 3 3/4                      | 5 3/8                                   | 7 3/4                       | 348            | -106                     | <b>LG-8079B-100</b> | \$320.74      |
| 1000           | 4 1/4                      | 5 3/8                                   | 9                           | 348            | -106                     | <b>LG-8079B-102</b> | 346.99        |
| 2000           | 5 1/2                      | 6 5/8                                   | 10 1/4                      | 359            | -108                     | <b>LG-8079B-104</b> | 427.55        |
| 3000           | 5 1/2                      | 6 5/8                                   | 12                          | 359            | -108                     | <b>LG-8079B-106</b> | 502.74        |
| 4000           | 5 1/2                      | 6 5/8                                   | 16 1/2                      | 359            | -108                     | <b>LG-8079B-108</b> | 586.77        |

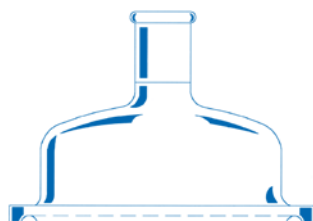


LG-8079C

**Reaction Vessel, Cylindrical, Jacketed, O-Ring Flange**

Similar to LG-8071 and LG-8075, but with jacket. Jacket has 1/2" hose connections.

| Capacity<br>mL | Body<br>Diameter<br>Inches | Flange<br>Outside<br>Diameter<br>Inches | Overall<br>Height<br>Inches | O-Ring<br>Size | Clamp<br>LG-7316<br>Code | Part<br>Number      | Each<br>Price |
|----------------|----------------------------|-----------------------------------------|-----------------------------|----------------|--------------------------|---------------------|---------------|
| 500            | 3 3/4                      | 5 3/8                                   | 7                           | 348            | -106                     | <b>LG-8079C-100</b> | \$304.04      |
| 1000           | 4 1/4                      | 5 3/8                                   | 8                           | 348            | -106                     | <b>LG-8079C-102</b> | 330.38        |
| 2000           | 5 1/2                      | 6 5/8                                   | 10                          | 359            | -108                     | <b>LG-8079C-104</b> | 401.00        |
| 3000           | 5 1/2                      | 6 5/8                                   | 12                          | 359            | -108                     | <b>LG-8079C-106</b> | 479.16        |
| 4000           | 5 1/2                      | 6 5/8                                   | 16                          | 359            | -108                     | <b>LG-8079C-108</b> | 542.56        |



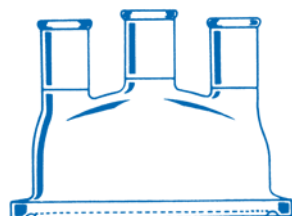
LG-8072C

**Reaction Vessel Lid, Single Neck, O-Ring Flange**

For use with LG-8071, LG-8075, LG-8079A, LG-8079B and LG-8079C kettle bodies.

| Joint | Fits<br>Kettle<br>Size | O-Ring<br>Size | Clamp<br>LG-7316<br>Code | Part<br>Number      | Each<br>Price |
|-------|------------------------|----------------|--------------------------|---------------------|---------------|
| 24/40 | 500 - 1000mL           | 348            | -106                     | <b>LG-8072C-100</b> | \$176.09      |
| 29/42 | 500 - 1000ml           | 348            | -106                     | <b>LG-8072C-102</b> | 178.36        |
| 24/40 | 2000 - 4000mL          | 359            | -108                     | <b>LG-8072C-104</b> | 205.64        |
| 29/42 | 2000 - 4000mL          | 359            | -108                     | <b>LG-8072C-106</b> | 207.93        |

Note: Flange outside diameter 5 3/8" on 500-1000, Flange outside diameter 6 5/8" on 2000-4000.



LG-8072

**Reaction Vessel Lid, Three Neck, O-Ring Flange**

Grooved to accommodate an O-Ring and create a greaseless vacuum-tight seal. Side necks are 180° apart. Designed to be used with the LG-8071, LG-8079A, LG-8079B, and LG-8079C vessels. Flange outside diameter is 5 3/8".

| Center Neck<br>Joint | Side Necks<br>Joint | O-Ring<br>size | Part<br>Number     | Each<br>Price |
|----------------------|---------------------|----------------|--------------------|---------------|
| 24/40                | 24/40               | 348            | <b>LG-8072-100</b> | \$203.88      |
| 29/26                | 29/26               | 348            | <b>LG-8072-101</b> | 220.60        |
| 29/42                | 24/40               | 348            | <b>LG-8072-102</b> | 214.19        |
| 29/42                | 29/42               | 348            | <b>LG-8072-104</b> | 220.60        |

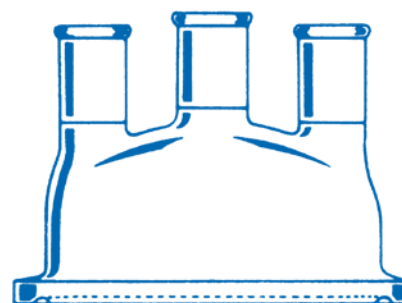
Note: Use clamp LG-7316-106 with these lids.

**Reaction Vessel Lid, Three Neck, O-Ring Flange**

Designed to be used with 2000mL, 3000mL, and 4000mL vessels (LG-8075, LG-8079A, LG-8079B, and LG-8079C). Outside diameter of flange is  $6\frac{5}{8}"$ .

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | O-ring<br>size | Part<br>Number     | Each<br>Price |
|-------------------------|------------------------|----------------|--------------------|---------------|
| 24/40                   | 24/40                  | 359            | <b>LG-8076-100</b> | \$232.51      |
| 29/42                   | 24/40                  | 359            | <b>LG-8076-102</b> | 242.82        |
| 29/42                   | 29/42                  | 359            | <b>LG-8076-104</b> | 248.88        |

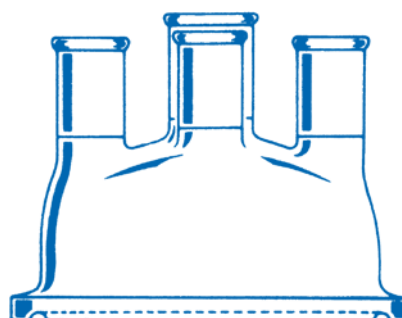
*Note: Use clamp LG-7316-108 with these lids.*

**LG-8076****Reaction Vessel Lid, Four Neck, O-Ring Flange**

For use with LG-8071, LG-8079A, LG-8079B, and LG-8079C vessels. Flange outside diameter is  $5\frac{3}{8}"$ .

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | O-Ring<br>Size | Part<br>Number     | Each<br>Price |
|-------------------------|------------------------|----------------|--------------------|---------------|
| 24/40                   | 24/40                  | 348            | <b>LG-8073-100</b> | \$237.52      |
| 29/42                   | 24/40                  | 348            | <b>LG-8073-102</b> | 244.52        |
| 29/42                   | 29/42                  | 348            | <b>LG-8073-104</b> | 250.76        |

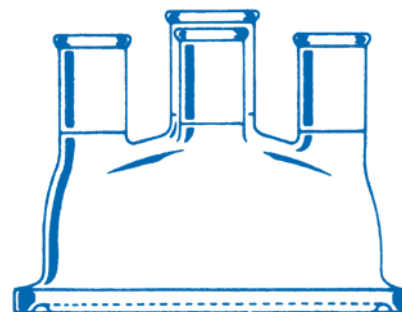
*Note: Use clamp LG-7316-106 with these lids. See LG-1022 for O-Ring.*

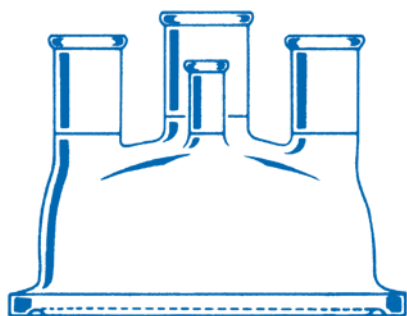
**LG-8073****Reaction Vessel Lid, Four Neck, O-Ring Flange**

Designed to be used with 2000mL, 3000mL, and 4000mL vessels (LG-8075, LG-8079A, LG-8079B, and LG-8079C). Flange outside diameter is  $6\frac{5}{8}"$ .

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | O-Ring<br>Size | Part<br>Number     | Each<br>Price |
|-------------------------|------------------------|----------------|--------------------|---------------|
| 24/40                   | 24/40                  | 359            | <b>LG-8077-100</b> | \$259.77      |
| 29/42                   | 24/40                  | 359            | <b>LG-8077-102</b> | 266.18        |
| 29/42                   | 29/42                  | 359            | <b>LG-8077-104</b> | 271.86        |

*Note: Use clamp LG-7316-108 with these lids. See LG-1022 for O-Ring.*

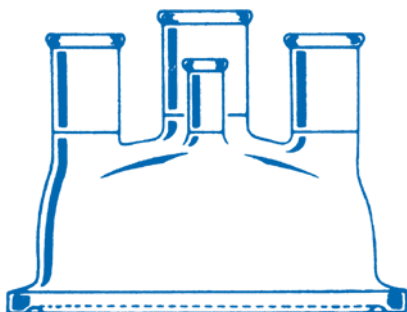
**LG-8077**

**LG-8074****Reaction Vessel Lid, Four Neck with 10/30, Thermometer Joint**

Similar to LG-8073 except fourth neck is a 10/30 outer joint for thermometers. Used with LG-8071, LG-8079A, LG-8079B, and LG-8079C vessels. Flange outside diameter is 5  $\frac{3}{8}$ ".

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | O-Ring<br>Size | Part<br>Number     | Each<br>Price |
|-------------------------|------------------------|----------------|--------------------|---------------|
| 24/40                   | 24/40                  | 348            | <b>LG-8074-100</b> | \$219.04      |
| 29/42                   | 24/40                  | 348            | <b>LG-8074-102</b> | 229.60        |
| 29/42                   | 29/42                  | 348            | <b>LG-8074-104</b> | 235.23        |

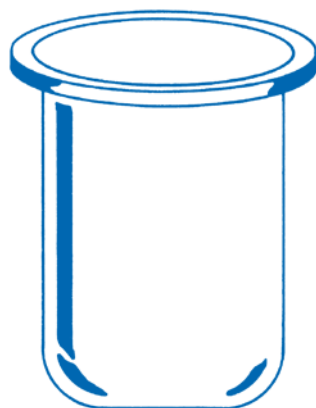
*Note: Use clamp LG-7316-106 with these lids. See LG-1022 for O-Ring.*

**LG-8078****Reaction Vessel Lid, Four Neck with 10/30 Thermometer Joint**

Designed to be used with 2000mL, 3000mL, and 4000mL vessels (LG-8075, LG-8079A, LG-8079B, and LG-8079C). A 10/30 outer joint is provided for thermometers. Flange outside diameter is 6  $\frac{5}{8}$ ".

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joints | O-Ring<br>Size | Part<br>Number     | Each<br>Price |
|-------------------------|-------------------------|----------------|--------------------|---------------|
| 24/40                   | 24/40                   | 359            | <b>LG-8078-100</b> | \$247.67      |
| 29/42                   | 24/40                   | 359            | <b>LG-8078-102</b> | 258.30        |
| 29/42                   | 29/42                   | 359            | <b>LG-8078-104</b> | 263.53        |

*Note: Use clamp LG-7316-108 with these lids. See LG-1022 for O-Ring.*

**LG-8080****Reaction Vessel, Cylindrical, Flat Flange**

LG-8080 has a sturdy wall and a tooled flat flange which has the face smoothly ground for a tight seal. Without constriction at the top and with flat bottom. There is a gently sloping contour at junction of side wall and bottom. Thus, the weakening that might occur with a sharp shoulder is prevented. Uses LG-7316-106 clamp.

| Capacity<br>mL | Body<br>Diameter<br>Inches | Overall<br>Height<br>Inches | Flange<br>Outside<br>Diameter<br>Inches | Part<br>Number     | Each<br>Price |
|----------------|----------------------------|-----------------------------|-----------------------------------------|--------------------|---------------|
| 500            | 3 $\frac{3}{4}$            | 6                           | 5 $\frac{3}{8}$                         | <b>LG-8080-100</b> | \$144.18      |
| 1000           | 4 $\frac{1}{4}$            | 6 $\frac{1}{2}$             | 5 $\frac{3}{8}$                         | <b>LG-8080-102</b> | 152.37        |

**Reaction Vessel, Cylindrical, Flat Flange**

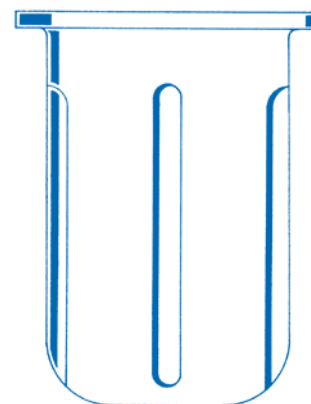
Vessel has a tooled flat flange. This surface is ground to assure a tight seal. All sizes use *LG-7316-108* clamp.

| Capacity<br>mL | Body<br>Diameter<br>Inches | Overall<br>Height<br>Inches | Flange<br>Outside<br>Diameter<br>Inches | Part<br>Number     | Each<br>Price |
|----------------|----------------------------|-----------------------------|-----------------------------------------|--------------------|---------------|
| 2000           | 5 1/2                      | 7 1/8                       | 6 5/8                                   | <b>LG-8082-100</b> | \$137.88      |
| 3000           | 5 1/2                      | 10 1/8                      | 6 5/8                                   | <b>LG-8082-102</b> | 149.19        |
| 4000           | 5 1/2                      | 13 1/4                      | 6 5/8                                   | <b>LG-8082-104</b> | 169.23        |

**LG-8082****Reaction Vessel, Cylindrical, Indented, Flat Flange**

Vessel has four indentations for improved stirring.

| Capacity<br>mL | Overall<br>Diameter<br>Inches | Outside<br>Height<br>Inches | Flange<br>Clamp<br>Diameter<br>Inches | Clamp<br>LG-7316<br>Code | Part<br>Number     | Each<br>Price |
|----------------|-------------------------------|-----------------------------|---------------------------------------|--------------------------|--------------------|---------------|
| 500            | 3 3/4                         | 6 1/2                       | 5 3/8                                 | -106                     | <b>LG-8084-100</b> | \$162.17      |
| 1000           | 4 1/4                         | 7                           | 5 3/8                                 | -106                     | <b>LG-8084-102</b> | 168.08        |
| 2000           | 5 1/2                         | 8 1/8                       | 6 5/8                                 | -108                     | <b>LG-8084-104</b> | 174.71        |
| 3000           | 5 1/2                         | 11 1/2                      | 6 5/8                                 | -108                     | <b>LG-8084-106</b> | 231.69        |
| 4000           | 5 1/2                         | 14 1/4                      | 6 5/8                                 | -108                     | <b>LG-8084-108</b> | 275.12        |

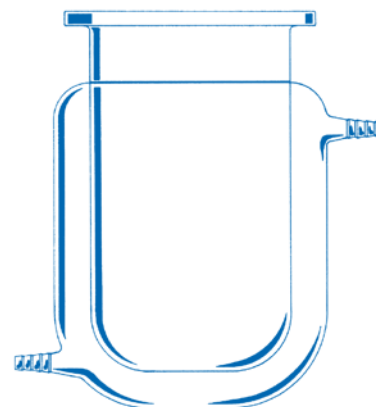
**LG-8084****Reaction Vessel, Cylindrical, Jacketed, Flat Flange**

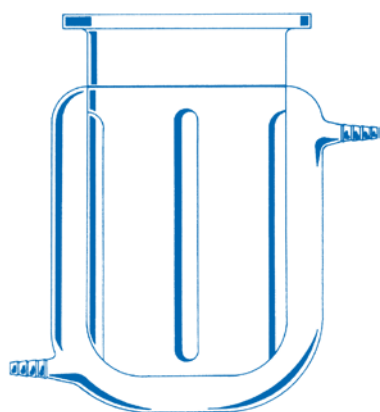
Similar to *LG-8080* and *LG-8082* except jacketed. Jacket has 1/2" hose connections.

| Capacity<br>mL | Body<br>Diameter<br>Inches | Overall<br>Height<br>Inches | Flange<br>Outside<br>Diameter<br>Inches | Clamp<br>LG-7316<br>Code | Part<br>Number     | Each<br>Price |
|----------------|----------------------------|-----------------------------|-----------------------------------------|--------------------------|--------------------|---------------|
| 500            | 3 3/4                      | 7                           | 5 3/8                                   | -106                     | <b>LG-8089-100</b> | \$295.65      |
| 1000           | 4 1/4                      | 8                           | 5 3/8                                   | -106                     | <b>LG-8089-102</b> | 326.14        |
| 2000           | 5 1/2                      | 10                          | 6 5/8                                   | -108                     | <b>LG-8089-104</b> | 402.56        |
| 3000           | 5 1/2                      | 12                          | 6 5/8                                   | -108                     | <b>LG-8089-106</b> | 461.56        |
| 4000           | 5 1/2                      | 16                          | 6 5/8                                   | -108                     | <b>LG-8089-108</b> | 535.22        |

*Note: Use clamp LG-7316-106 with 500mL and 1000mL sizes.*

*Use clamp LG-7316-108 with 2000mL, 3000mL, and 4000mL bodies.*

**LG-8089**

**LG-8085****Reaction Vessel, Cylindrical, Indented, Jacketed, Flat Flange**

Jacketed version of *LG-8084*. Jacket has  $\frac{1}{2}$ " hose connections.

| Capacity<br>mL | Overall<br>Diameter<br>Inches | Outside<br>Height<br>Inches | Flange<br>Clamp<br>Diameter<br>Inches | LG-7316<br>Code | Part<br>Number     | Each<br>Price |
|----------------|-------------------------------|-----------------------------|---------------------------------------|-----------------|--------------------|---------------|
| 500            | 3 $\frac{3}{4}$               | 7 $\frac{3}{4}$             | 5 $\frac{3}{8}$                       | -106            | <b>LG-8085-100</b> | \$314.00      |
| 1000           | 4 $\frac{1}{4}$               | 9                           | 5 $\frac{3}{8}$                       | -106            | <b>LG-8085-102</b> | 339.97        |
| 2000           | 5 $\frac{1}{2}$               | 10 $\frac{1}{4}$            | 6 $\frac{5}{8}$                       | -108            | <b>LG-8085-104</b> | 415.76        |
| 3000           | 5 $\frac{1}{2}$               | 12                          | 6 $\frac{5}{8}$                       | -108            | <b>LG-8085-106</b> | 496.86        |
| 4000           | 5 $\frac{1}{2}$               | 16 $\frac{1}{2}$            | 6 $\frac{5}{8}$                       | -108            | <b>LG-8085-108</b> | 576.47        |

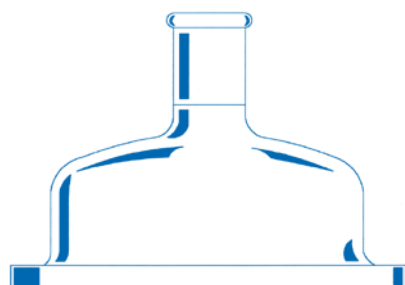
**LG-8081**  
**LG-8083****Reaction Vessel Lid, Molded, Four Neck, Flat Flange**

Lid with a flat flange. Contact surface is finely ground to provide a tight seal.

*LG-8081* is for use with *LG-8080* vessels. *LG-8083* is for use with *LG-8082* vessels.

| Center<br>Neck<br>Jt Joint | Side<br>Necks<br>Jt Joint | Flange<br>Outside<br>Diameter<br>Inches | Part<br>Number     | Each<br>Price |
|----------------------------|---------------------------|-----------------------------------------|--------------------|---------------|
| 24/40                      | 24/40                     | 5 $\frac{3}{8}$                         | <b>LG-8081-100</b> | \$305.04      |
| 34/45                      | 24/40                     | 6 $\frac{5}{8}$                         | <b>LG-8083-100</b> | 280.15        |

*Note: Use clamp LG-7316-106 with LG-8081. Use clamp LG-7316-108 with LG-8083.*

**LG-8086C****Reaction Vessel Lid, Single Neck, Flat Flange**

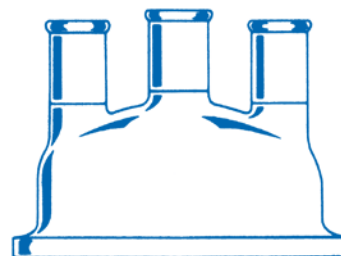
Reaction flask lid with ground face and single center neck. Flange outside diameter 5  $\frac{3}{8}$ " on 500 - 1000mL lids, flange outside diameter 6  $\frac{5}{8}$ " on 2000 - 4000mL lids.

| Jt Joint | Fits<br>Kettle Size | Clamp<br>LG-7316<br>Code | Part<br>Number      | Each<br>Price |
|----------|---------------------|--------------------------|---------------------|---------------|
| 24/40    | 500 - 1000mL        | -106                     | <b>LG-8086C-100</b> | \$176.09      |
| 29/42    | 500 - 1000mL        | -106                     | <b>LG-8086C-104</b> | 178.36        |
| 24/40    | 2000 - 4000mL       | -108                     | <b>LG-8086C-200</b> | 205.64        |
| 29/42    | 2000 - 4000mL       | -108                     | <b>LG-8086C-204</b> | 207.93        |

**Reaction Vessel Lid, Three Neck, Flat Flange**

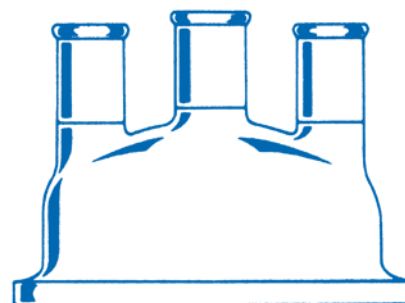
Designed to be used with *LG-8080* vessels. Flange outside diameter is  $5\frac{3}{8}$ ". All sizes use *LG-7316-106* clamps.

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joints | Part<br>Number     | Each<br>Price |
|-------------------------|-------------------------|--------------------|---------------|
| 24/40                   | 24/40                   | <b>LG-8086-100</b> | \$183.00      |
| 29/42                   | 24/40                   | <b>LG-8086-102</b> | 185.52        |
| 29/42                   | 29/42                   | <b>LG-8086-104</b> | 190.53        |

**LG-8086****Reaction Vessel Lid, Three Neck, Flat Flange**

For use with large capacity vessels, 2000mL, 3000mL and 4000mL (*LG-8082*, *LG-8084*, *LG-8085*, and *LG-8089*). Flange outside diameter is  $6\frac{5}{8}$ ". All sizes use *LG-7316-108* clamps.

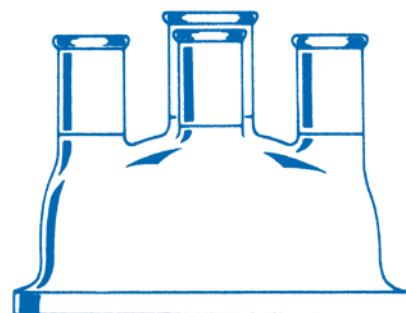
| Center Neck<br>\$ Joint | Side Necks<br>\$ Joints | Part<br>Number      | Each<br>Price |
|-------------------------|-------------------------|---------------------|---------------|
| 24/40                   | 24/40                   | <b>LG-8086A-100</b> | \$195.55      |
| 29/42                   | 29/42                   | <b>LG-8086A-104</b> | 209.34        |

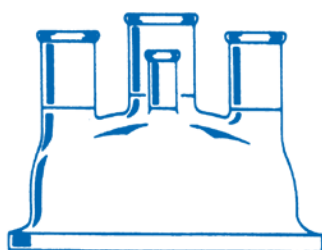
**LG-8086A****Reaction Vessel Lid, Four Neck, Flat Flange**

*LG-8087* is designed to be used with *LG-8080*, *LG-8084*, *LG-8085*, and *LG-8089* vessels. *LG-8087A* is designed to be used with *LG-8082*, *LG-8084*, *LG-8085*, *LG-8089* vessels.

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joints | Flange<br>Outside<br>Diam. Inches | Clamp<br>LG-7316<br>Code | Part<br>Number      | Each<br>Price |
|-------------------------|-------------------------|-----------------------------------|--------------------------|---------------------|---------------|
| 24/40                   | 24/40                   | $5\frac{3}{8}$                    | -106                     | <b>LG-8087-100</b>  | \$231.14      |
| 29/42                   | 24/40                   | $5\frac{3}{8}$                    | -106                     | <b>LG-8087-102</b>  | 237.67        |
| 29/42                   | 29/42                   | $5\frac{3}{8}$                    | -106                     | <b>LG-8087-104</b>  | 248.62        |
| 24/40                   | 24/40                   | $6\frac{5}{8}$                    | -108                     | <b>LG-8087A-100</b> | 259.77        |
| 29/42                   | 24/40                   | $6\frac{5}{8}$                    | -108                     | <b>LG-8087A-102</b> | 266.13        |
| 29/42                   | 29/42                   | $6\frac{5}{8}$                    | -108                     | <b>LG-8087A-104</b> | 271.89        |

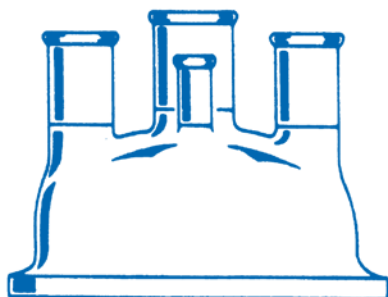
*Note: Use clamp LG-7316-106 with LG-8087. Use clamp LG-7316-108 with LG-8087A.*

**LG-8087  
LG-8087A**

**LG-8088****Reaction Vessel Lid, Four Neck with 10/30 Thermometer Joint**

Designed to be used with *LG-8080*, *LG-8084*, *LG-8085*, and *LG-8089* vessels. Flange outside diameter is 5  $\frac{3}{8}$ ". Fourth neck is a 10/30 joint. All sizes use *LG-7316-106* clamps.

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | Part<br>Number     | Each<br>Price |
|-------------------------|------------------------|--------------------|---------------|
| 24/40                   | 24/40                  | <b>LG-8088-100</b> | \$208.09      |
| 29/42                   | 24/40                  | <b>LG-8088-102</b> | 210.59        |
| 29/42                   | 29/42                  | <b>LG-8088-104</b> | 224.38        |

**LG-8088A****Reaction Vessel Lid, Four Neck with 10/30 Thermometer Joint**

Similar to *LG-8088* but sized to fit *LG-8082*, *8084*, *8085* and *8089* vessels. Fourth neck is a 10/30 joint flange diameter is 6  $\frac{5}{8}$ ". All sizes use

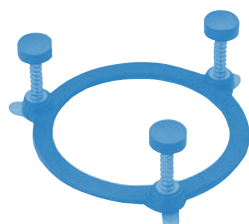
*LG-7316-108* clamps.

| Center Neck<br>\$ Joint | Side Necks<br>\$ Joint | Part<br>Number      | Each<br>Price |
|-------------------------|------------------------|---------------------|---------------|
| 24/40                   | 24/40                  | <b>LG-8088A-100</b> | \$233.66      |
| 29/42                   | 24/40                  | <b>LG-8088A-102</b> | 244.61        |
| 29/42                   | 29/42                  | <b>LG-8088A-104</b> | 249.72        |

**LG-7316****Reaction Clamp, McCarter, for O-ring and Flat Flanges**

A unique stainless steel horseshoe-shaped clamp particularly designed to connect two pieces of glass that have flat flanges of the same diameter. The clamp has adjustable tension springs to secure even pressure over the flange area. Construction is such that clamp may be slid on or off easily, facilitating assembly and disassembly of apparatus setups.

| Size              | Part<br>Number     | Each<br>Price |
|-------------------|--------------------|---------------|
| 32mm              | <b>LG-7316-100</b> | \$57.84       |
| 57mm              | <b>LG-7316-102</b> | 64.59         |
| 80mm              | <b>LG-7316-104</b> | 84.01         |
| 4 $\frac{1}{2}$ " | <b>LG-7316-106</b> | 140.76        |
| 5 $\frac{1}{2}$ " | <b>LG-7316-108</b> | 149.81        |

**LG-7317****Reaction Clamp, for O-Ring and Flat Flanges**

Cast bronze ring with black oxidized finish. Three insulated, spring activated clamping arms fit beneath the flange of the flask body. Simple pressure on the heat-resistant fiber knobs, and a twist, permit attachment or removal.

| Flask<br>Capacity  | Part<br>Number     | Each<br>Price |
|--------------------|--------------------|---------------|
| 500, 1000mL        | <b>LG-7317-100</b> | \$117.18      |
| 2000, 3000, 4000mL | <b>LG-7317-102</b> | 118.91        |



### Reaction Clamp, for Conical Flange

Designed for easy removal of top clamp without disturbing the cover or body of reaction flask. Disassemble by loosening nuts. Complete with an extension rod for clamping to a laboratory stand.

| For Flange Size | Part Number        | Each Price |
|-----------------|--------------------|------------|
| 2"              | <b>ML-1288-700</b> | \$59.90    |
| 4"              | <b>LG-8070-100</b> | 138.00     |



**LG-8070**



**ML-1288**

### Reaction Gasket, PTFE, for Conical Flange

Gasket is supplied for flanged reaction flasks as an option lubricant as a seal. Clamp pressure creates an effective seal.

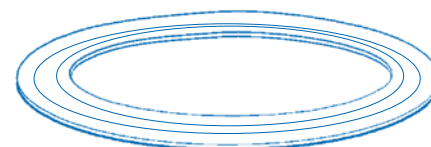
| Flange Inside Diameter Inches | Part Number        | Each Price |
|-------------------------------|--------------------|------------|
| 2"                            | <b>LG-8069-100</b> | \$48.30    |
| 4"                            | <b>LG-8069-102</b> | 49.50      |



**LG-8069**

### Reaction Gasket, PTFE, Grooved for Ground Flange

| For Vessel Size | Flange Outside Diam.            | Part Number        | Each Price |
|-----------------|---------------------------------|--------------------|------------|
| 500-1000mL      | 5 <sup>3</sup> / <sub>8</sub> " | <b>LG-8068-100</b> | \$59.90    |
| 2000-4000mL     | 6 <sup>5</sup> / <sub>8</sub> " | <b>LG-8068-102</b> | 61.10      |

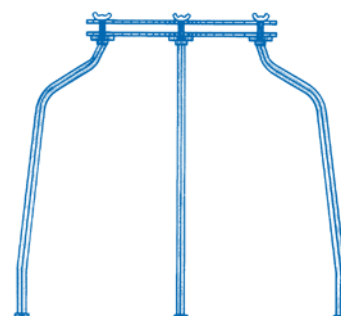


**LG-8068**

### Support, Reaction Flask Support and Clamp for Flat Flanges

A support stand with ring style clamps for use with reaction kettles and covers with flat flanges. Support has a base ring with 3 legs, a split top ring, and 3 wing nuts for firmly clamping the flanges. Both rings are the same I.D.

| Flask Capacity<br>Capacity<br>mL | Ring<br>I.D.,<br>inches       | Height Under<br>Rings,<br>Inches | Part<br>Number     | Each<br>Price |
|----------------------------------|-------------------------------|----------------------------------|--------------------|---------------|
| 1000                             | 4 <sup>1</sup> / <sub>2</sub> | 14 <sup>1</sup> / <sub>2</sub>   | <b>LG-8061-102</b> | \$151.05      |
| 2000                             | 5 <sup>3</sup> / <sub>4</sub> | 12                               | <b>LG-8061-104</b> | 184.71        |
| 3000                             | 5 <sup>3</sup> / <sub>4</sub> | 17                               | <b>LG-8061-106</b> | 199.86        |



**LG-8061**

Graduated in hundredths of  
a foot .0-.5



**LG-5601**

Graduated in cc's per liter  
1000-0

## Settler, Mallory Direct Reading

For use in the oxidized sludge process as required for treatment of sewage and other wastes. Unit is a 2000mL heavy wall cylinder and measures  $5 \frac{1}{8}$ " I.D. x  $7 \frac{1}{2}$ " high. Graduated in cc per liter and hundredths of a foot.

| Part<br>Number     | Each<br>Price   |
|--------------------|-----------------|
| <b>LG-5601-100</b> | <b>\$167.84</b> |

Replaces LX6240

**Solid Phase Reaction Vessel**

Solid phase reaction vessel for peptide synthesis. Supplied with medium or coarse porosity fritted resin support. The vessel top has a GL thread and is supplied complete with PTFE-lined PBT screw cap. The PTFE stopcock has a 2mm bore. The stem below the stopcock has an 8mm O.D.

| Capacity<br>mL | Frit<br>Diameter<br>(mm)<br>Porosity | OD x<br>Eff. Length<br>mm | Thread<br>Size<br>GL | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------------|---------------------------|----------------------|--------------------|---------------|
| 10             | 15 coarse                            | 18 x 75                   | 14                   | <b>LG-5000-100</b> | \$104.85      |
| 25             | 20 coarse                            | 25 x 90                   | 25                   | <b>LG-5000-102</b> | 119.33        |
| 50             | 30 coarse                            | 45 x 115                  | 25                   | <b>LG-5000-104</b> | 132.58        |
| 100            | 40 coarse                            | 57 x 160                  | 25                   | <b>LG-5000-106</b> | 144.63        |
| 10             | 15 medium                            | 18 x 75                   | 14                   | <b>LG-5000-120</b> | 104.85        |

**LG-5000****Replacement Plastic Cap with PTFE Protected Seal**

Replacement caps for use with Solid Phase Reaction Vessels.

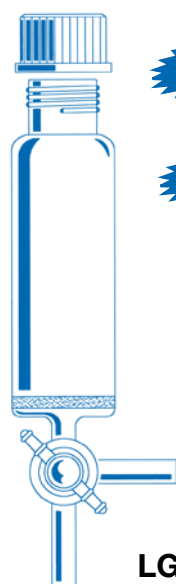
| Thread<br>Size | Part<br>Number     | Each<br>Price |
|----------------|--------------------|---------------|
| GL14           | <b>LG-5003-100</b> | \$2.00        |
| GL25           | <b>LG-5003-102</b> | 2.60          |
| GL32           | <b>LG-5003-104</b> | 4.04          |

**LG-5003****Solid Phase Reaction Vessels, with Side Port**

Solid phase reaction vessel for peptide synthesis. Supplied with medium or coarse porosity fritted glass resin support. The vessel top has a GL thread and is supplied complete with PTFE-lined PBT screw cap. Side port and lower PTFE stopcocks have a 2mm bore. The stems have an 8mm O.D.

| Capacity<br>mL | Frit<br>Diameter<br>(mm)<br>Porosity | OD x<br>Eff. Length<br>mm | Thread<br>Size<br>GL | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------------|---------------------------|----------------------|--------------------|---------------|
| 10             | 15 coarse                            | 18 x 75                   | 14                   | <b>LG-5001-100</b> | \$126.54      |
| 25             | 20 coarse                            | 25 x 90                   | 25                   | <b>LG-5001-102</b> | 141.01        |
| 50             | 30 coarse                            | 35 x 95                   | 25                   | <b>LG-5001-104</b> | 154.27        |
| 100            | 40 coarse                            | 45 x 115                  | 25                   | <b>LG-5001-106</b> | 166.32        |
| 10             | 15 medium                            | 18 x 75                   | 14                   | <b>LG-5001-120</b> | 126.54        |

**LG-5001**



Teflon

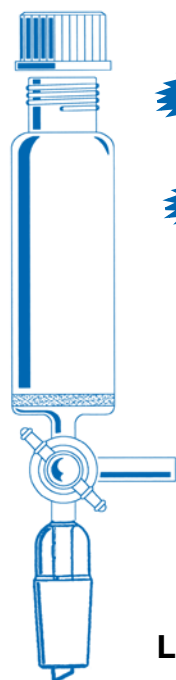
NEW

LG-5006

**Solid Phase Reaction Vessel, with PTFE T-bore Stopcock**

Solid phase reaction vessel having a coarse porosity fritted glass resin support. Top of the vessel has a GL thread and is supplied complete with a PTFE-lined screw cap. Supplied with 2mm T-bore Teflon stopcock.

| Capacity (mL) | Coarse Disc OD (mm) | OD x Eff. Length (mm) | Thread Size GL | Part Number        | Each Price |
|---------------|---------------------|-----------------------|----------------|--------------------|------------|
| 10            | 15                  | 18 x 150              | 14             | <b>LG-5006-100</b> | \$127.10   |
| 25            | 20                  | 25 x 165              | 25             | <b>LG-5006-102</b> | 140.05     |
| 50            | 20                  | 30 x 195              | 25             | <b>LG-5006-104</b> | 153.20     |
| 100           | 40                  | 51 x 183              | 25             | <b>LG-5006-106</b> | 165.25     |



Teflon

NEW

LG-5008

**Solid Phase Reaction Vessel, with PTFE T-bore Stopcock**

Similar to *LG-5006*, but with the addition of a lower 24/40 inner joint. Supplied with 2mm T-bore Teflon stopcock.

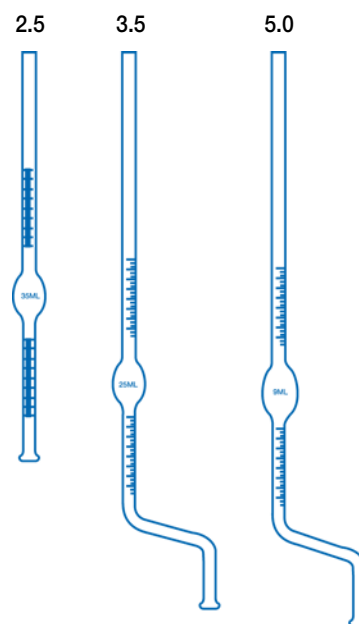
| Capacity (mL) | Coarse Disc OD (mm) | OD x Eff. Length (mm) | Thread Size GL | Part Number        | Each Price |
|---------------|---------------------|-----------------------|----------------|--------------------|------------|
| 10            | 15                  | 18 x 90               | 14             | <b>LG-5008-100</b> | \$140.00   |
| 25            | 20                  | 25 x 209              | 25             | <b>LG-5008-102</b> | 153.25     |
| 50            | 20                  | 30 x 238              | 25             | <b>LG-5008-104</b> | 168.00     |
| 100           | 40                  | 51 x 227              | 25             | <b>LG-5008-106</b> | 179.10     |

## Stalagmometer

Tubes especially designed for checking the surface tension of liquids. Each tube is accurately calibrated to help quickly determine surface tension by the drop count method. Each tube is graduated above and below the bulb. Tubes are available in 2.5mL, 3.5mL and 5.0mL sizes. The 2.5 and 5.0mL sizes allow flexibility in sample size of most liquid baths, while the 3.5mL size is used for more viscous applications. Available individually or in a complete set of 3 tubes (1 of each size) in a protective wooden case. Supplied with instructions for use.

| Supplied         | Part Number        | Each Price |
|------------------|--------------------|------------|
| Complete Set     | <b>LG-5050-100</b> | \$585.20   |
| 2.5mL Tube Only  | <b>LG-5050-102</b> | 178.69     |
| 3.5mL Tube Only  | <b>LG-5050-104</b> | 178.69     |
| 5.0mL Tube Only  | <b>LG-5050-106</b> | 178.69     |
| Wooden Case Only | <b>LG-5050-200</b> | 80.00      |

*Replaces LX 6310*



**LG-5050**

**LG-9410****ML-1680**  
**ML-1702****Stirrer Bearing, Precision Glass Sleeve, 10mm**

Glass sleeve bearing designed for precision fit with a ground shaft and inner joint at lower end.

| Joint | Shaft Diameter mm | Part Number        | Each Price |
|-------|-------------------|--------------------|------------|
| 24/40 | 10                | <b>LG-9410-142</b> | \$64.36    |
| 29/26 | 10                | <b>LG-9410-143</b> | 66.90      |
| 29/42 | 10                | <b>LG-9410-144</b> | 65.57      |
| 34/45 | 10                | <b>LG-9410-146</b> | 68.21      |
| 45/50 | 10                | <b>LG-9410-148</b> | 69.54      |

**Stirrer, Precision**

Complete unit consists of bearing with grease cup and glass rod stirrer shaft. Will fit flasks up to 500mL.

| Joint | Supplied     | Shaft Diameter mm | Part Number        | Each Price |
|-------|--------------|-------------------|--------------------|------------|
| 14/20 | Complete     | 6.25              | <b>ML-1680-700</b> | \$131.37   |
| 19/22 | Complete     | 6.25              | <b>ML-1680-702</b> | 131.88     |
| 19/22 | Complete     | 10.00             | <b>ML-1702-700</b> | 164.30     |
| 14/20 | Bearing Only | 6.25              | <b>ML-1720-700</b> | 91.85      |
| 19/22 | Bearing Only | 6.25              | <b>ML-1720-702</b> | 91.85      |
| 19/22 | Bearing Only | 10.00             | <b>ML-1725-700</b> | 114.10     |
|       | Shaft Only   | 6.25              | <b>ML-1740-700</b> | 46.40      |
|       | Shaft Only   | 10.00             | <b>ML-1742-700</b> | 60.10      |

**Stirrer, Lubricant**

For Trubore Stirrer with grease cup.

| Size      | Part Number        | Each Price |
|-----------|--------------------|------------|
| 1 oz. Jar | <b>LG-9413-100</b> | \$19.80    |

**LG-9413**

**Stirrer Bearing, Precision Glass Sleeve, 10mm**

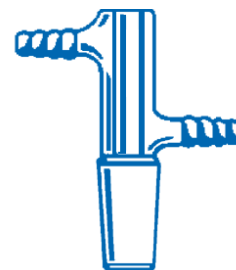
Glass sleeve bearing designed for precision fit with a ground shaft and inner joint at lower end and small grease cup at top.

| § Joint | Shaft Diameter mm | Part Number        | Each Price |
|---------|-------------------|--------------------|------------|
| 24/40   | 10                | <b>LG-9411-142</b> | \$66.12    |
| 29/26   | 10                | <b>LG-9411-143</b> | 68.76      |
| 29/42   | 10                | <b>LG-9411-144</b> | 67.45      |
| 34/45   | 10                | <b>LG-9411-146</b> | 70.09      |
| 45/50   | 10                | <b>LG-9411-148</b> | 77.15      |

**LG-9411****Stirrer Bearing, Precision Glass Sleeve, 10mm, Jacketed**

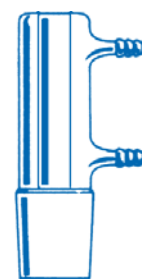
Glass sleeve bearing designed for precision fit with a ground shaft and inner joint at lower end. Bearing is jacketed and has hose connections for coolant circulation.

| § Joint | Shaft Diameter mm | Part Number        | Each Price |
|---------|-------------------|--------------------|------------|
| 24/40   | 10                | <b>LG-9425-140</b> | \$80.68    |
| 29/26   | 10                | <b>LG-9425-141</b> | 94.02      |
| 29/42   | 10                | <b>LG-9425-142</b> | 83.27      |
| 45/50   | 10                | <b>LG-9425-146</b> | 89.17      |

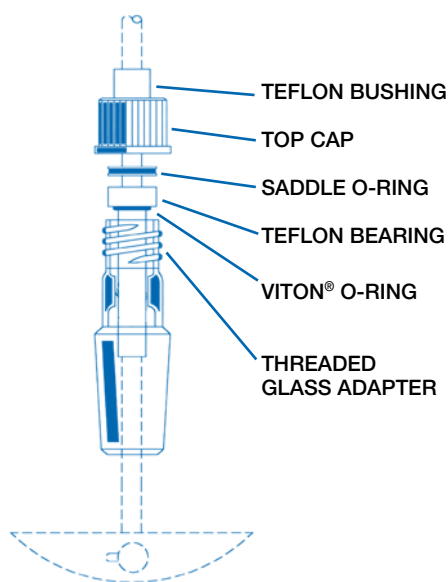
**LG-9425****Stirrer Bearing, Precision Glass Sleeve, 19mm, Jacketed, Heavy Duty**

Designed for stirring reaction mixtures with increased viscosity. Jacketed with hose connections for cooling. Lower end of bearing has an inner joint.

| § Joint | Shaft Diameter mm | Part Number        | Each Price |
|---------|-------------------|--------------------|------------|
| 45/50   | 19                | <b>LG-9427-140</b> | \$176.82   |
| 55/50   | 19                | <b>LG-9427-142</b> | 184.41     |

**LG-9427**



**LG-9444****Stirrer Bearing Precision, 10mm, PTFE**

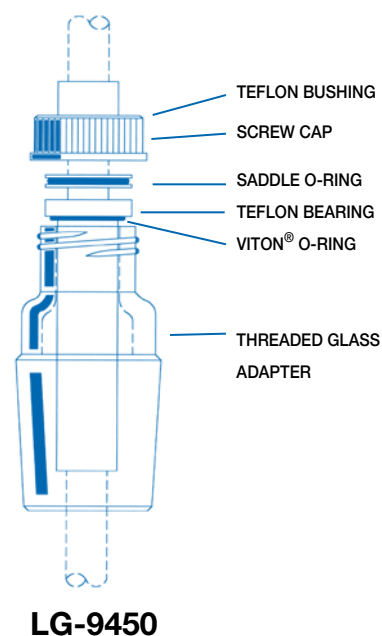
A uniquely designed lubricant free, self-aligning precision stirrer bearing. The saddle O-Ring provides constant force and a positive seal on the stirring rod that allows vacuum operation to as low as 1mm. Ground finish rods from other manufacturers are not recommended for use with this bearing. Complete assembly includes PTFE inner bearing, PTFE bushing, saddle O-Ring, threaded glass adapter, Viton® O-Ring, and top cap. See *LG-9501* for polished stirrer rods or *LG-9502* for stainless steel rods.

| Supplied                       | Bearing Joint | Part Number         | Each Price |
|--------------------------------|---------------|---------------------|------------|
| Complete                       | § 24/40       | <b>LG-9444-100</b>  | \$ 81.74   |
| Complete                       | § 29/26       | <b>LG-9444-102</b>  | 83.62      |
| Complete                       | § 29/42       | <b>LG-9444-104</b>  | 83.62      |
| Complete                       | § 34/45       | <b>LG-9444-106</b>  | 86.53      |
| Complete                       | § 45/50       | <b>LG-9444-108</b>  | 98.75      |
| Complete                       | § 35/25       | <b>LG-9444-110</b>  | 85.89      |
| Adapter Only                   | § 24/40       | <b>LG-9444-120</b>  | 28.55      |
| Adapter Only                   | § 29/26       | <b>LG-9444-122</b>  | 30.13      |
| Adapter Only                   | § 29/42       | <b>LG-9444-124</b>  | 30.13      |
| Adapter Only                   | § 34/45       | <b>LG-9444-126</b>  | 32.87      |
| Adapter Only                   | § 45/50       | <b>LG-9444-128</b>  | 45.58      |
| Adapter Only                   | § 35/25       | <b>LG-9444-130</b>  | 32.17      |
| PTFE Inner Bearing with O-Ring |               | <b>LG-9444-140</b>  | 23.00      |
| Saddle O-Ring Only             |               | <b>LG-9470-300</b>  | 12.36      |
| PTFE Bushing Only              |               | <b>LG-9444-144</b>  | 17.31      |
| Top Cap Only                   |               | <b>LG-10818-114</b> | 1.68       |
| Viton® O-Ring Only             |               | <b>LG-1022-508</b>  | 1.17       |

**Stirrer Bearing, Precision, PTFE, Heavy Duty**

A uniquely designed, rugged, heavy duty stirrer bearing for use under heavier torque conditions. With 19mm I.D. self aligning PTFE bearing and saddle O-Ring that provides a constant positive seal on the stirring rod. Ground finish rods from other manufacturers are not recommended for use with this bearing. Complete assembly includes PTFE stirrer bearing, PTFE bushing, saddle O-Ring, threaded heavy wall glass adapter, and top cap. Use *LG-9504*, 19mm stirrer shaft with this bearing.

| Supplied                  | ⌘ Bearing | Part Number        | Each Price |
|---------------------------|-----------|--------------------|------------|
| Complete                  | 45/50     | <b>LG-9450-100</b> | \$187.10   |
| Complete                  | 55/50     | <b>LG-9450-102</b> | 189.70     |
| Adapter Only              | 45/50     | <b>LG-9450-112</b> | 84.03      |
| Adapter Only              | 55/50     | <b>LG-9450-114</b> | 86.00      |
| PTFE Stirrer Bearing      |           | <b>LG-9450-140</b> | 60.50      |
| Saddle O-Ring             |           | <b>LG-9450-142</b> | 12.46      |
| PTFE Bushing              |           | <b>LG-9450-144</b> | 28.43      |
| Screw Cap                 |           | <b>LG-9450-146</b> | 7.31       |
| Viton® O-Ring for Bearing |           | <b>LG-9450-148</b> | 3.50       |

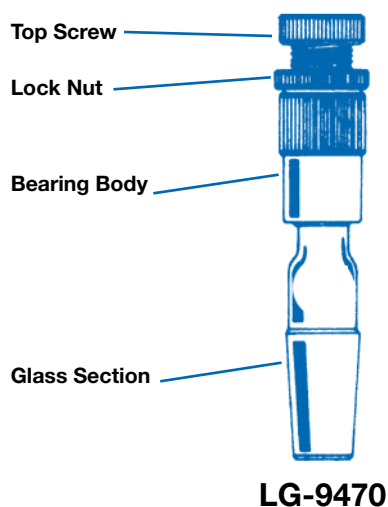
**Stirrer Bearing, PTFE Sealed**

Design allows liquids or vapors to contact glass and PTFE only. The threaded glass adapter has an inner joint. A PTFE sleeve with O-Ring is bored to accommodate a 10mm O.D. polished stirrer shaft. The PTFE sleeve holds a PTFE gland with O-Ring, and has a threaded plastic cap to enclose the whole assembly effecting a tight seal for vacuum or pressure applications.

| Supplied                 | ⌘ Joint | Part Number        | Each Price |
|--------------------------|---------|--------------------|------------|
| Complete                 | 24/40   | <b>LG-9455-100</b> | \$146.60   |
| Complete                 | 29/42   | <b>LG-9455-102</b> | 153.50     |
| Complete                 | 34/45   | <b>LG-9455-104</b> | 161.40     |
| Glass Adapter Only       | 24/40   | <b>LG-9455-110</b> | 62.15      |
| Glass Adapter Only       | 29/42   | <b>LG-9455-112</b> | 70.14      |
| Glass Adapter Only       | 34/45   | <b>LG-9455-114</b> | 77.03      |
| PTFE Bearing With O-Ring |         | <b>LG-9455-120</b> | 57.69      |
| PTFE Gland With O-Ring   |         | <b>LG-9455-130</b> | 19.52      |
| Plastic Cap Only         |         | <b>LG-9455-140</b> | 11.77      |

Replaces LX6343





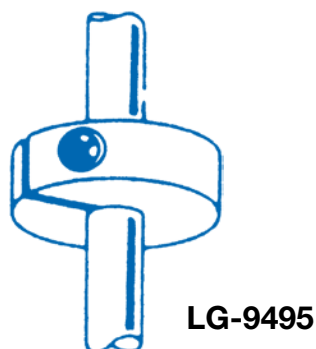
### Stirrer Bearing, Chesapeake

Designed for stirring at atmospheric and high pressures and at vacuums to 10mm of Hg. Eliminates glass to glass contact with stirrer rod.

| Joint | Supplied           | Part Number        | Each Price |
|-------|--------------------|--------------------|------------|
| 24/40 | Bearing Complete   | <b>LG-9470-200</b> | \$173.55   |
| 29/42 | Bearing Complete   | <b>LG-9470-202</b> | 177.78     |
| 34/45 | Bearing Complete   | <b>LG-9470-204</b> | 180.44     |
| 45/50 | Bearing Complete   | <b>LG-9470-206</b> | 189.82     |
| 24/40 | Glass Only Section | <b>LG-9470-250</b> | 81.74      |
| 29/42 | Glass Only Section | <b>LG-9470-252</b> | 84.29      |
| 34/45 | Glass Only Section | <b>LG-9470-254</b> | 88.64      |
| 45/50 | Glass Only Section | <b>LG-9470-256</b> | 97.93      |

#### Replacement parts for PTFE section

|                    |                    |       |
|--------------------|--------------------|-------|
| PTFE Sleeve        | <b>LG-9444-140</b> | 23.00 |
| PTFE Saddle O-Ring | <b>LG-9470-300</b> | 12.36 |
| PTFE Top Screw     | <b>LG-9470-302</b> | 33.20 |
| Lock Nut           | <b>LG-9470-304</b> | 9.10  |
| Fiber Washer       | <b>LG-9470-306</b> | 4.00  |
| Bearing Body       | <b>LG-9470-308</b> | 49.65 |



### Stirrer Shaft Safety Retainer

LG-9495 attaches to shaft at top of bearing. Prevents shaft from slipping down and damaging flasks. Nylon retainer prevents contamination of bearing by excluding dust and oil.

| Shaft Size mm | Part Number        | Each Price |
|---------------|--------------------|------------|
| 10            | <b>LG-9495-100</b> | \$15.16    |
| 19            | <b>LG-9495-102</b> | 27.21      |

### Stirrer Shaft, Glass Rod

Precision ground with side button for attachment of stirrer blades. Use blades LG-9505 through LG-9511T for LG-9500 shafts, ML-1770T blade for ML-1760 shaft and LG-9510T-100 blade for ML-1765 shaft.

| Diameter mm | Overall Length mm | Flask Capacity mL | Part Number        | Each Price |
|-------------|-------------------|-------------------|--------------------|------------|
| 6.25        | 310               | 50 to 500         | <b>ML-1760-700</b> | \$33.73    |
| 10          | 445               | 50 to 500         | <b>ML-1765-700</b> | 34.16      |
| 10          | 445               | 100 to 5000       | <b>LG-9500-100</b> | 34.14      |
| 10          | 515               | 12000             | <b>LG-9500-102</b> | 40.13      |
| 10          | 590               | 22000             | <b>LG-9500-104</b> | 42.79      |
| 10          | 820               | 50000             | <b>LG-9500-106</b> | 44.37      |

**ML-1760**  
**ML-1765**  
**LG-9500**



**Stirrer Shaft, Glass Rod**

Precision ground and polished, diameter 10mm. For use with bearings having a PTFE interface with the same bore. With side button at bottom for attachment of any of the stirrer blades, *LG-9505* through *LG-9511T*.

| Flask Capacity<br>mL | Overall Length<br>mm | Part Number        | Each Price |
|----------------------|----------------------|--------------------|------------|
| 100 to 5000          | 445                  | <b>LG-9501-100</b> | \$67.97    |
| 12000                | 515                  | <b>LG-9501-102</b> | 71.34      |
| 22000                | 590                  | <b>LG-9501-104</b> | 74.23      |

**LG-9501****Stirrer Shaft, Stainless Steel**

Stainless steel rod, precision ground and polished, diameter 10mm. For use with bearings having a PTFE interface with same bore. With side button at bottom for attachment of any of the stirrer blades, *LG-9505* through *LG-9511T*.

| Flask Capacity<br>mL | Overall Length<br>mm | Part Number        | Each Price |
|----------------------|----------------------|--------------------|------------|
| 100 to 5000          | 445                  | <b>LG-9502-100</b> | \$110.24   |
| 12000                | 515                  | <b>LG-9502-102</b> | 115.04     |
| 22000                | 590                  | <b>LG-9502-104</b> | 117.44     |

**LG-9502****Stirrer Shaft, Stainless Steel, with Blade**

Stainless steel rod, shaft diameter is 10mm and is precision ground and polished. Stainless steel blade pivots on a pin attached to the bottom of the shaft.

| Flask Capacity<br>mL | Blade<br>W x L<br>mm | Rod Overall<br>Length<br>mm | Min.<br>\$ Joint<br>Clearance | Min.<br>\$ Joint<br>Clearance | Part Number        | Each Price |
|----------------------|----------------------|-----------------------------|-------------------------------|-------------------------------|--------------------|------------|
| 200 to 300           | 19 x 60              | 330                         | 24/40                         | 35/20                         | <b>LG-9503-100</b> | \$153.43   |
| 500 to 1000          | 19 x 75              | 330                         | 24/40                         | 35/20                         | <b>LG-9503-102</b> | 158.44     |
| 2000 to 3000         | 20 x 110             | 450                         | 29/42                         | 35/25                         | <b>LG-9503-104</b> | 162.17     |
| 5000                 | 21 x 130             | 450                         | 29/42                         | 35/25                         | <b>LG-9503-106</b> | 167.16     |
| 12000                | 21 x 130             | 525                         | 29/42                         | 35/25                         | <b>LG-9503-108</b> | 180.89     |
| 22000                | 21 x 130             | 600                         | 29/42                         | 35/25                         | <b>LG-9503-110</b> | 189.61     |

**LG-9503**

**LG-9504****LG-9505****LG-9515**

### Stirrer Shaft, Glass Rod, Heavy Duty, Precision Ground and Polished

Diameter of shaft is 19mm and is used with *LG-9427* bearing. Rod length below contact surface of bearing is unground and varies with flask capacity. Shaft has large side button for attaching *LG-9515* or *LG-9516T* stirrer blades.

| Flask Capacity<br>mL | Overall Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------------|----------------------|--------------------|---------------|
| 12000                | 645                  | <b>LG-9504-106</b> | \$88.21       |
| 22000                | 720                  | <b>LG-9504-108</b> | 88.23         |
| 50000                | 820                  | <b>LG-9504-110</b> | 94.98         |
| 72000                | 905                  | <b>LG-9504-112</b> | 94.98         |

### Stirrer Blade, Glass

Made of borosilicate glass 1/8" thick, with chip-resistant, fire-polished holes and edges. For 10mm O.D. shafts with side button for attachment of blade.

| Blade<br>W x L<br>mm | Flask<br>Capacity<br>mL | Min.<br>\$ Joint<br>Clearances | Min.<br>\$ Joint<br>Clearances | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------|--------------------------------|--------------------------------|--------------------|---------------|
| 19 x 48              | 100                     | 24/40                          | 35/20                          | <b>LG-9505-100</b> | \$12.58       |
| 19 x 60              | 250 to 300              | 24/40                          | 35/20                          | <b>LG-9505-102</b> | 12.58         |
| 19 x 75              | 500 to 1000             | 24/40                          | 35/20                          | <b>LG-9505-104</b> | 12.58         |
| 24 x 110             | 2000 to 3000            | 29/42                          | 35/25                          | <b>LG-9505-106</b> | 12.58         |
| 24 x 130             | 5000                    | 29/42                          | 35/25                          | <b>LG-9505-108</b> | 13.18         |
| 35 x 185             | 12000                   | 45/50                          | 65/40                          | <b>LG-9505-110</b> | 27.73         |

### Stirrer Blade, Glass, Heavy Duty

Suited for stirring high viscosity liquids. For use with *LG-9504* heavy duty stirrer rods. Blade thickness is 3/16".

| Blade<br>W x L<br>mm | Flask<br>Capacity<br>mL | Min.<br>\$ Joint<br>Clearance | Part<br>Number     | Each<br>Price |
|----------------------|-------------------------|-------------------------------|--------------------|---------------|
| 35 x 150             | 12000                   | 45/50                         | <b>LG-9515-106</b> | \$31.15       |
| 39 x 160             | 22000                   | 45/50                         | <b>LG-9515-108</b> | 34.89         |
| 44 x 175             | 50000                   | 55/50                         | <b>LG-9515-110</b> | 34.89         |
| 54 x 200             | 72000                   | 71/60                         | <b>LG-9515-112</b> | 37.38         |

### Stirrer Blade, PTFE

Made of 1/8" thick material. For 10mm shafts with side button for attachment of blade.

| Blade<br>W x L<br>mm | Flask<br>Capacity<br>mL | Min.<br>\$ Joint | Part<br>Number      | Each<br>Price |
|----------------------|-------------------------|------------------|---------------------|---------------|
| 13 x 44              | 50                      | 14/20            | <b>ML-1770T-700</b> | \$7.59        |
| 19 x 48              | 100                     | 24/40            | <b>LG-9510T-100</b> | 6.79          |
| 19 x 60              | 250 to 300              | 24/40            | <b>LG-9510T-102</b> | 7.60          |
| 19 x 75              | 500 to 1000             | 24/40            | <b>LG-9510T-104</b> | 9.00          |
| 24 x 110             | 2000 to 3000            | 29/42            | <b>LG-9510T-106</b> | 11.45         |
| 24 x 130             | 5000                    | 29/42            | <b>LG-9510T-108</b> | 15.54         |
| 35 x 185             | 12000                   | 45/50            | <b>LG-9510T-110</b> | 17.45         |



**ML-1770T  
LG-9510T**



### Stirring Apparatus, Stirrer Blade, PTFE, Heavy Duty

Suited for stirring high viscosity liquids. For use with *LG-9504* heavy duty stirrer rods. Blade thickness is 3/16".

| Blade<br>W x L<br>mm | Flask<br>Capacity<br>mL | Min.<br>\$ Joint<br>Clearance | Part<br>Number      | Each<br>Price |
|----------------------|-------------------------|-------------------------------|---------------------|---------------|
| 35 x 74              | 1000                    | 45/50                         | <b>LG-9516T-100</b> | \$29.81       |
| 35 x 93              | 2000 to 3000            | 45/50                         | <b>LG-9516T-102</b> | 35.07         |
| 35 x 130             | 5000                    | 45/50                         | <b>LG-9516T-104</b> | 43.24         |
| 35 x 150             | 12000                   | 45/50                         | <b>LG-9516T-106</b> | 49.10         |
| 39 x 160             | 22000                   | 45/50                         | <b>LG-9516T-108</b> | 58.45         |
| 44 x 175             | 50000                   | 55/50                         | <b>LG-9516T-111</b> | 64.89         |
| 54 x 200             | 72000                   | 71/60                         | <b>LG-9516T-112</b> | 67.80         |



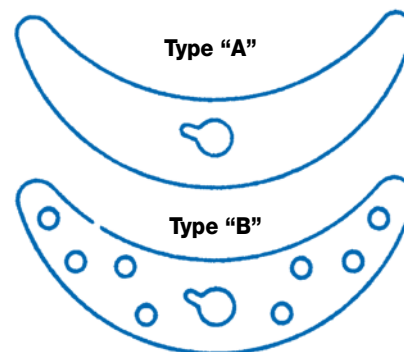
**LG-9516T**

### Stirrer Blade, PTFE Banana Shape

Made of 1/8" thick material. Shaped so that bottom of blade approaches more closely the actual inside contour of the round bottom flasks.

Offered in two styles... Type A has only the center opening for attachment to a stirrer shaft: Type B has, in addition, a number of perforations.

| Flask<br>Capacity<br>mL | Type | Min.<br>\$ Joint<br>Clearance | Min.<br>\$ Joint<br>Clearance | Part<br>Number      | Each<br>Price |
|-------------------------|------|-------------------------------|-------------------------------|---------------------|---------------|
| 500                     | A    | 34/45                         | 50/30                         | <b>LG-9511T-100</b> | \$18.42       |
| 1000                    | A    | 34/45                         | 50/30                         | <b>LG-9511T-102</b> | 23.00         |
| 2000                    | A    | 34/45                         | 50/30                         | <b>LG-9511T-104</b> | 24.68         |
| 3000                    | A    | 34/45                         | 50/30                         | <b>LG-9511T-106</b> | 29.49         |
| 5000                    | A    | 45/50                         | 65/40                         | <b>LG-9511T-108</b> | 35.64         |
| 12000                   | A    | 55/50                         | 75/50                         | <b>LG-9511T-110</b> | 36.84         |
| 22000                   | A    | 71/60                         | 102/75                        | <b>LG-9511T-112</b> | 48.76         |
| 500                     | B    | 34/45                         | 50/30                         | <b>LG-9511T-120</b> | 18.42         |
| 1000                    | B    | 34/45                         | 50/30                         | <b>LG-9511T-122</b> | 23.00         |
| 2000                    | B    | 34/45                         | 50/30                         | <b>LG-9511T-124</b> | 24.68         |
| 3000                    | B    | 34/45                         | 50/30                         | <b>LG-9511T-126</b> | 29.49         |
| 5000                    | B    | 45/50                         | 65/40                         | <b>LG-9511T-128</b> | 35.64         |
| 12000                   | B    | 55/50                         | 75/50                         | <b>LG-9511T-130</b> | 36.84         |
| 22000                   | B    | 71/60                         | 102/75                        | <b>LG-9511T-132</b> | 48.76         |

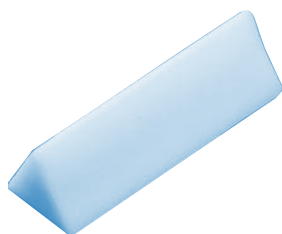


**LG-9511T**

**LG-9497T****Stirrer Shaft, PTFE Washers**

LG-9497T is a replacement washer for stirrers. Manufactured from PTFE, they keep stirrer blades affixed to button.

| Shaft Size<br>mm | Part<br>Number      | Each<br>Price |
|------------------|---------------------|---------------|
| 10               | <b>LG-9497T-100</b> | \$1.01        |
| 19               | <b>LG-9497T-102</b> | 1.58          |

**LG-9554T****Stirrer Bar, PTFE, Triangular**

Effective for dissolving solids and mixing sediments in flat surface glassware such as erlenmeyers or beakers because of scraper-like action.

| Length x<br>Diameter (mm) | Part<br>Number      | Each<br>Price |
|---------------------------|---------------------|---------------|
| 12 x 6                    | <b>LG-9554T-100</b> | \$2.50        |
| 20 x 8                    | <b>LG-9554T-102</b> | 3.10          |
| 25 x 8                    | <b>LG-9554T-104</b> | 3.30          |
| 25 x 14                   | <b>LG-9554T-106</b> | 3.80          |
| 35 x 9                    | <b>LG-9554T-108</b> | 4.00          |
| 40 x 14                   | <b>LG-9554T-110</b> | 5.20          |
| 50 x 12                   | <b>LG-9554T-112</b> | 5.50          |
| 55 x 14                   | <b>LG-9554T-114</b> | 7.10          |
| 80 x 18                   | <b>LG-9554T-116</b> | 12.60         |

**LG-9555T****Stirring Bar, Magnetic, Octagonal**

With polished permanent Alnico-V magnet sealed into PTFE with octagonal cross section. Seamless and leakproof. Tested electronically and by vacuum. The diameters listed below represent the circle enclosing the corners of the octagon.

| Length<br>Inches | Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| 1/2              | 1/8                | <b>LG-9555T-100</b> | \$2.85        |
| 1/2              | 5/16               | <b>LG-9555T-102</b> | 3.18          |
| 5/8              | 5/16               | <b>LG-9555T-104</b> | 3.18          |
| 7/8              | 5/16               | <b>LG-9555T-106</b> | 3.47          |
| 1                | 5/16               | <b>LG-9555T-108</b> | 3.52          |
| 1 1/8            | 5/16               | <b>LG-9555T-110</b> | 3.70          |
| 1 1/2            | 5/16               | <b>LG-9555T-112</b> | 3.94          |
| 1 5/8            | 5/16               | <b>LG-9555T-114</b> | 4.56          |
| 2                | 5/16               | <b>LG-9555T-116</b> | 4.84          |
| 2 1/2            | 5/16               | <b>LG-9555T-118</b> | 7.74          |
| 1/2              | 3/8                | <b>LG-9555T-120</b> | 3.70          |
| 5/8              | 3/8                | <b>LG-9555T-122</b> | 4.13          |
| 7/8              | 3/8                | <b>LG-9555T-124</b> | 4.28          |
| 1                | 3/8                | <b>LG-9555T-126</b> | 4.28          |
| 1 3/8            | 3/8                | <b>LG-9555T-128</b> | 5.08          |
| 1 1/2            | 3/8                | <b>LG-9555T-130</b> | 5.08          |
| 1 7/8            | 3/8                | <b>LG-9555T-132</b> | 6.41          |
| 2                | 3/8                | <b>LG-9555T-134</b> | 6.83          |
| 2 1/2            | 3/8                | <b>LG-9555T-136</b> | 7.97          |
| 1 1/2            | 1/2                | <b>LG-9555T-144</b> | 12.92         |
| 3                | 1/2                | <b>LG-9555T-146</b> | 14.15         |

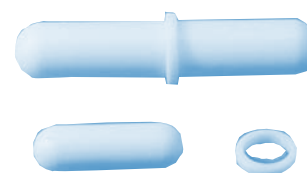


**Stirring Bar, Magnetic, Round**

With polished permanent Alnico-V magnet sealed into PTFE with round cross-section. With removable pivot ring on bars of 1" or greater length. Seamless and leakproof. Tested electrically and by vacuum.

| Length<br>Inches | Diameter<br>Inches | Part<br>Number | Each<br>Price |
|------------------|--------------------|----------------|---------------|
| 1/2*             | 5/16               | LG-9565T-102   | \$4.68        |
| 3/4*             | 5/16               | LG-9565T-104   | 4.72          |
| 1                | 5/16               | LG-9565T-106   | 4.89          |
| 1 1/4            | 5/16               | LG-9565T-108   | 6.25          |
| 1 1/2            | 5/16               | LG-9565T-110   | 6.47          |
| 1 3/4            | 5/16               | LG-9565T-112   | 7.98          |
| 2                | 5/16               | LG-9565T-114   | 8.37          |
| 1                | 3/8                | LG-9565T-116   | 6.41          |
| 1 1/4            | 3/8                | LG-9565T-118   | 6.85          |
| 1 1/2            | 3/8                | LG-9565T-120   | 8.15          |
| 1 5/8            | 3/8                | LG-9565T-122   | 9.13          |
| 1 3/4            | 3/8                | LG-9565T-124   | 8.74          |
| 2                | 3/8                | LG-9565T-126   | 9.57          |
| 2 1/8            | 3/8                | LG-9565T-128   | 10.54         |
| 3                | 1/2                | LG-9565T-134   | 18.74         |

\* No Pivot Ring

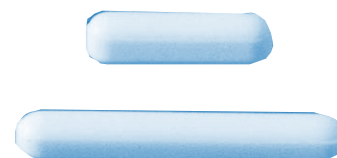


**LG-9565T**


**Stirring Bar, Magnetic, Round, Micro**

With polished permanent Alnico-V magnet sealed into PTFE with round cross-section. Seamless and leakproof. Tested electrically and by vacuum.

| Length<br>mm | Diameter<br>mm | Part<br>Number | Each<br>Price |
|--------------|----------------|----------------|---------------|
| 8            | 1.5            | LG-9566T-100   | \$3.90        |
| 15           | 1.5            | LG-9566T-102   | 4.20          |
| 5            | 2              | LG-9566T-104   | 3.90          |
| 7            | 2              | LG-9566T-106   | 3.90          |
| 3            | 3              | LG-9566T-108   | 4.31          |
| 6.35         | 3              | LG-9566T-110   | 4.31          |
| 10           | 3              | LG-9566T-112   | 4.31          |
| 12.70        | 3              | LG-9566T-114   | 4.31          |

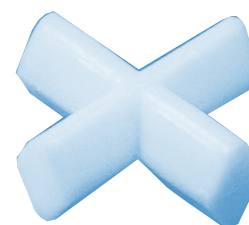


**LG-9566T**

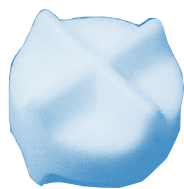
**Stirrer Bar, PTFE, Cross**

PTFE stirrer bar referred to as the "PLUS" or "CROSS" shape.

| Size<br>Inches | Part<br>Number | Each<br>Price |
|----------------|----------------|---------------|
| 3/8            | BP-2315-038    | \$7.50        |
| 3/4            | BP-2315-034    | 8.02          |
| 1              | BP-2315-100    | 8.60          |
| 1 1/4          | BP-2315-114    | 9.00          |
| 1 1/2          | BP-2315-112    | 9.50          |
| 2              | BP-2315-200    | 11.00         |



**BP-2315**

**LG-9568T****LG-9556T****LG-9557T****LG-9570T****Stirring Bar, Egg Shaped**

The unique shape provides its own pivot point without separate ring or abrupt change in contour. Designed especially for use in round bottom vessels, it is shaped to spin unrestricted by the vessel contour.

| Length<br>Long Axis<br>Inches | Width<br>Short Axis<br>Inches | Part<br>Number      | Each<br>Price |
|-------------------------------|-------------------------------|---------------------|---------------|
| $\frac{3}{4}$                 | $\frac{3}{8}$                 | <b>LG-9568T-100</b> | \$8.04        |
| 1                             | $\frac{1}{2}$                 | <b>LG-9568T-102</b> | 7.99          |
| $1\frac{1}{4}$                | $\frac{5}{8}$                 | <b>LG-9568T-104</b> | 10.07         |
| $1\frac{1}{2}$                | $\frac{5}{8}$                 | <b>LG-9568T-106</b> | 10.97         |
| $1\frac{5}{8}$                | $\frac{3}{4}$                 | <b>LG-9568T-108</b> | 13.69         |
| 2                             | $\frac{3}{4}$                 | <b>LG-9568T-110</b> | 16.25         |
| $2\frac{1}{2}$                | $\frac{3}{4}$                 | <b>LG-9568T-112</b> | 20.78         |
| 3                             | $\frac{3}{4}$                 | <b>LG-9568T-114</b> | 23.71         |

**Stirrer, Magnetic, Spinfin**

Designed specifically for round bottom test tubes and flasks. With permanent Alnico-v magnet sealed into PTFE with cylindrical base having four fins at top. All sizes are  $\frac{1}{2}$ " high. may be used with any magnetic stirrer, and will maintain position without wobble.

| Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| $\frac{1}{4}$      | <b>LG-9556T-100</b> | \$12.98       |
| $\frac{3}{8}$      | <b>LG-9556T-102</b> | 13.08         |
| $\frac{1}{2}$      | <b>LG-9556T-104</b> | 13.72         |
| $\frac{5}{8}$      | <b>LG-9556T-106</b> | 14.73         |
| $\frac{3}{4}$      | <b>LG-9556T-108</b> | 18.25         |
| $\frac{7}{8}$      | <b>LG-9556T-110</b> | 16.82         |

**Stirrer, Double, Magnetic, Spinfin**

Similar to *LG-9556T* except that there are fins at both top and bottom and all sizes are  $\frac{3}{4}$ " high.

| Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| $\frac{1}{2}$      | <b>LG-9557T-100</b> | \$11.68       |
| $\frac{3}{4}$      | <b>LG-9557T-102</b> | 13.91         |
| 1                  | <b>LG-9557T-104</b> | 14.72         |

**Stirrer Bar Positioner/Retriever**

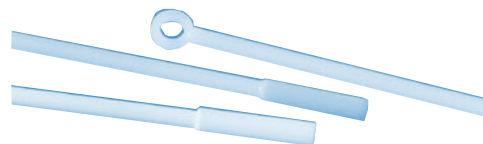
Used to either position your stir bar in place without splashing or to retrieve your stir bar without having to touch or pour out your liquid. Simple to use.

| Diameter<br>x Length  | Part<br>Number      | Each<br>Price |
|-----------------------|---------------------|---------------|
| $\frac{1}{4}$ " x 12" | <b>LG-9570T-100</b> | \$34.00       |

### Stirring Bar Retriever

With 3/8" Alnico-V magnet sealed into a PTFE case. Supplied with an attached rod of the same material and hanging loop. The PTFE rod is flexible.

| Length of Rod Inches | Part Material | Part Number         | Each Price |
|----------------------|---------------|---------------------|------------|
| 12                   | Polypropylene | <b>LG-9569T-100</b> | \$10.29    |
| 18                   | Polypropylene | <b>LG-9569T-110</b> | 11.87      |
| 13                   | PTFE          | <b>LG-9569T-200</b> | 22.95      |



**LG-9569T**

### Stirrer, Variable Speed, Explosion Proof, Air Driven, Arrow

Shaft and propeller are made of stainless steel. Air motor develops 1/3 horsepower at 80 pound pressure. Air pressure of 35 to 1000 PSI is necessary to develop speeds from 200 rpm to 10,000 rpm. Desired speed is attained by adjusting the air supply valve. Ideal for stirring organic solvents, paints, etc. where danger of explosion exists. Coupler and shaft are 12 inches overall. The propeller is 2.5 inches diameter and furnished with a hose 4 feet long. See *LG-9589A* for adapter.

Both stirrers have gear reduction, thus lowering speed fluctuations due to changes in air pressure. Speeds range from 50 to 1200 rpm, depending on opening in air supply valve.

Another feature is presence of a muffler for quiet operation. Gear ratio is 7:1.

| Speed RPM     | Part Number        | Each Price |
|---------------|--------------------|------------|
| 200 to 10,000 | <b>LG-9572-100</b> | \$297.26   |
| 50 to 1,200   | <b>LG-9574-100</b> | 440.40     |



**LG-9574**

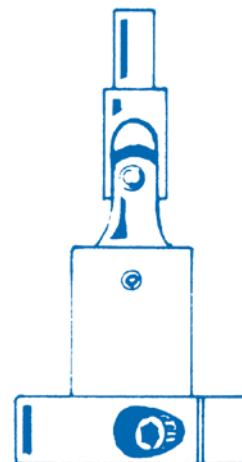
**LG-9572**

### Stirrer Shaft Adapter with Universal Joint

For connecting a 6, 8, 10 or 19mm diameter stirrer shaft to the chuck of the stirrer motor. The universal joint compensates for vibration and misalignment of the stirrer shaft, thereby greatly reducing the danger of breaking.

Consists, at the stirrer shaft end, of a split aluminum collar surrounding a nylon bushing. The stirrer shaft is inserted into the bushing and secured by tightening the set screw in the aluminum collar. This collar and bushing assembly is connected to a universal joint. This stud then connects the whole assembly to the chuck of a stirrer motor.

| Stirrer Shaft Size | Fits Chuck Size inches | Part Number         | Each Price |
|--------------------|------------------------|---------------------|------------|
| 6mm (1/4")         | 1/4                    | <b>LG-9589A-096</b> | \$79.34    |
| 10mm               | 1/4                    | <b>LG-9589A-100</b> | 84.28      |
| 19mm               | 1/2                    | <b>LG-9589A-102</b> | 85.50      |



**LG-9589A**


**LG-9575**
**Stirrer, Variable Speed, Talboys**

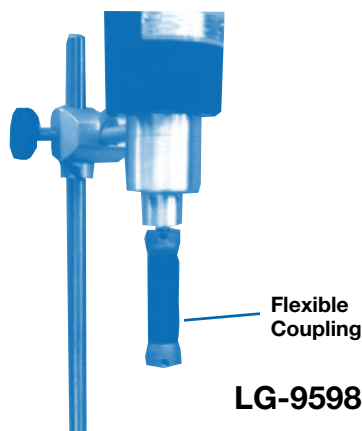
Equipped with a precision 1/4" collet type chuck. Motor has an attached 10" support rod for attachment to frames or ring stands. Develops 1/75 hp with 120 volt, AC, motor. Dial controls speed from 500 to 7500 rpm. Furnished with a 3-wire cord and plug.

|  | Part<br>Number     | Each<br>Price |
|--|--------------------|---------------|
|  | <b>LG-9575-100</b> | \$291.66      |


**LG-9585**
**Stirrer, Variable Speed, Full Torque, Talboys**

This full torque stirrer has three shafts. The direct drive shaft delivers 0.75 inch pounds of torque at speeds of 500 to 7500 rpm. The second shaft has a 10:1 gear ratio and delivers 4.7 inch pounds of torque at 50-750 rpm. The third shaft has a 60:1 gear ratio and delivers 15.0 inch pounds of torque at 10-125 rpm. Jacobs chuck handles rods up to 3/8" diameter and can be easily transferred to the shaft of choice. There is little change of speed with increasing load.

|  | Part<br>Number     | Each<br>Price |
|--|--------------------|---------------|
|  | <b>LG-9585-100</b> | \$741.93      |


**LG-9598**
**Stirrer, Flexible Coupling, Arrow**

For use with glass stirring shafts. Four inch length allows for compensation of misalignment. Corrosion resistant. Rubber sleeve body provides quiet, vibration free running.

| Stirring Shaft<br>Size | Motor Shaft<br>Size: Inches | Part<br>Number     | Each<br>Price |
|------------------------|-----------------------------|--------------------|---------------|
| 10mm                   | 1/4                         | <b>LG-9598-100</b> | \$37.42       |
| 10mm                   | 5/16                        | <b>LG-9598-110</b> | 37.42         |
| 10mm                   | 3/8                         | <b>LG-9598-120</b> | 37.42         |
| 10mm                   | 1/2                         | <b>LG-9598-130</b> | 37.42         |
| 19mm                   | 3/8                         | <b>LG-9598-102</b> | 63.14         |
| 19mm                   | 1/2                         | <b>LG-9598-112</b> | 63.14         |
| 19mm                   | 5/8                         | <b>LG-9598-122</b> | 63.14         |
| 19mm                   | 3/4                         | <b>LG-9598-132</b> | 63.14         |


**LG-9588**
**Stirrer Support Stand**

Complete unit consists of stainless steel base and 5/8" x 28" stainless steel support rod firmly fastened by a lock nut. Base opening accommodates apparatus up to 18" in diameter. There are two additional holes threaded to accept more rods.

| Item         | Part<br>Number     | Each<br>Price |
|--------------|--------------------|---------------|
| Base and Rod | <b>LG-9588-100</b> | \$209.79      |

**Stirrer, Corning®, 4 x 5 Inch Top PC-210 Stirrer**

These Corning® stirrers have a durable glass-ceramic 4 x 5 inch Pyroceram® top and offer superior performance and reliability in a low profile, space-saving design. Exclusive closed-loop stirring control monitors and regulates the stirring speed for aqueous, viscous, or semi-solid solutions. A stronger, larger magnet improves stir bar coupling and stirring capability. They operate on 120V/60Hz and are UL and CUL approved to meet needs in North America and other locations with similar requirements.

| Top Size (cm) | Stir Range    | Power     | Part Number       | Each Price |
|---------------|---------------|-----------|-------------------|------------|
| 10.2 x 12.7   | 60 - 1108 rpm | 120V/60Hz | <b>C-6795-210</b> | \$260.52   |


**C-6795-210**
**Stirrer, Scholar™, 5 x 5 Inch PC-171 Magnetic Stirrer**

The 5 x 5 inch plastic top Scholar™ PC-171 Stirrer is compact and provides vigorous stirring with an alternating current motor for longer life and rugged construction. It operates on 120V/60Hz and is UL and CUL approved to meet needs in North America and other locations with similar requirements. Space saving design and light weight.

| Top Size (cm) | Stir Range     | Power     | Part Number       | Each Price |
|---------------|----------------|-----------|-------------------|------------|
| 12.7 x 12.7   | 100 - 1600 rpm | 120V/60Hz | <b>C-6795-171</b> | \$171.05   |


**C-6795-171**
**Stirrer, Corning®, 5 x 7 Inch Top PC-410D Stirrer with Digital Display**

The Corning® PC-410D stirrer has a 5" x 7" (12.7 x 17.8cm) Pyroceram® top and digital stirring speed display. It is designed to operate on 120V/60Hz with standard US 3-prong plug for use in North America and other areas with similar electrical requirements.

| Top Size (cm) | Stir Range    | Power     | Part Number        | Each Price |
|---------------|---------------|-----------|--------------------|------------|
| 12.7 x 17.8   | 60 - 1150 rpm | 120V/60Hz | <b>C-6795-410D</b> | \$262.50   |


**C-6795-410D**
**Stirrer, Corning®, 10 x 10 Inch Top PC-610D Stirrer with Digital Display**

The Corning® PC-610D stirrer has a 10" x 10" (25.4 x 25.4cm) Pyroceram® top and digital stirring speed display. It is designed to operate on 120V/60Hz with standard US 3-prong plug for use in North America and other areas with similar electrical requirements.

| Top Size (cm) | Stir Range    | Power     | Part Number        | Each Price |
|---------------|---------------|-----------|--------------------|------------|
| 25.4 x 25.4   | 60 - 1150 rpm | 120V/60Hz | <b>C-6795-610D</b> | \$441.00   |


**C-6795-610D**

**C-6795-420D****Stirrer, Corning®, 5 x 7 Inch Top PC-420D Stirrer with Digital Displays**

The Corning® PC-420D stirrer has a 5" x 7" (12.7 x 17.8cm) Pyroceram® top and digital stirring speed display. It is designed to operate on 120V/60Hz with standard US 3-prong plug for use in North America and other areas with similar electrical requirements.

| Top Size Inches | Stir Range    | Power     | Part Number        | Each Price |
|-----------------|---------------|-----------|--------------------|------------|
| 5 x 7           | 60 - 1150 rpm | 120V/60Hz | <b>C-6795-420D</b> | \$414.75   |

**C-6795-620D****Stirrer, Corning®, 10 x 10 Inch Top PC-620D Stirring Hot Plate with Digital Displays**

The Corning® PC-620D stirring hot plate has a 10" x 10" (25.4 x 25.4cm) Pyroceram® top and digital stirring speed display. It is designed to operate on 120V/60Hz with standard US 3-prong plug for use in North America and other areas with similar electrical requirements.

| Top Size Inches | Stir Range    | Power     | Part Number        | Each Price |
|-----------------|---------------|-----------|--------------------|------------|
| 10 x 10         | 60 - 1150 rpm | 120V/60Hz | <b>C-6795-620D</b> | \$546.00   |

**LG-9023****Stirrer, Basic Mini Hotplate, Stirrer, Hotplate/Stirrer**

This rugged compact unit heats up to 1000mL of liquid. Durable 4.5" (11.4cm) diameter cast aluminum top plate provides an even heating surface. B-metallic thermostat offers reliable temperature control. Powerful heater reaches maximum temperature in only minutes. Electronic speed control adjusts stirring from 100 to 1200 rpm. Powerful motor and magnet deliver reliable and consistent stirring. Compact design saves bench space.

| Description           | Part Number        | Each Price |
|-----------------------|--------------------|------------|
| Mini Hotplate         | <b>LG-9023-110</b> | \$133.00   |
| Mini Stirrer          | <b>LG-9023-100</b> | 165.00     |
| Mini Hotplate/Stirrer | <b>LG-9023-120</b> | 269.00     |

**LG-9022****Stirrer, Professional Hot Plate/Stirrers, Top 7 x 7 Inches**

This professional hotplate/stirrer is designed for applications that require exceptional accuracy, stability and repeatability. Spill-resistant housing channels fluids away from internal components. Top plate is 7" x 7", maximum capacity is 2500mL, speed is 60 to 1600 rpm. It has a digital display for speed, temperature and time. External temperature probe, safety system protects operator and includes ultra flex support kit.

| Top Plate Material | Temperature Range | Part Number        | Each Price |
|--------------------|-------------------|--------------------|------------|
| Ceramic            | 5° - 500°C        | <b>LG-9022-100</b> | \$826.00   |
| Aluminum           | 5° - 400°C        | <b>LG-9022-110</b> | 975.00     |



**Stirrer, Advanced Hot Plate/Stirrers, Top 7 x 7 Inches**

Advanced hotplate/stirrers deliver accurate and repeatable result. Low profile, space saving design takes up less space. Spill-resistant housing channels fluids away from internal components. Front panel features easy-to-use controls which allow users to dial-in adjustments. Top plate is 7" x 7", speed is 60 to 1600 rpm. It has a LCD display, Overshoot protection and memory recalls last set temperature.

| Top Plate Material | Temperature Range | Part Number        | Each Price |
|--------------------|-------------------|--------------------|------------|
| Ceramic            | 5° - 500°C        | <b>LG-9021-100</b> | \$411.00   |
| Aluminum           | 5° - 400°C        | <b>LG-9021-110</b> | 488.00     |


**LG-9021**
**Stirrer, IKA Digital**

IKA RW20 Digital stirrer is the latest in digital stirring technology. With constant power drive, push-through agitator shaft and two speed ranges for universal use from 60-2000rpm.

| Description                   | Part Number        | Each Price |
|-------------------------------|--------------------|------------|
| Digital Stirrer IKA, Complete | <b>LG-9570-100</b> | \$614.00   |
| <u>Replacement Parts</u>      |                    |            |
| Plate Stand                   | <b>LG-9570-102</b> | 286.00     |
| Boss Head Clamp               | <b>LG-9570-104</b> | 72.00      |
| Propeller Stirrer             | <b>LG-9570-106</b> | 99.00      |


**LG-9570**
**Stirrer, Hot Plate, IKA, RCT**

IKA RCT Basic Safety Control hotplate stirrer.

| Description                    | Part Number        | Each Price |
|--------------------------------|--------------------|------------|
| IKA RCT Basic Hotplate Stirrer | <b>LG-9587-100</b> | \$717.00   |


**LG-9587-100**
**Stirrer, Thermometer, IKA**

Thermometer controller for use with all magnetic stirrers with contact bushing according to DIN 12878, class 2.

| Description                    | Part Number        | Each Price |
|--------------------------------|--------------------|------------|
| IKA ETS-D5 Contact Thermometer | <b>LG-9587-500</b> | \$386.00   |

Use with LG-9570 above


**LG-9587-500**





**LG-9600**  
**LG-9601**

### Stopcock, Straight Bore, Glass Plug

Stopcock plug and barrel are ground to interchangeable specifications. Plugs are solid and have a 1:10 taper.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Supplied  | Part Number        | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|-----------|--------------------|------------|
| 1                             | 12                            | 30                  | 8                            | Complete  | <b>LG-9600-100</b> | \$30.89    |
| 2                             | 12                            | 30                  | 8                            | Complete  | <b>LG-9600-102</b> | 28.78      |
| 2*                            | 12                            | 38                  | 8                            | Complete  | <b>LG-9600-104</b> | 38.30      |
| 3                             | 17                            | 40                  | 10                           | Complete  | <b>LG-9600-106</b> | 36.19      |
| 4                             | 17                            | 40                  | 10                           | Complete  | <b>LG-9600-108</b> | 35.56      |
| 5                             | 20                            | 44                  | 12                           | Complete  | <b>LG-9600-110</b> | 40.49      |
| 6                             | 20                            | 44                  | 12                           | Complete  | <b>LG-9600-112</b> | 41.84      |
| 8                             | 25                            | 52                  | 16                           | Complete  | <b>LG-9600-114</b> | 66.61      |
| 10                            | 35                            | 56                  | 16                           | Complete  | <b>LG-9600-116</b> | 88.26      |
| 15**                          | 35                            | 56                  | 25                           | Complete  | <b>LG-9600-118</b> | 168.02     |
| 1                             | 12                            | 30                  |                              | Plug Only | <b>LG-9601-104</b> | 16.84      |
| 2                             | 12                            | 30                  |                              | Plug Only | <b>LG-9601-106</b> | 15.92      |
| 2***                          | 12                            | 38                  |                              | Plug Only | <b>LG-9601-108</b> | 16.25      |
| 3                             | 17                            | 40                  |                              | Plug Only | <b>LG-9601-110</b> | 16.84      |
| 4                             | 17                            | 40                  |                              | Plug Only | <b>LG-9601-112</b> | 16.52      |
| 5                             | 20                            | 44                  |                              | Plug Only | <b>LG-9601-114</b> | 22.01      |
| 6                             | 20                            | 44                  |                              | Plug Only | <b>LG-9601-116</b> | 22.01      |
| 8                             | 25                            | 52                  |                              | Plug Only | <b>LG-9601-118</b> | 45.22      |
| 10                            | 35                            | 56                  |                              | Plug Only | <b>LG-9601-120</b> | 56.04      |

\* The barrel of this stopcock is longer on each side of the bore than is required by specifications, but all quality requirements are met. The extra length is preferred by some users.

\*\* Specifications do not include this size however the taper is 1 to 10 and all quality requirements are met.

\*\*\*The specifications do not include these sizes.

### Stopcock, Straight Bore, PTFE Plug

Plugs are PTFE and have a 1:5 taper.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Supplied  | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|-----------|---------------------|------------|
| 1                             | 11                            | 25                  | 6                            | Complete  | <b>LG-9605T-100</b> | \$34.39    |
| 1 1/2                         | 11                            | 25                  | 8                            | Complete  | <b>LG-9605T-102</b> | 33.80      |
| 2                             | 11                            | 25                  | 8                            | Complete  | <b>LG-9605T-104</b> | 30.70      |
| 3                             | 15.2                          | 30                  | 10                           | Complete  | <b>LG-9605T-106</b> | 45.09      |
| 4                             | 15.2                          | 30                  | 10                           | Complete  | <b>LG-9605T-108</b> | 46.72      |
| 5                             | 16                            | 35                  | 12                           | Complete  | <b>LG-9605T-110</b> | 55.98      |
| 6                             | 16                            | 35                  | 12                           | Complete  | <b>LG-9605T-112</b> | 56.82      |
| 8                             | 24                            | 40                  | 16                           | Complete  | <b>LG-9605T-114</b> | 108.71     |
| 10*                           | 24                            | 40                  | 16                           | Complete  | <b>LG-9605T-116</b> | 117.72     |
| 1                             | 11                            | 25                  |                              | Plug Only | <b>LG-9607T-100</b> | 12.24      |
| 1 1/2                         | 11                            | 25                  |                              | Plug Only | <b>LG-9607T-102</b> | 19.67      |
| 2                             | 11                            | 25                  |                              | Plug Only | <b>LG-9607T-104</b> | 11.63      |
| 3                             | 15.2                          | 30                  |                              | Plug Only | <b>LG-9607T-106</b> | 16.01      |
| 4                             | 15.2                          | 30                  |                              | Plug Only | <b>LG-9607T-108</b> | 13.36      |
| 5                             | 16                            | 35                  |                              | Plug Only | <b>LG-9607T-110</b> | 18.97      |
| 6                             | 16                            | 35                  |                              | Plug Only | <b>LG-9607T-112</b> | 19.58      |
| 8                             | 24                            | 40                  |                              | Plug Only | <b>LG-9607T-114</b> | 70.79      |
| 10*                           | 24                            | 40                  |                              | Plug Only | <b>LG-9607T-116</b> | 72.25      |

\*Specifications do not include this large bore stopcock.



**LG-9605T**



Plug Only

**LG-9607T**

### Stopcock, PTFE Plug w/Metering Valve

*LG-9606T* is a straight 1:5 taper PTFE stopcock with a threaded needle valve. The needle valve extends through the bore of the plug and can be used as a valve within the stopcock. Can be used to control flow while the stopcock can be used for on-off control.

*LG-9609* is a replacement washer and O-Ring set for *LG-9606T* and includes one PTFE washer and the two required O-Rings.

| Stopcock Size<br>Bore of Plug<br>mm | Diameter of Plug at Center<br>mm | Length of Barrel<br>mm | Outside Diameter of Stems<br>mm | Supplied                        | For Bore Size | Part Number         | Each Price |
|-------------------------------------|----------------------------------|------------------------|---------------------------------|---------------------------------|---------------|---------------------|------------|
| 2                                   | 11                               | 25                     | 8                               | Complete                        |               | <b>LG-9606T-100</b> | \$68.53    |
| 4                                   | 15.2                             | 30                     | 10                              | Complete                        |               | <b>LG-9606T-102</b> | 84.65      |
| 2                                   | 11                               | 25                     |                                 | Plug Only                       |               | <b>LG-9608T-102</b> | 46.10      |
| 4                                   | 15.2                             | 30                     |                                 | Plug Only                       |               | <b>LG-9608T-104</b> | 48.57      |
|                                     |                                  |                        |                                 | Replacement Washer & O-Ring Set | 2             | <b>LG-9609-100</b>  | 9.75       |
|                                     |                                  |                        |                                 | Replacement Washer & O-Ring Set | 4             | <b>LG-9609-102</b>  | 11.10      |

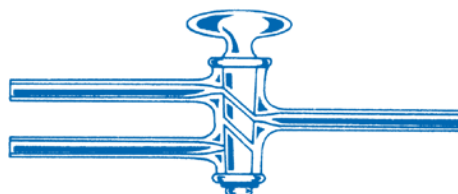


**LG-9606T  
LG-9608T  
LG-9609**

### Stopcock, Double Oblique Bore (Three-Way)

With solid glass plug having two parallel oblique bores.

| Stopcock Size<br>Bore of Plug<br>mm | Diameter of Plug at Center<br>mm | Length of Barrel<br>mm | Outside Diameter of Stems<br>mm | Part Number        | Each Price |
|-------------------------------------|----------------------------------|------------------------|---------------------------------|--------------------|------------|
| 2                                   | 14.5                             | 50                     | 8                               | <b>LG-9660-102</b> | \$53.02    |
| 3                                   | 16.2                             | 56                     | 9                               | <b>LG-9660-104</b> | 64.54      |
| 4                                   | 16.2                             | 56                     | 10                              | <b>LG-9660-106</b> | 68.05      |

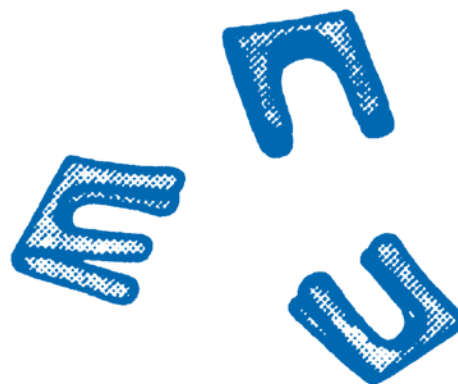


**LG-9660**

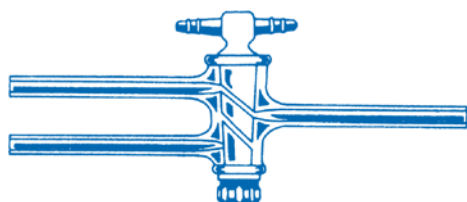
### Stopcock, Clip, Retainer

Used to keep plug in place with a constant sealing pressure.

| Clip Size | Fits Bore mm | Part Number        | Each Price |
|-----------|--------------|--------------------|------------|
| 1         | 2            | <b>LG-9604-100</b> | \$1.31     |
| 4         | 4            | <b>LG-9604-104</b> | 1.29       |



**LG-9604**


**LG-9665T**
**Stopcock, Double Oblique Bore (Three-Way), with PTFE Plug**

Similar to *LG-9660*, except designed for and supplied with a PTFE plug.

| Stopcock<br>Size<br>Bore<br>of Plug<br>mm | Diameter<br>of<br>Plug at<br>Center<br>mm | Length<br>of<br>Barrel<br>mm | Outside<br>Diameter<br>of<br>Stems<br>mm | Part<br>Number      | Each<br>Price |
|-------------------------------------------|-------------------------------------------|------------------------------|------------------------------------------|---------------------|---------------|
| 2                                         | 12.9                                      | 44                           | 8                                        | <b>LG-9665T-102</b> | \$65.18       |
| 3                                         | 14.4                                      | 44                           | 10                                       | <b>LG-9665T-104</b> | 76.23         |
| 4                                         | 14.4                                      | 44                           | 10                                       | <b>LG-9665T-106</b> | 76.23         |


**LG-9680**
**Stopcock, T-Bore, T-Shaped**

With three stems sealed 90° apart to form a T. Supplied with solid glass plug having a T-shaped bore so that any two or all three stems can be connected at one time.

| Stopcock<br>Size<br>Bore<br>of Plug<br>mm | Diameter<br>of<br>Plug at<br>Center<br>mm | Length<br>of<br>Barrel<br>mm | Outside<br>Diameter<br>of<br>Stems<br>mm | Part<br>Number     | Each<br>Price |
|-------------------------------------------|-------------------------------------------|------------------------------|------------------------------------------|--------------------|---------------|
| 1                                         | 17                                        | 40                           | 8                                        | <b>LG-9680-100</b> | \$44.37       |
| 2                                         | 17                                        | 40                           | 8                                        | <b>LG-9680-102</b> | 44.37         |
| 3                                         | 20                                        | 44                           | 10                                       | <b>LG-9680-104</b> | 53.28         |
| 4                                         | 20                                        | 44                           | 10                                       | <b>LG-9680-106</b> | 53.28         |
| 6*                                        | 25                                        | 52                           | 12                                       | <b>LG-9680-110</b> | 69.50         |
| 8*                                        | 35                                        | 56                           | 16                                       | <b>LG-9680-112</b> | 133.96        |
| 10*                                       | 35                                        | 56                           | 16                                       | <b>LG-9680-114</b> | 141.69        |

\*The specifications do not include these large-bore stopcocks.


**LG-9685T**
**Stopcock, T-Bore, T-Shaped, with PTFE Plug**

Similar to *LG-9680*, except designed for and supplied with a PTFE plug.

| Stopcock<br>Size<br>Bore<br>of Plug<br>mm | Diameter<br>of<br>Plug at<br>Center<br>mm | Length<br>of<br>Barrel<br>mm | Outside<br>Diameter<br>of<br>Stems<br>mm | Part<br>Number      | Each<br>Price |
|-------------------------------------------|-------------------------------------------|------------------------------|------------------------------------------|---------------------|---------------|
| 2                                         | 15.2                                      | 30                           | 8                                        | <b>LG-9685T-100</b> | \$67.92       |
| 4                                         | 16                                        | 35                           | 10                                       | <b>LG-9685T-102</b> | 81.76         |
| 6                                         | 24                                        | 40                           | 16                                       | <b>LG-9685T-104</b> | 114.95        |

### Stopcock, Double Oblique Bore (Three-Way) Pressure/Vacuum

Similar to *LG-10184* except three-way double oblique solid glass plug and PTFE locking washer.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|---------------------|------------|
| 2                             | 14.5                          | 50                  | 8                            | <b>LG-10186-100</b> | \$66.13    |
| 4                             | 16.2                          | 56                  | 10                           | <b>LG-10186-102</b> | 75.75      |

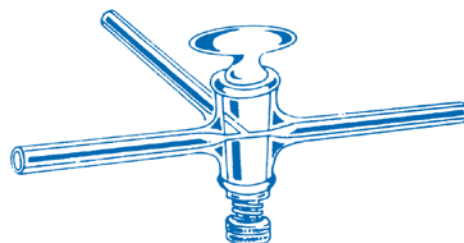


**LG-10186**

### Stopcock, T-Bore, T-Shaped, Pressure

With three stems sealed 90° apart to form a T. With a solid glass plug having a T-shaped bore so that any two or all three stems can be connected at one time.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|---------------------|------------|
| 2                             | 17                            | 40                  | 8                            | <b>LG-10210-100</b> | \$77.92    |
| 4                             | 20                            | 44                  | 10                           | <b>LG-10210-102</b> | 110.21     |

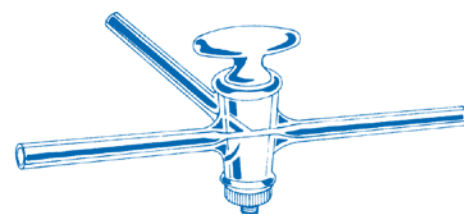


**LG-10210**

### Stopcock, T-Bore, T-Shaped, Threaded Plug, Pressure/Vacuum

Similar to *LG-10210*, except with a threaded glass plug which consists of a PTFE washer, Viton O-Ring, and a PTFE nut. Can be used for either pressure or vacuum applications.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|---------------------|------------|
| 2                             | 17                            | 40                  | 8                            | <b>LG-10214-100</b> | \$90.16    |
| 4                             | 20                            | 44                  | 10                           | <b>LG-10214-102</b> | 100.44     |
| 6                             | 25                            | 52                  | 12                           | <b>LG-10214-104</b> | 130.57     |



**LG-10214**

### Stopcock, Straight Bore, High Vacuum

Solid glass plug with a single straight bore.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number        | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|--------------------|------------|
| 2                             | 12                            | 38                  | 8                            | <b>LG-9940-100</b> | \$37.26    |
| 4                             | 17                            | 44                  | 10                           | <b>LG-9940-106</b> | 45.22      |
| 6                             | 20                            | 44                  | 12                           | <b>LG-9940-108</b> | 57.60      |



**LG-9940**


**LG-9961**
**Stopcock, Single Oblique Bore, High Vacuum**

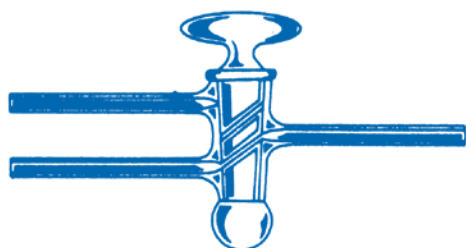
The body of the glass plug is hollow except for a single oblique duct.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number        | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|--------------------|------------|
| 2                             | 12.6                          | 40                  | 8                            | <b>LG-9961-200</b> | \$81.15    |
| 4                             | 17.35                         | 50                  | 10                           | <b>LG-9961-204</b> | 74.31      |


**LG-10090**
**Stopcock, Oblique Bore, High Vacuum**

This stopcock has a chamber at the bottom of the barrel. However, the chamber is not in the line of flow and must be evacuated in a separate operation.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|---------------------|------------|
| 2                             | 15                            | 44                  | 8                            | <b>LG-10090-100</b> | \$74.93    |
| 4                             | 17.35                         | 50                  | 10                           | <b>LG-10090-102</b> | 91.64      |
| 6                             | 20                            | 52                  | 12                           | <b>LG-10090-104</b> | 126.87     |
| 8                             | 25                            | 65                  | 16                           | <b>LG-10090-106</b> | 157.49     |
| 10                            | 30                            | 75                  | 16                           | <b>LG-10090-108</b> | 178.04     |
| 15                            | 40                            | 100                 | 26                           | <b>LG-10090-110</b> | 335.91     |


**LG-10110**
**Stopcock, Double Oblique Bore, High Vacuum**

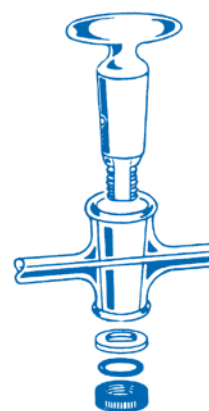
Two stems on one side of barrel and a third stem on the opposite side, and with two oblique bores in the hollow glass plug.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number         | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|---------------------|------------|
| 2                             | 14.5                          | 50                  | 8                            | <b>LG-10110-100</b> | \$104.64   |
| 4                             | 16.2                          | 56                  | 10                           | <b>LG-10110-102</b> | 129.28     |
| 6                             | 25                            | 65                  | 12                           | <b>LG-10110-104</b> | 265.09     |

## Stopcock, Straight Bore, Threaded Plug, Pressure/ Vacuum

The assembly consists of a glass barrel, a solid glass plug threaded at the small end, a PTFE washer, a Viton® O-Ring and a PTFE nut. The washer is placed on the plug first, then the O-Ring, then the nut. This assembly allows a uniform seating tension to be maintained on the glass plug when the PTFE nut is tightened. Can be used for either pressure or vacuum applications.

| Stopcock Size Bore of Plug mm | Diameter of Plug at Center mm | Length of Barrel mm | Outside Diameter of Stems mm | Part Number  | Each Price |
|-------------------------------|-------------------------------|---------------------|------------------------------|--------------|------------|
| 2                             | 12                            | 30                  | 8                            | LG-10184-100 | \$45.68    |
| 4                             | 17                            | 40                  | 10                           | LG-10184-102 | 59.76      |
| 6                             | 20                            | 44                  | 12                           | LG-10184-104 | 79.88      |
| 8                             | 25                            | 52                  | 16                           | LG-10184-106 | 87.88      |
| 10                            | 35                            | 56                  | 16                           | LG-10184-108 | 111.85     |



LG-10184

## Stopcock, Rotaflo®, Straight

An all-purpose stopcock that can be used for routine or high vacuum applications. Only borosilicate glass and PTFE contact the sample. Will handle liquids or gases of system temperatures of -20 to 200°C.

| Bore Range mm | Outside Diameter of Stems mm | Part Number  | Each Price |
|---------------|------------------------------|--------------|------------|
| 0-3           | 8                            | LG-10240-100 | \$77.17    |
| 0-6           | 10                           | LG-10240-102 | 102.10     |
| 0-10          | 13                           | LG-10240-104 | 117.54     |

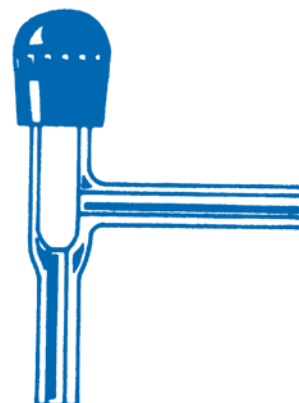


LG-10240

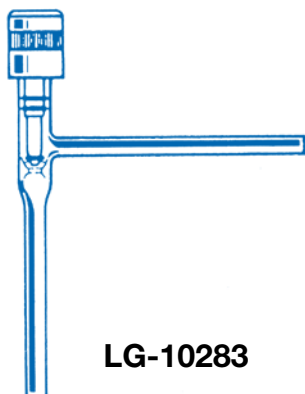
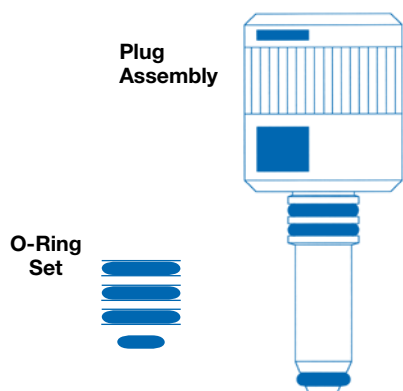
## Stopcock, Rotaflo®, Right Angle

Contact surfaces are PTFE and borosilicate glass. Designed for routine and high vacuum use. Stems are in the same plane but positioned at right angles to each other. Can be used at temperatures from -20 to 200°C.

| Bore Range mm | Outside Diameter of Stems mm | Part Number  | Each Price |
|---------------|------------------------------|--------------|------------|
| 0-3           | 8                            | LG-10246-100 | \$72.51    |
| 0-6           | 10                           | LG-10246-102 | 106.34     |
| 0-10          | 13                           | LG-10246-104 | 121.21     |



LG-10246


**LG-10282**

**LG-10283**

**LG-10284**

**LG-10285**
**Stopcock, Straight Sidearms, High Vacuum PTFE Plug**

Precision made having durable threads and a non-rotating primary seal. PTFE plug has a Viton O-Ring on a tapered seat. Valve can be used as a bleed up to 1/2 turn and fully opened with an additional 1 1/2 turns. Use for high vacuum procedures to 5 x 10mm Hg. See *LG-10284* for replacement plugs and O-Rings.

| Bore Range<br>mm | Outside<br>Diameter<br>of Stems<br>mm | Part<br>Number      | Each<br>Price |
|------------------|---------------------------------------|---------------------|---------------|
| 0-4              | 9                                     | <b>LG-10282-100</b> | \$55.30       |
| 0-8              | 13                                    | <b>LG-10282-102</b> | 87.78         |
| 0-12             | 16                                    | <b>LG-10282-104</b> | 101.01        |

**Stopcock, Right Angle, High Vacuum, PTFE Plug**

Similar to *LG-10282* except arms aligned at right angles. See *LG-10284* for replacement plugs and O-Rings.

| Bore Range<br>mm | Outside<br>Diameter<br>of Stems<br>mm | Part<br>Number      | Each<br>Price |
|------------------|---------------------------------------|---------------------|---------------|
| 0-4              | 9                                     | <b>LG-10283-100</b> | \$52.90       |
| 0-8              | 13                                    | <b>LG-10283-102</b> | 82.97         |
| 0-12             | 16                                    | <b>LG-10283-104</b> | 86.57         |

**Stopcock, Replacement Parts for LG-10282 & LG-10283**

| Bore Range<br>mm | Supplied          | Part<br>Number      | Each<br>Price |
|------------------|-------------------|---------------------|---------------|
| 0-4              | Viton® O-Ring Set | <b>LG-10284-100</b> | \$3.18        |
| 0-8              | Viton® O-Ring Set | <b>LG-10284-102</b> | 3.28          |
| 0-12             | Viton® O-Ring Set | <b>LG-10284-104</b> | 3.73          |
| 0-4              | Plug Assembly Set | <b>LG-10284-110</b> | 13.36         |
| 0-8              | Plug Assembly Set | <b>LG-10284-112</b> | 19.64         |
| 0-12             | Plug Assembly Set | <b>LG-10284-114</b> | 25.05         |

**Stopcock, Straight Sidearm, High Vacuum, PTFE Plug**

Precision made utilizing only PTFE and borosilicate glass as the contact surface. Suitable for analytical sample preparation and suggested where lubricants/grease should be avoided. For replacement plugs and O-Rings see *LG-10290*.

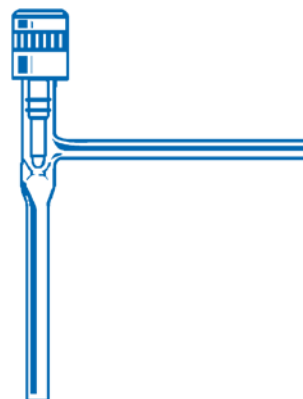
| Bore Range<br>mm | Outside<br>of Stems<br>Diameter<br>mm | Part<br>Number      | Each<br>Price |
|------------------|---------------------------------------|---------------------|---------------|
| 0-4              | 9                                     | <b>LG-10285-100</b> | \$60.11       |
| 0-8              | 13                                    | <b>LG-10285-102</b> | 91.38         |
| 0-12             | 16                                    | <b>LG-10285-104</b> | 101.01        |



### Stopcock, Right Angle, High Vacuum, PTFE Plug

Similar to *LG-10285* but with sidearms at right angles. For replacement plugs and O-Rings see *LG-10290*.

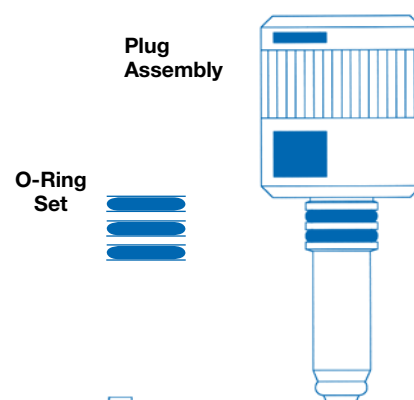
| Bore Range<br>mm | Outside<br>of Stems<br>Diameter<br>mm | Part<br>Number      | Each<br>Price |
|------------------|---------------------------------------|---------------------|---------------|
| 0-4              | 9                                     | <b>LG-10286-100</b> | \$50.49       |
| 0-8              | 13                                    | <b>LG-10286-102</b> | 66.13         |
| 0-12             | 16                                    | <b>LG-10286-104</b> | 76.95         |



**LG-10286**

### Stopcock, Replacement Parts for LG-10285 & LG-10286

| Bore Range<br>mm | Supplied           | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| 0-4              | O-Ring Set, Viton® | <b>LG-10290-100</b> | \$6.01        |
| 0-8              | O-Ring Set, Viton® | <b>LG-10290-102</b> | 4.44          |
| 0-12             | O-Ring Set, Viton® | <b>LG-10290-104</b> | 5.57          |
| 0-4              | Plug Assembly Only | <b>LG-10290-110</b> | 25.15         |
| 0-8              | Plug Assembly Only | <b>LG-10290-112</b> | 37.14         |
| 0-12             | Plug Assembly Only | <b>LG-10290-114</b> | 50.26         |



**LG-10290**

### Stopcock, Valve, High Vacuum, PTFE, Low Hold-Up

Valve design addresses liquid flow applications and presents minimal surface to avoid product losses. PTFE shaft protect Viton® O-Rings with the precision bore glass body. Suitable for analytical applications.

| Bore Range<br>mm | Approx.<br>O.D. mm | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| 0-4              | 9                  | <b>LG-10288-100</b> | \$65.11       |
| 0-8              | 13                 | <b>LG-10288-102</b> | 111.01        |
| 0-12             | 16                 | <b>LG-10288-104</b> | 122.26        |

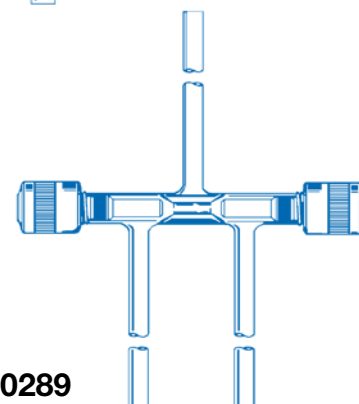


**LG-10288**

### Stopcock, Valve, High Vacuum, PTFE, Three-Way

Designed for three-way applications. Valves do not have an O-Ring at the primary seal. Sealing surface is PTFE. Useful with Schlenk tubes where alternate cycles of vacuum and inert gas are needed. See *LG-10290* for replacement plug and O-Rings.

| Bore Range<br>mm | Approx.<br>O.D. mm | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| 0-4              | 9                  | <b>LG-10289-100</b> | \$122.26      |
| 0-8              | 13                 | <b>LG-10289-102</b> | 159.41        |
| 0-12             | 16                 | <b>LG-10289-104</b> | 192.74        |



**LG-10289**


**LG-9602**

**LG-9603**

**LG-9611**

**LG-9612**

**LG-9613**

**LG-9614**
**Stopcock, Grease, High-Vacuum**

Stiff, non-melting silicone lubricant that maintains consistency from -40 to 260°C. Lubricates and seals. Resistant to water, chemicals, and high and low temperatures.

| Size         | Part Number        | Each Price |
|--------------|--------------------|------------|
| 5.3 Oz. Tube | <b>LG-9602-100</b> | \$22.64    |

**Stopcock, Grease, LubriSeal®**

Smooth-textured, highly insoluble lubricant for sealing ground joints and glass stopcocks. Resistant over a wide pH range. Melting point is approximately 52°C.

| Size     | Part Number        | Each Price |
|----------|--------------------|------------|
| 75g Tube | <b>LG-9603-100</b> | \$23.23    |

**Stopcock, Lubricant, Phynal**

Grease which is used for lubricating ground joints and stopcocks. Insoluble in hydrocarbons but soluble in water. For use up to 50°C.

| Size      | Part Number        | Each Price |
|-----------|--------------------|------------|
| 1 oz. Jar | <b>LG-9611-100</b> | \$27.86    |

**Stopcocks, Lubricant, Graphited Silicone**

A grease used in lubricating ground joints and stopcocks which may be used in high vacuum systems up to 250°C continuously.

| Size      | Part Number        | Each Price |
|-----------|--------------------|------------|
| 2 oz. Jar | <b>LG-9612-100</b> | \$34.84    |

**Stopcock, Grease, Fluorinated, GPL KRYTOX®**

Superior performance non-contaminating, nonflammable, general purpose grease. Use with joints & stopcocks.

| Size       | Part Number        | Each Price |
|------------|--------------------|------------|
| 2 oz. Tube | <b>LG-9613-100</b> | \$47.48    |

**Stopcock, Grease, High Vacuum Grease, LVP, KRYTOX®**

Very low vapor pressure, highly inert, nonflammable grease. The grease is for use in high vacuum systems. Maintain consistency from -20 to 260°C.

| Size       | Part Number        | Each Price |
|------------|--------------------|------------|
| 2 oz. Tube | <b>LG-9614-100</b> | \$126.60   |

**Stopper, Pennyhead, Solid, Glass**

| Size  | Part Number | Each Price |
|-------|-------------|------------|
| 7/12  | ML-1790-700 | \$17.54    |
| 10/18 | ML-1790-702 | 17.54      |
| 14/20 | ML-1790-704 | 11.36      |
| 19/22 | ML-1790-706 | 12.99      |


**ML-1790**
**Stopper, Pennyhead, Hollow, Glass**

With closed bottom. Precision ground.

| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 10/30 | LG-10300-104 | \$11.59    |
| 12/18 | LG-10310-106 | 11.42      |
| 12/30 | LG-10300-106 | 11.81      |
| 14/20 | LG-10310-108 | 11.45      |
| 14/35 | LG-10300-108 | 13.49      |
| 19/22 | LG-10310-110 | 13.72      |
| 19/38 | LG-10300-110 | 14.18      |
| 24/25 | LG-10310-112 | 16.79      |
| 24/40 | LG-10300-112 | 14.41      |
| 29/26 | LG-10310-114 | 17.25      |
| 29/42 | LG-10300-114 | 17.98      |
| 34/45 | LG-10300-116 | 23.74      |
| 40/50 | LG-10300-118 | 32.48      |
| 45/50 | LG-10300-120 | 32.40      |
| 55/50 | LG-10300-124 | 40.50      |
| 60/50 | LG-10300-126 | 56.14      |


**LG-10300  
LG-10310**
**Stopper, Pennyhead, Solid, Glass**

Product is used with volumetric flasks and separatory funnels.

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 9    | LG-10320-100 | \$4.97     |
| 13   | LG-10320-102 | 5.20       |
| 16   | LG-10320-104 | 6.25       |
| 19   | LG-10320-106 | 7.33       |
| 22   | LG-10320-108 | 7.92       |
| 27   | LG-10320-110 | 10.05      |
| 32*  | LG-10320-112 | 13.60      |
| 38*  | LG-10320-114 | 18.92      |

\*Supplied hollow


**LG-10320**
**Stopper, PYREX®, Solid, Improved Form**

| Stopper No. | Part Number | Each Price |
|-------------|-------------|------------|
| 19          | C-7620-19   | \$14.05    |
| 24          | C-7620-24   | 14.68      |


**C-7620**



LG-10376



LG-10377



LG-10305


LG-10312  
LG-10315

### Stopper, Ball, Pennyhead, Glass

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 28   | LG-10376-100 | \$19.03    |
| 35   | LG-10376-102 | 20.49      |

### Stopper, Ball, Flat Head, Solid, Glass

Flat Head allows placement on a laboratory bench without contaminating the ground zone.

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 18   | LG-10377-100 | \$27.47    |
| 28   | LG-10377-102 | 32.15      |
| 35   | LG-10377-104 | 36.74      |
| 50*  | LG-10377-106 | 55.36      |
| 65*  | LG-10377-108 | 73.35      |

\*Supplied hollow.

### Stopper, Flat Head, Hollow, Glass

Designed to permit stopper to be inverted and placed upon lab bench without contamination of ground surface.

| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 24/40 | LG-10305-112 | \$21.10    |
| 29/26 | LG-10305-113 | 23.08      |
| 29/42 | LG-10305-114 | 23.08      |

### Stopper, Flat Hexagonal Head, Hollow, Glass

The hexagonal feature prevents the stopper from rolling when placed on its side. The flat head allows the stopper to be stood on end thus preventing contamination of the ground surface.

| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 14/20 | LG-10312-108 | \$17.72    |
| 19/22 | LG-10312-110 | 17.95      |
| 24/40 | LG-10315-112 | 24.89      |
| 24/25 | LG-10312-112 | 22.00      |
| 29/26 | LG-10312-114 | 23.52      |
| 29/42 | LG-10315-114 | 27.51      |
| 34/45 | LG-10315-116 | 35.28      |

## Stopper, Hollow, Glass

An economy-style stopper, precisely ground but with open bottom.

| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 14/20 | LG-10330-100 | \$12.48    |
| 19/22 | LG-10330-102 | 12.48      |
| 24/40 | LG-10330-104 | 19.59      |
| 29/26 | LG-10330-105 | 18.62      |
| 29/42 | LG-10330-106 | 20.55      |



LG-10330



LG-10350

## Stopper, For Iodine Flask, Long Handle, Hollow, Glass

Closed bottom and designed to be used with iodine flasks, LG-7870.

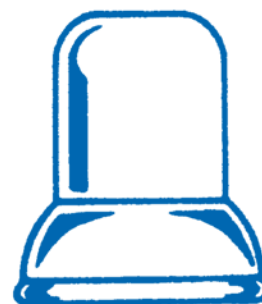
| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 24/40 | LG-10350-100 | \$21.33    |



LG-10370

## Stopper, Cylindrical Head, Hollow, Cap Style, Glass

| Size  | Part Number  | Each Price |
|-------|--------------|------------|
| 14/20 | LG-10370-100 | \$14.45    |
| 19/22 | LG-10370-102 | 15.66      |
| 24/40 | LG-10370-104 | 19.28      |
| 29/26 | LG-10370-105 | 23.88      |
| 29/42 | LG-10370-106 | 23.88      |



LG-10375

## Stopper, Socket, Cap Style, Glass

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 28   | LG-10375-100 | \$20.00    |
| 35   | LG-10375-102 | 22.18      |



LG-10307  
LG-10308



## Stopper, Solid, PTFE

With vertical head having straight edges.

| Size   | Part Number  | Each Price |
|--------|--------------|------------|
| 10/18  | LG-10308-104 | \$15.95    |
| 14/20  | LG-10308-108 | 19.01      |
| 19/22  | LG-10308-110 | 19.87      |
| 24/25  | LG-10308-112 | 29.96      |
| 24/40  | LG-10307-112 | 26.48      |
| 29/26  | LG-10308-114 | 27.97      |
| 29/42  | LG-10307-114 | 37.57      |
| 34/45* | LG-10307-116 | 58.39      |

\*Supplied hollow.

Teflon



LG-10313



LG-10322

Teflon



C-7624

### Stopper, PTFE, Safe-Lab®

Stopper with thumb screw nut at top that allows easy removal of stoppers when frozen in place.

| Size  | Supplied | Part Number  | Each Price |
|-------|----------|--------------|------------|
| 14/20 | Solid    | LG-10313-100 | \$68.02    |
| 19/22 | Solid    | LG-10313-102 | 70.16      |
| 24/40 | Hollow   | LG-10313-104 | 72.80      |
| 29/42 | Hollow   | LG-10313-106 | 83.11      |
| 34/45 | Hollow   | LG-10313-108 | 56.48      |
| 45/50 | Hollow   | LG-10313-110 | 110.82     |
| 55/50 | Hollow   | LG-10313-112 | 132.13     |

### Stopper, Solid PTFE

With vertical head having straight edges. PTFE avoids freezing in ground zone and is used with volumetric flasks and separatory funnels.

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 9    | LG-10322-100 | \$12.64    |
| 13   | LG-10322-102 | 13.96      |
| 16   | LG-10322-104 | 15.90      |
| 19   | LG-10322-106 | 16.48      |
| 22   | LG-10322-108 | 18.30      |
| 27   | LG-10322-110 | 27.21      |
| 32   | LG-10322-112 | 41.51      |
| 38   | LG-10322-114 | 50.69      |

### Stopper, PYREX®, HDPE Polyethylene, Improved Form

These blue and white stoppers are made with closed bottoms, of linear high-density polyethylene to conform to stopper dimensions. The three unit rings on the base provide an efficient seal. The improved design fully protects the neck in the event of accidental tipping.

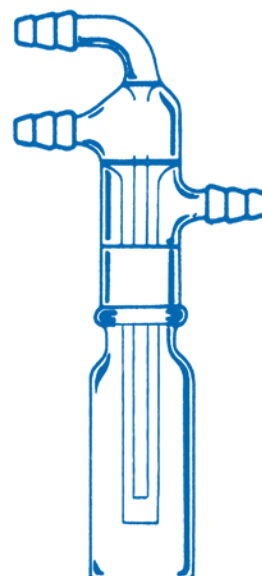
These stoppers may be used in place of conventional flask stoppers.

| Stopper No. | Part Number | Each Price |
|-------------|-------------|------------|
| 8           | C-7624-8    | \$2.16     |
| 9           | C-7624-9    | 2.17       |
| 13          | C-7624-13   | 2.17       |
| 16          | C-7624-16   | 2.91       |
| 19          | C-7624-19   | 2.91       |
| 22          | C-7624-22   | 3.63       |
| 27          | C-7624-27   | 3.63       |
| 32          | C-7624-32   | 4.37       |
| 38          | C-7624-38   | 4.37       |

### Sublimation Apparatus, Vacuum

For purification by sublimation of quantities of about 0.5 to 500mg, under vacuum. Consists of a cylindrical, flat bottomed flask for sample and a water cooled finger type condenser. The condenser has an outer short skirt with a 24/25 outer joint to fit over the neck of the flask. Above the joint there is a side hose connection for attachment to a source of vacuum

| Supplied       | Part Number        | Each Price |
|----------------|--------------------|------------|
| Complete       | <b>ML-1800-700</b> | \$94.84    |
| Flask Only     | <b>ML-1800-702</b> | 25.19      |
| Condenser Only | <b>ML-1800-704</b> | 69.79      |

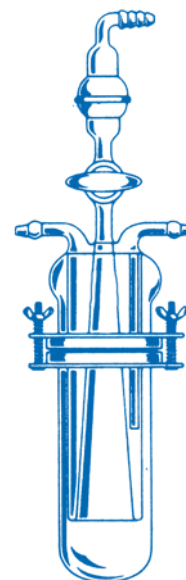


**ML-1800**

### Sublimation Apparatus, Sublimer, Vacuum, McCarter

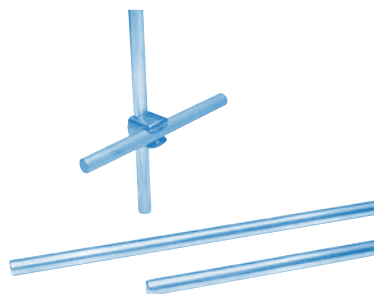
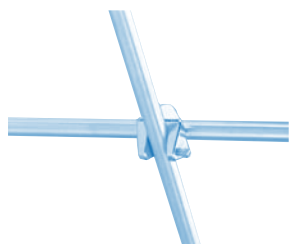
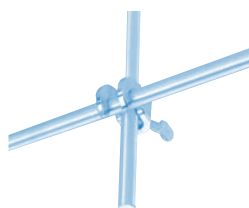
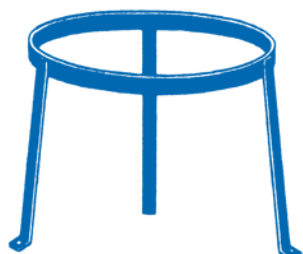
Designed for subliming high boiling or heat sensitive compounds. In operation, sublimate collects on the inner surface of an open bottom, jacketed, inverted cone. Product is easily recovered and there is little chance for sublimate to form on the outer wall. Apparatus consists of a kettle, a head containing the cone, and an adapter to connect to vacuum source. When assembled, the cone is approximately 25mm from the bottom of the kettle. Both kettle and head have flanges which are grooved for an O-Ring. Complete apparatus consists of kettle, head, adapter **LG-1701-102**, horseshoe-shaped clamp and Viton® O-Ring. Supplied with 6mm glass stopcock.

| Supplied    | Approx. Capacity up to Cone Bottom mL | Approx. Outside Diameter of Kettle | O-Ring Size (LG-1022) | Clamp Code (LG-7316) | Part Number         | Each Price |
|-------------|---------------------------------------|------------------------------------|-----------------------|----------------------|---------------------|------------|
| Complete    | 100                                   | 80mm                               | 339                   | -104                 | <b>LG-10433-104</b> | \$1,316.90 |
| Complete    | 200                                   | 4 1/2"                             | 348                   | -106                 | <b>LG-10433-106</b> | 1,784.90   |
| Complete    | 300                                   | 5 1/2"                             | 359                   | -108                 | <b>LG-10433-108</b> | 2,523.18   |
| Kettle Only | 100                                   | 80mm                               | 339                   | -104                 | <b>LG-10433-124</b> | 138.57     |
| Kettle Only | 200                                   | 4 1/2"                             | 348                   | -106                 | <b>LG-10433-126</b> | 180.51     |
| Kettle Only | 300                                   | 5 1/2"                             | 359                   | -108                 | <b>LG-10433-128</b> | 188.06     |
| Head Only   | 100                                   | 80mm                               | 339                   | -104                 | <b>LG-10433-144</b> | 1,033.90   |
| Head Only   | 200                                   | 4 1/2"                             | 348                   | -106                 | <b>LG-10433-146</b> | 1,316.90   |
| Head Only   | 300                                   | 5 1/2"                             | 359                   | -108                 | <b>LG-10433-148</b> | 2,024.88   |



**LG-10433**



**LG-10445****LG-4644****LG-4645****LG-8905****LG-8940****Support, Lattice Clamp and Rod**

Supplied for erecting a lattice support. Unit provides a versatile support for laboratory apparatus. Clamps are high strength with Allen head screws. V-shaped slots allow easy attachment of rods without disturbing the existing support. Aluminum alloy rod is furnished without threads and ends are smoothly finished.

| Description                 | Part Number         | Each Price |
|-----------------------------|---------------------|------------|
| Set of 12 Clamps and Wrench | <b>LG-10445-100</b> | \$140.17   |
| 1/2" Rod 36"                | <b>LG-10445-208</b> | 16.31      |
| 1/2" Rod - 48"              | <b>LG-10455-210</b> | 24.99      |

**Support, S-Connector**

Connector features separate adjustment capability with two rods or clamps versus single clamp action of the hook connector. Clamp items at 90° angle.

|  | Part Number        | Each Price |
|--|--------------------|------------|
|  | <b>LG-4644-100</b> | \$12.94    |

**Support, Hook Connector**

Easy-to use hook connector allows one-handed assembly of two components with one adjustment screw.

|  | Part Number        | Each Price |
|--|--------------------|------------|
|  | <b>LG-4645-100</b> | \$8.53     |

**Support, Extension Support for Heating Mantles**

This table-top support holds spherical and hemispherical Series O mantles up to 3 liter capacity. The steel support, with its fabric strap basket, is strong, handy, and durable. Attaches easily to stable ring stands or distillation racks.

| Flask Capacity<br>mL<br>(Mantle Size) | Part Number        | Each Price |
|---------------------------------------|--------------------|------------|
| 250 and 300                           | <b>LG-8905-102</b> | \$54.00    |
| 500                                   | <b>LG-8905-104</b> | 56.00      |
| 1000                                  | <b>LG-8905-106</b> | 62.00      |
| 2000 and 3000                         | <b>LG-8905-108</b> | 66.00      |

**Support, Tripod Support for Heating Mantles**

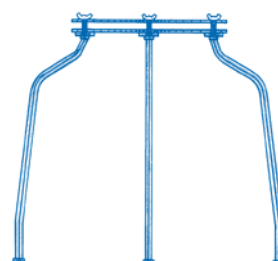
For mantles with hemispherical housing. Support consists of a ring and three legs which are bolted to the ring. Shipped unassembled.

| Flask Capacity<br>mL<br>(Mantle Size) | Part Number        | Each Price |
|---------------------------------------|--------------------|------------|
| 22000                                 | <b>LG-8940-106</b> | \$130.00   |

**Support, Reaction Flask Support and Clamp for Flat Flanges**

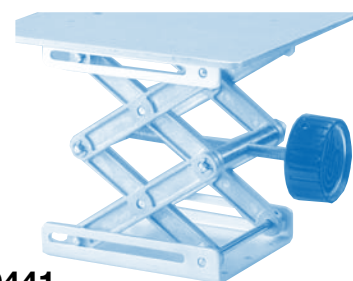
A support stand with ring style clamps for use with reaction kettles and covers with flat flanges. Support has a base ring with 3 legs, a split top ring, and 3 wing nuts for firmly clamping the flanges. Both rings are the same I.D.

| Flask Capacity<br>Capacity<br>mL | Ring<br>I.D.,<br>inches | Height Under<br>Rings,<br>Inches | Part<br>Number     | Each<br>Price |
|----------------------------------|-------------------------|----------------------------------|--------------------|---------------|
| 1000                             | 4 1/2                   | 14 1/2                           | <b>LG-8061-102</b> | \$151.05      |
| 2000                             | 5 3/4                   | 12                               | <b>LG-8061-104</b> | 184.71        |
| 3000                             | 5 3/4                   | 17                               | <b>LG-8061-106</b> | 199.86        |

**LG-8061****Support, Lab-Jack, Aluminum**

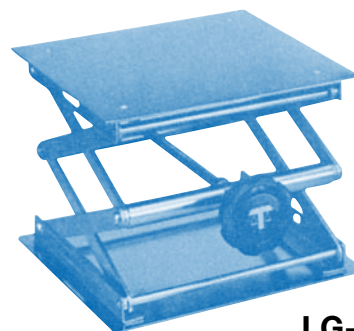
All purpose anodized aluminum support for hot plates, oil baths, large Dewar flasks, ground joint glassware, receivers, etc. Utilizes scissors jack principle for quick, easy, and accurate rate height adjustment.

| Size<br>Inches               | Height<br>Inches | Max.<br>Load lbs. | Part<br>Number      | Each<br>Price |
|------------------------------|------------------|-------------------|---------------------|---------------|
| 4 x 4                        | 2 - 5            | 30                | <b>LG-10441-150</b> | \$124.96      |
| 6 x 6                        | 2 3/4 - 9 3/4    | 35                | <b>LG-10441-152</b> | 160.83        |
| 8 x 8                        | 2 3/4 - 13       | 55                | <b>LG-10441-154</b> | 194.54        |
| 17" rod, flatwasher & jamnut |                  |                   | <b>LG-10441-160</b> | 27.17         |

**LG-10441****Support, Lab-Jack, Stainless Steel**

Recommended for laboratories where adjustment of apparatus is required. Manufactured from stainless steel for maximum corrosion resistance. Rugged, precise scissor action provides level lifting. Knobs are oversized for fast, smooth platform adjustment.

| Size<br>Inches | Height<br>Inches | Max.<br>Load lbs. | Part<br>Number      | Each<br>Price |
|----------------|------------------|-------------------|---------------------|---------------|
| 4 x 4          | 2 1/2 - 5        | 30                | <b>LG-10443-100</b> | \$164.00      |
| 6 x 6          | 3 - 9 3/4        | 35                | <b>LG-10443-102</b> | 245.00        |
| 8 x 8          | 3 1/2 - 13       | 55                | <b>LG-10443-104</b> | 311.00        |
| 12 x 12        | 4 - 19 1/2       | 150               | <b>LG-10443-106</b> | 679.00        |

**LG-10443**

**LG-9025****Support, Ultra Flex Support Kit**

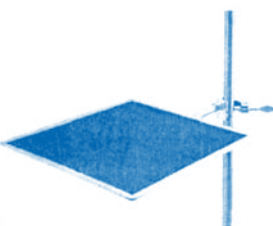
Extremely versatile with a unique flex arm that can be placed in virtually every position or angle. Includes 12" (30.5cm) flex arm and interchangeable 3-prong clamp, 2-prong clamp and spring clamp heads.

| Description            | Part Number        | Each Price |
|------------------------|--------------------|------------|
| Ultra Flex Support Kit | <b>LG-9025-100</b> | \$129.00   |

**LG-9026****Support, Rod and Clamp Kit**

Designed for holding temperature probes, thermometers or other glass tubes. Includes an 18" (45.7cm) support rod, thermometer/temperature probe extension clamp, 3-prong medium swivel clamp, and hook connector.

| Description               | Part Number        | Each Price |
|---------------------------|--------------------|------------|
| Support Rod and Clamp Kit | <b>LG-9026-100</b> | \$93.00    |

**LG-9024****Support, Plates**

Designed to hold hotplate/stirrers and other apparatus to lab-frames or ring stands. Support plates include holder for mounting to vertical rod up to .75" (1.9cm) and non-skid mat. Aluminum construction offers strength and durability.

| Size   | Dimensions                 | Part Number        | Each Price |
|--------|----------------------------|--------------------|------------|
| Small  | 9.5 x 6.5" (24.1 x 16.5cm) | <b>LG-9024-100</b> | \$94.00    |
| Medium | 12.75 x 9" (32.4 x 22.9cm) | <b>LG-9024-110</b> | \$151.00   |

### Adapter, Joint, Flexible, PTFE

Flexible connector which allows for movement of glass joint connection. Relieves stress and allows for mis-alignment. Top and bottom connection are the same.

| § Joint | Height mm | Part Number         | Each Price |
|---------|-----------|---------------------|------------|
| 14/20   | 115       | <b>LG-1014T-200</b> | \$50.00    |
| 19/22   | 90        | <b>LG-1014T-202</b> | 55.00      |
| 19/38   | 120       | <b>LG-1014T-204</b> | 57.00      |
| 24/40   | 130       | <b>LG-1014T-206</b> | 64.00      |
| 29/42   | 140       | <b>LG-1014T-208</b> | 68.00      |
| 34/45   | 145       | <b>LG-1014T-210</b> | 71.00      |
| 45/50   | 155       | <b>LG-1014T-212</b> | 80.00      |

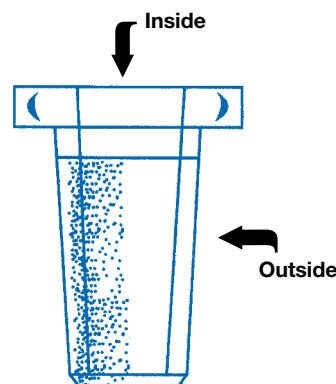


**LG-1014T**

### Adapter, Reducing, Bushing Style, PTFE

Machined from PTFE and used where lubricant should be avoided.

| Outside § Joint | Inside § Joint | Part Number         | Each Price |
|-----------------|----------------|---------------------|------------|
| 24/40           | 19/38          | <b>LG-1245T-100</b> | \$28.30    |
| 29/42           | 24/40          | <b>LG-1245T-102</b> | 28.30      |
| 34/45           | 29/42          | <b>LG-1245T-104</b> | 38.40      |
| 45/50           | 34/45          | <b>LG-1245T-106</b> | 57.44      |



**LG-1245T**

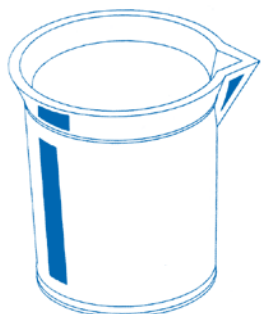
### Adapter, Thermometer, PTFE

Inner joint adapter with compression cap and saddle O-ring for use with plain stem thermometers and inlet tubes. Comes with four saddle O-Rings which accepts O.D's from 3.8 to 6.3mm.

| § Joint | May be used in Outer Members | Part Number        | Each Price |
|---------|------------------------------|--------------------|------------|
| 10/18   | 10/18, 10/30                 | <b>LG-1453-100</b> | \$14.10    |
| 14/20   | 14/20, 14/35                 | <b>LG-1453-102</b> | 15.00      |
| 19/22   | 19/22, 19/38                 | <b>LG-1453-104</b> | 18.00      |
| 24/25   | 24/25, 24/40                 | <b>LG-1453-106</b> | 20.00      |
| 29/26   | 29/26, 29/42                 | <b>LG-1453-108</b> | 22.00      |
| 34/28   | 34/28, 34/45                 | <b>LG-1453-110</b> | 35.00      |



**LG-1453**

**NEW****LG-3305****Beaker, PTFE**

Molded from PTFE with smooth internal finish. Base has been machined to assure flat contact surface and good heat transfer. Beaker has Griffin profile and is recommended for trace metal analysis.

| Capacity<br>mL | Height x<br>Diameter<br>mm | Part<br>Number     | Each<br>Price |
|----------------|----------------------------|--------------------|---------------|
| 25             | 47 x 32                    | <b>LG-3305-100</b> | \$12.00       |
| 50             | 60 x 43                    | <b>LG-3305-102</b> | 13.00         |
| 100            | 68 x 54                    | <b>LG-3305-104</b> | 17.00         |
| 150            | 69 x 59                    | <b>LG-3305-106</b> | 21.00         |
| 250            | 97 x 66                    | <b>LG-3305-108</b> | 25.00         |
| 400            | 106 x 80                   | <b>LG-3305-110</b> | 37.00         |
| 500            | 125 x 80                   | <b>LG-3305-112</b> | 40.00         |
| 600            | 125 x 90                   | <b>LG-3305-114</b> | 54.00         |
| 1000           | 155 x 100                  | <b>LG-3305-116</b> | 84.00         |
| 2000           | 210 x 125                  | <b>LG-3305-118</b> | 135.00        |
| 5000           | 280 x 170                  | <b>LG-3305-120</b> | 500.00        |

**NEW****LG-7226****Flask, Round Bottom, PTFE**

Machine Finished, Inert and Usable to 280°C

| Capacity<br>mL | Joint | Part<br>Number     | Each<br>Price |
|----------------|-------|--------------------|---------------|
| 10             | 19/38 | <b>LG-7226-100</b> | \$28.05       |
| 25             | 24/40 | <b>LG-7226-102</b> | 43.50         |
| 50             | 24/40 | <b>LG-7226-104</b> | 59.00         |
| 50             | 29/42 | <b>LG-7226-106</b> | 59.90         |
| 100            | 29/42 | <b>LG-7226-108</b> | 91.90         |

**NEW****LG-8313****Funnel, PTFE, Powder**

Totally chemically inert with super smooth non-stick internal finish.

| Top Diam.<br>mm | Stem<br>Diameter<br>mm | Height<br>mm | Part<br>Number     | Each<br>Price |
|-----------------|------------------------|--------------|--------------------|---------------|
| 30              | 8                      | 50           | <b>LG-8313-100</b> | \$13.50       |
| 50              | 10                     | 85           | <b>LG-8313-102</b> | 23.00         |
| 70              | 12                     | 110          | <b>LG-8313-104</b> | 40.00         |
| 100             | 14                     | 170          | <b>LG-8313-106</b> | 79.00         |
| 150             | 16                     | 220          | <b>LG-8313-108</b> | 158.00        |

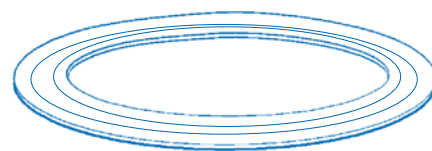
**Reaction Gasket, PTFE, for Conical Flange**

Gasket is supplied for flanged reaction flasks as an option lubricant as a seal. Clamp pressure creates an effective seal.

| Flange Inside Diameter Inches | Part Number        | Each Price |
|-------------------------------|--------------------|------------|
| 2"                            | <b>LG-8069-100</b> | \$48.30    |
| 4"                            | <b>LG-8069-102</b> | 49.50      |

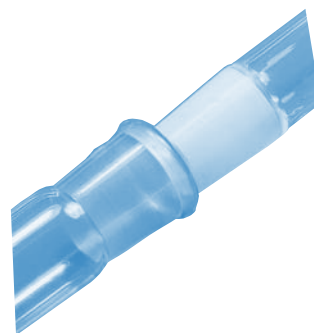
**LG-8069****Reaction Gasket, PTFE, Grooved for Ground Flange**

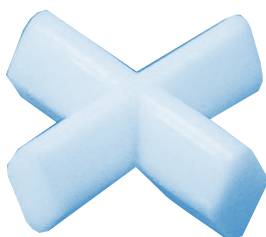
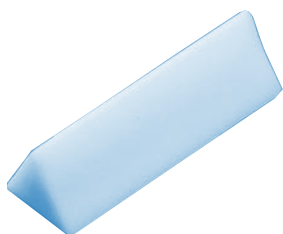
| For Vessel Size | Flange Outside Diam.            | Part Number        | Each Price |
|-----------------|---------------------------------|--------------------|------------|
| 500-1000mL      | 5 <sup>3</sup> / <sub>8</sub> " | <b>LG-8068-100</b> | \$59.90    |
| 2000-4000mL     | 6 <sup>5</sup> / <sub>8</sub> " | <b>LG-8068-102</b> | 61.10      |

**LG-8068****Joint, Sleeve, PTFE**

These sleeves, nominal thickness 0.003", are fitted onto inner joints to prevent "freezing" of assembled joints.

| Joint | Part Number         | Each Price |
|-------|---------------------|------------|
| 10/30 | <b>LG-1038T-100</b> | \$8.73     |
| 12/30 | <b>LG-1038T-102</b> | 8.73       |
| 14/20 | <b>LG-1038T-104</b> | 8.73       |
| 14/35 | <b>LG-1038T-106</b> | 9.30       |
| 19/22 | <b>LG-1038T-108</b> | 9.30       |
| 19/38 | <b>LG-1038T-110</b> | 9.71       |
| 24/25 | <b>LG-1038T-112</b> | 9.71       |
| 24/40 | <b>LG-1038T-114</b> | 10.27      |
| 29/26 | <b>LG-1038T-116</b> | 11.38      |
| 29/42 | <b>LG-1038T-118</b> | 11.38      |
| 34/45 | <b>LG-1038T-122</b> | 12.50      |
| 40/50 | <b>LG-1038T-124</b> | 13.76      |
| 45/50 | <b>LG-1038T-126</b> | 14.56      |
| 55/50 | <b>LG-1038T-130</b> | 19.03      |
| 60/50 | <b>LG-1038T-132</b> | 26.09      |

**LG-1038T**

**LG-1039T****BP-2315****LG-9554T****Joint, Sleeves, PTFE, Rigid**

For grease-free, high vacuum seals using standard ground glass joints. Made from PTFE with substantial shoulder for ease of handling.

| Joint | Part Number  | Each Price |
|-------|--------------|------------|
| 10/30 | LG-1039T-100 | \$6.00     |
| 14/20 | LG-1039T-102 | 6.25       |
| 14/35 | LG-1039T-104 | 7.50       |
| 19/22 | LG-1039T-106 | 7.25       |
| 19/38 | LG-1039T-108 | 9.00       |
| 24/40 | LG-1039T-110 | 9.50       |
| 29/42 | LG-1039T-112 | 13.00      |
| 34/45 | LG-1039T-114 | 16.00      |
| 45/50 | LG-1039T-116 | 25.00      |
| 55/50 | LG-1039T-118 | 29.00      |

**Stirrer Bar, PTFE, Cross**

PTFE stirrer bar referred to as the "PLUS" or "CROSS" shape.

| Size Inches    | Part Number | Each Price |
|----------------|-------------|------------|
| $\frac{3}{8}$  | BP-2315-038 | \$7.50     |
| $\frac{3}{4}$  | BP-2315-034 | 8.02       |
| 1              | BP-2315-100 | 8.60       |
| $1\frac{1}{4}$ | BP-2315-114 | 9.00       |
| $1\frac{1}{2}$ | BP-2315-112 | 9.50       |
| 2              | BP-2315-200 | 11.00      |

**Stirrer Bar, PTFE, Triangular**

Effective for dissolving solids and mixing sediments in flat surface glassware such as erlenmeyers or beakers because of scraper-like action.

| Length x Diameter (mm) | Part Number  | Each Price |
|------------------------|--------------|------------|
| 12 x 6                 | LG-9554T-100 | \$2.50     |
| 20 x 8                 | LG-9554T-102 | 3.10       |
| 25 x 8                 | LG-9554T-104 | 3.30       |
| 25 x 14                | LG-9554T-106 | 3.80       |
| 35 x 9                 | LG-9554T-108 | 4.00       |
| 40 x 14                | LG-9554T-110 | 5.20       |
| 50 x 12                | LG-9554T-112 | 5.50       |
| 55 x 14                | LG-9554T-114 | 7.10       |
| 80 x 18                | LG-9554T-116 | 12.60      |



**Stirring Bar, Magnetic, Octagonal**

With polished permanent Alnico-V magnet sealed into PTFE with octagonal cross section. Seamless and leakproof. Tested electronically and by vacuum. The diameters listed below represent the circle enclosing the corners of the octagon.

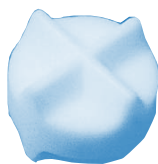
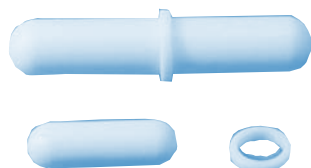
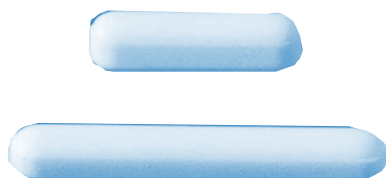
| Length<br>Inches | Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| 1/2              | 1/8                | <b>LG-9555T-100</b> | \$2.85        |
| 1/2              | 5/16               | <b>LG-9555T-102</b> | 3.18          |
| 5/8              | 5/16               | <b>LG-9555T-104</b> | 3.18          |
| 7/8              | 5/16               | <b>LG-9555T-106</b> | 3.47          |
| 1                | 5/16               | <b>LG-9555T-108</b> | 3.52          |
| 1 1/8            | 5/16               | <b>LG-9555T-110</b> | 3.70          |
| 1 1/2            | 5/16               | <b>LG-9555T-112</b> | 3.94          |
| 1 5/8            | 5/16               | <b>LG-9555T-114</b> | 4.56          |
| 2                | 5/16               | <b>LG-9555T-116</b> | 4.84          |
| 2 1/2            | 5/16               | <b>LG-9555T-118</b> | 7.74          |
| 1/2              | 3/8                | <b>LG-9555T-120</b> | 3.70          |
| 5/8              | 3/8                | <b>LG-9555T-122</b> | 4.13          |
| 7/8              | 3/8                | <b>LG-9555T-124</b> | 4.28          |
| 1                | 3/8                | <b>LG-9555T-126</b> | 4.28          |
| 1 3/8            | 3/8                | <b>LG-9555T-128</b> | 5.08          |
| 1 1/2            | 3/8                | <b>LG-9555T-130</b> | 5.08          |
| 1 7/8            | 3/8                | <b>LG-9555T-132</b> | 6.41          |
| 2                | 3/8                | <b>LG-9555T-134</b> | 6.83          |
| 2 1/2            | 3/8                | <b>LG-9555T-136</b> | 7.97          |
| 1 1/2            | 1/2                | <b>LG-9555T-144</b> | 12.92         |
| 3                | 1/2                | <b>LG-9555T-146</b> | 14.15         |

**LG-9555T****Stirrer, Magnetic, Spinfin**

Designed specifically for round bottom test tubes and flasks. With permanent Alnico-v magnet sealed into PTFE with cylindrical base having four fins at top. All sizes are 1/2" high. May be used with any magnetic stirrer, and will maintain position without wobble.

| Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| 1/4                | <b>LG-9556T-100</b> | \$12.98       |
| 3/8                | <b>LG-9556T-102</b> | 13.08         |
| 1/2                | <b>LG-9556T-104</b> | 13.72         |
| 5/8                | <b>LG-9556T-106</b> | 14.73         |
| 3/4                | <b>LG-9556T-108</b> | 18.25         |
| 7/8                | <b>LG-9556T-110</b> | 16.82         |

**LG-9556T**

**LG-9557T****LG-9565T****LG-9566T****Stirrer, Double, Magnetic, Spinfin**

Similar to *LG-9556T* except that there are fins at both top and bottom and all sizes are  $\frac{3}{4}$ " high.

| Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|--------------------|---------------------|---------------|
| $\frac{1}{2}$      | <b>LG-9557T-100</b> | \$11.68       |
| $\frac{3}{4}$      | <b>LG-9557T-102</b> | 13.91         |
| 1                  | <b>LG-9557T-104</b> | 14.72         |

**Stirring Bar, Magnetic, Round**

With polished permanent Alnico-V magnet sealed into PTFE with round cross-section. With removable pivot ring on bars of 1" or greater length. Seamless and leakproof. Tested electrically and by vacuum.

| Length<br>Inches | Diameter<br>Inches | Part<br>Number      | Each<br>Price |
|------------------|--------------------|---------------------|---------------|
| $\frac{1}{2}$ *  | $\frac{5}{16}$     | <b>LG-9565T-102</b> | \$4.68        |
| $\frac{3}{4}$ *  | $\frac{5}{16}$     | <b>LG-9565T-104</b> | 4.72          |
| 1                | $\frac{5}{16}$     | <b>LG-9565T-106</b> | 4.89          |
| 1 $\frac{1}{4}$  | $\frac{5}{16}$     | <b>LG-9565T-108</b> | 6.25          |
| 1 $\frac{1}{2}$  | $\frac{5}{16}$     | <b>LG-9565T-110</b> | 6.47          |
| 1 $\frac{3}{4}$  | $\frac{5}{16}$     | <b>LG-9565T-112</b> | 7.98          |
| 2                | $\frac{5}{16}$     | <b>LG-9565T-114</b> | 8.37          |
| 1                | $\frac{3}{8}$      | <b>LG-9565T-116</b> | 6.41          |
| 1 $\frac{1}{4}$  | $\frac{3}{8}$      | <b>LG-9565T-118</b> | 6.85          |
| 1 $\frac{1}{2}$  | $\frac{3}{8}$      | <b>LG-9565T-120</b> | 8.15          |
| 1 $\frac{5}{8}$  | $\frac{3}{8}$      | <b>LG-9565T-122</b> | 9.13          |
| 1 $\frac{3}{4}$  | $\frac{3}{8}$      | <b>LG-9565T-124</b> | 8.74          |
| 2                | $\frac{3}{8}$      | <b>LG-9565T-126</b> | 9.57          |
| 2 $\frac{1}{8}$  | $\frac{3}{8}$      | <b>LG-9565T-128</b> | 10.54         |
| 3                | $\frac{1}{2}$      | <b>LG-9565T-134</b> | 18.74         |

\* No Pivot Ring

**Stirring Bar, Magnetic, Round, Micro**

With polished permanent Alnico-V magnet sealed into PTFE with round cross-section. Seamless and leakproof. Tested electrically and by vacuum.

| Length<br>mm | Diameter<br>mm | Part<br>Number      | Each<br>Price |
|--------------|----------------|---------------------|---------------|
| 8            | 1.5            | <b>LG-9566T-100</b> | \$3.90        |
| 15           | 1.5            | <b>LG-9566T-102</b> | 4.20          |
| 5            | 2              | <b>LG-9566T-104</b> | 3.90          |
| 7            | 2              | <b>LG-9566T-106</b> | 3.90          |
| 3            | 3              | <b>LG-9566T-108</b> | 4.31          |
| 6.35         | 3              | <b>LG-9566T-110</b> | 4.31          |
| 10           | 3              | <b>LG-9566T-112</b> | 4.31          |
| 12.70        | 3              | <b>LG-9566T-114</b> | 4.31          |

**Stirring Bar, Egg Shaped**

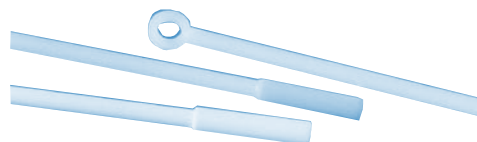
The unique shape provides its own pivot point without separate ring or abrupt change in contour. Designed especially for use in round bottom vessels, it is shaped to spin unrestricted by the vessel contour.

| Length<br>Long Axis<br>Inches | Width<br>Short Axis<br>Inches | Part<br>Number      | Each<br>Price |
|-------------------------------|-------------------------------|---------------------|---------------|
| $\frac{3}{4}$                 | $\frac{3}{8}$                 | <b>LG-9568T-100</b> | \$8.04        |
| 1                             | $\frac{1}{2}$                 | <b>LG-9568T-102</b> | 7.99          |
| 1 $\frac{1}{4}$               | $\frac{5}{8}$                 | <b>LG-9568T-104</b> | 10.07         |
| 1 $\frac{1}{2}$               | $\frac{5}{8}$                 | <b>LG-9568T-106</b> | 10.97         |
| 1 $\frac{5}{8}$               | $\frac{3}{4}$                 | <b>LG-9568T-108</b> | 13.69         |
| 2                             | $\frac{3}{4}$                 | <b>LG-9568T-110</b> | 16.25         |
| 2 $\frac{1}{2}$               | $\frac{3}{4}$                 | <b>LG-9568T-112</b> | 20.78         |
| 3                             | $\frac{3}{4}$                 | <b>LG-9568T-114</b> | 23.71         |

**LG-9568T****Stirring Bar Retriever**

With 3/8" Alnico-V magnet sealed into a PTFE case. Supplied with an attached rod of the same material and hanging loop. The PTFE rod is flexible.

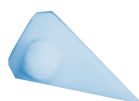
| Length<br>of Rod<br>Inches | Part<br>Material | Part<br>Number      | Each<br>Price |
|----------------------------|------------------|---------------------|---------------|
| 12                         | Polypropylene    | <b>LG-9569T-100</b> | \$10.29       |
| 18                         | Polypropylene    | <b>LG-9569T-110</b> | 11.87         |
| 13                         | PTFE             | <b>LG-9569T-200</b> | 22.95         |

**LG-9569T****Stirrer Bar Positioner/Retriever**

Used to either position your stir bar in place without splashing or to retrieve your stir bar without having to touch or pour out your liquid. Simple to use.

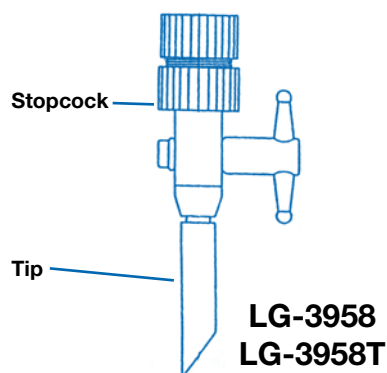
| Diameter<br>x Length  | Part<br>Number      | Each<br>Price |
|-----------------------|---------------------|---------------|
| $\frac{1}{4}$ " x 12" | <b>LG-9570T-100</b> | \$34.00       |

**LG-9570T**

**LG-4394A****Vial, Spin vane for Vials**

Magnet is encased in PTFE and is designed to fit conical shaped Mini-Vials. Provides efficient mixing and stirring for microscale titrations and reactions.

| For Vial Size<br>mL    | Part<br>Number      | Each<br>Price |
|------------------------|---------------------|---------------|
| 0.1 and 1.0            | <b>LG-4394A-100</b> | \$5.00        |
| 2.0, 3.0, 5.0 and 10.0 | <b>LG-4394A-102</b> | 5.50          |

**Buret, Replacement Parts for LG-3957T Burets**

| Supplied          | Part<br>Number      | Each<br>Price |
|-------------------|---------------------|---------------|
| 25mL Buret only   | <b>LG-3958-100</b>  | \$31.19       |
| 50mL Buret only   | <b>LG-3958-102</b>  | 34.79         |
| 2mm PTFE stopcock | <b>LG-3958T-104</b> | 29.68         |
| Buret tip         | <b>LG-3958-106</b>  | 5.69          |

**LG-9607T****Plug, Straight Bore, Teflon**

Plugs are PTFE and have a 1:5 taper.

| Stopcock<br>Size Bore<br>of Plug<br>mm | Diameter<br>of Plug<br>at Center<br>mm | Length<br>of Barrel<br>mm | Part<br>Number      | Each<br>Price |
|----------------------------------------|----------------------------------------|---------------------------|---------------------|---------------|
| 1                                      | 11                                     | 25                        | <b>LG-9607T-100</b> | 12.24         |
| 1 1/2                                  | 11                                     | 25                        | <b>LG-9607T-102</b> | 19.67         |
| 2                                      | 11                                     | 25                        | <b>LG-9607T-104</b> | 11.63         |
| 3                                      | 15.2                                   | 30                        | <b>LG-9607T-106</b> | 16.01         |
| 4                                      | 15.2                                   | 30                        | <b>LG-9607T-108</b> | 13.36         |
| 5                                      | 16                                     | 35                        | <b>LG-9607T-110</b> | 18.97         |
| 6                                      | 16                                     | 35                        | <b>LG-9607T-112</b> | 19.58         |
| 8                                      | 24                                     | 40                        | <b>LG-9607T-114</b> | 70.79         |
| 10*                                    | 24                                     | 40                        | <b>LG-9607T-116</b> | 72.25         |

\*Specifications do not include this large bore stopcock.

**Stopper, Solid, PTFE**

With vertical head having straight edges.

| Size   | Part Number  | Each Price |
|--------|--------------|------------|
| 10/18  | LG-10308-104 | \$15.95    |
| 14/20  | LG-10308-108 | 19.01      |
| 19/22  | LG-10308-110 | 19.87      |
| 24/25  | LG-10308-112 | 29.96      |
| 24/40  | LG-10307-112 | 26.48      |
| 29/26  | LG-10308-114 | 27.97      |
| 29/42  | LG-10307-114 | 37.57      |
| 34/45* | LG-10307-116 | 58.39      |

\*Supplied hollow.

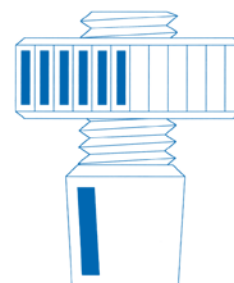


LG-10307  
LG-10308

**Stopper, PTFE, Safe-Lab®**

Stopper with thumb screw nut at top that allows easy removal of stoppers when frozen in place.

| Size  | Supplied | Part Number  | Each Price |
|-------|----------|--------------|------------|
| 14/20 | Solid    | LG-10313-100 | \$68.02    |
| 19/22 | Solid    | LG-10313-102 | 70.16      |
| 24/40 | Hollow   | LG-10313-104 | 72.80      |
| 29/42 | Hollow   | LG-10313-106 | 83.11      |
| 34/45 | Hollow   | LG-10313-108 | 56.48      |
| 45/50 | Hollow   | LG-10313-110 | 110.82     |
| 55/50 | Hollow   | LG-10313-112 | 132.13     |



LG-10313

**Stopper, Solid PTFE**

With vertical head having straight edges. PTFE avoids freezing in ground zone and is used with volumetric flasks and separatory funnels.

| Size | Part Number  | Each Price |
|------|--------------|------------|
| 9    | LG-10322-100 | \$12.64    |
| 13   | LG-10322-102 | 13.96      |
| 16   | LG-10322-104 | 15.90      |
| 19   | LG-10322-106 | 16.48      |
| 22   | LG-10322-108 | 18.30      |
| 27   | LG-10322-110 | 27.21      |
| 32   | LG-10322-112 | 41.51      |
| 38   | LG-10322-114 | 50.69      |



LG-10322

LG-10455



LG-10462



LG-10490



LG-10491



### Thermometer, Celsius, 76mm Immersion, Mineral Spirits

Made with an environmentally safe alcohol or mineral spirits filling in white glass. Thermometers are calibrated for 76mm immersion.

| Medium          | Temp Range °C | Sub-division °C | Overall Length mm | Part Number         | Each Price |
|-----------------|---------------|-----------------|-------------------|---------------------|------------|
| Alcohol         | -100 to +50   | 1               | 305               | <b>LG-10455-100</b> | \$28.81    |
| Alcohol         | -50 to +50    | 1               | 305               | <b>LG-10455-102</b> | 18.58      |
| Alcohol         | -35 to +50    | 1               | 305               | <b>LG-10455-104</b> | 14.60      |
| Mineral Spirits | -20 to +110   | 1               | 305               | <b>LG-10455-106</b> | 13.44      |
| Mineral Spirits | -20 to +150   | 1               | 350               | <b>LG-10455-108</b> | 14.47      |
| Mineral Spirits | -10 to +210   | 1               | 381               | <b>LG-10455-110</b> | 22.44      |
| Mineral Spirits | -10 to +250   | 1               | 381               | <b>LG-10455-112</b> | 29.22      |

### Thermometer, Celsius, Total Immersion, Mineral Spirits

Thermometer is calibrated for total immersion of the medium column. Made with mineral spirits.

| Temp Range °C | Subdivision °C | Overall Length mm | Part Number         | Each Price |
|---------------|----------------|-------------------|---------------------|------------|
| -20 to +110   | 1              | 305               | <b>LG-10462-108</b> | \$13.44    |
| -20 to +150   | 1              | 305               | <b>LG-10462-110</b> | 14.74      |
| -10 to +210   | 1              | 381               | <b>LG-10462-112</b> | 22.44      |

### Thermometer, Celsius, Total Immersion, Red Liquid

Made with mineral spirits. The coloring used will remain dissolved in the liquids under normal conditions of use.

| Actual Range °C | Subdivision °C | Overall Length mm | Part Number         | Each Price |
|-----------------|----------------|-------------------|---------------------|------------|
| -20 to +230     | 1              | 305               | <b>LG-10490-202</b> | \$35.98    |
| -15 to +110     | 1              | 305               | <b>LG-10490-203</b> | 37.35      |
| -50 to +50      | 1              | 305               | <b>LG-10490-204</b> | 30.27      |
| -100 to +50     | 1              | 305               | <b>LG-10490-206</b> | 46.62      |
| -200 to +30     | 1              | 350               | <b>LG-10490-208</b> | 117.88     |

### Thermometer, Celsius, 76mm Immersion, Red Liquid

Made with mineral spirits. The coloring used will remain dissolved in the liquids under normal conditions of use.

| Actual Range °C | Subdivision °C | Overall Length mm | Part Number         | Each Price |
|-----------------|----------------|-------------------|---------------------|------------|
| -20 to +110     | 1              | 305               | <b>LG-10491-100</b> | \$21.57    |
| -20 to +150     | 1              | 305               | <b>LG-10491-102</b> | 23.98      |

### Thermometer, Low Temperature, 76mm Immersion

Made with correct type of organic liquid for the ranges involved.

| Actual Range<br>°C | Subdivision<br>°C | Overall Length<br>mm | Part Number         | Each Price |
|--------------------|-------------------|----------------------|---------------------|------------|
| -100 to +50        | 1                 | 305                  | <b>LG-10492-100</b> | \$26.35    |
| -50 to +50         | 1                 | 305                  | <b>LG-10492-102</b> | 18.15      |

### Thermometer, Enviro-Safe®, Total Immersion

Manufactured with a biodegradable liquid. Each thermometer has a unique serial number and is supplied with a Statement of Accuracy indicating calibration accuracy traceable to N.I.S.T.

| Actual Range<br>°C | Subdivision<br>°C | Overall Length<br>mm | Part Number         | Each Price |
|--------------------|-------------------|----------------------|---------------------|------------|
| -20 to +110        | 1                 | 305                  | <b>LG-10493-100</b> | \$20.49    |
| -20 to +150        | 1                 | 305                  | <b>LG-10493-102</b> | 20.49      |
| -10 to +225        | 1                 | 405                  | <b>LG-10493-104</b> | 24.14      |

### Thermometer, Enviro-Safe®, 76mm Immersion

Manufactured with a biodegradable liquid. Each thermometer has a unique serial number and is supplied with a Statement of Accuracy indicating calibration accuracy traceable to N.I.S.T. Same as *LG-10493* except 76mm immersion.

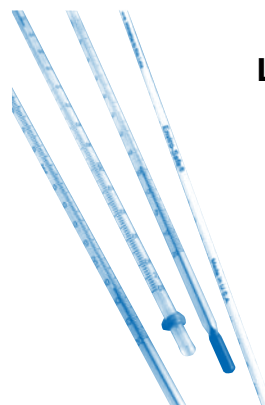
| Actual Range<br>°C | Subdivision<br>°C | Overall Length<br>mm | Part Number         | Each Price |
|--------------------|-------------------|----------------------|---------------------|------------|
| -20 to +110        | 1                 | 305                  | <b>LG-10494-100</b> | \$20.49    |
| -20 to +150        | 1                 | 305                  | <b>LG-10494-102</b> | 20.30      |
| -10 to +260        | 1                 | 405                  | <b>LG-10494-104</b> | 23.90      |

### Thermometer, Enviro-Safe®, 200mm Total Immersion

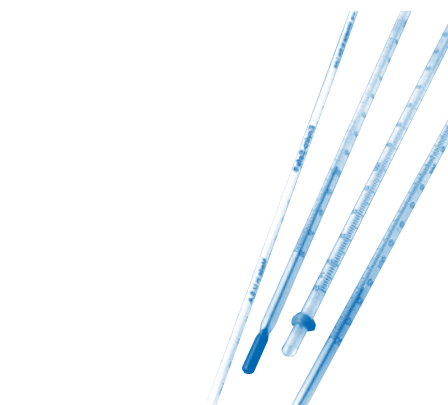
Manufactured with a biodegradable liquid. Each thermometer is supplied with a Statement of Accuracy indicating calibration accuracy traceable to N.I.S.T. Ideal for applications with limited space and immersion. Same as *LG-10493* except 200mm length.

| Actual Range<br>°C | Subdivision<br>°C | Overall Length<br>mm | Part Number         | Each Price |
|--------------------|-------------------|----------------------|---------------------|------------|
| -10 to +110        | 1                 | 200                  | <b>LG-10495-100</b> | \$15.51    |
| -10 to +150        | 1                 | 200                  | <b>LG-10495-102</b> | 15.51      |

**LG-10492**



**LG-10493**

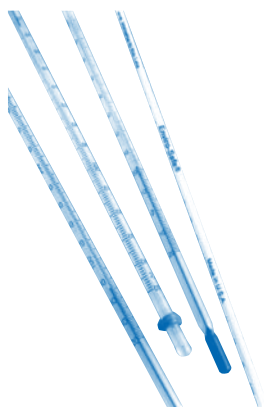


**LG-10494**



**LG-10495**





**LG-10496**



**LG-10515**

**Thermometer, Enviro-Safe®, 200mm, 50mm Immersion**

Manufactured with a biodegradable liquid. Each thermometer is supplied with a Statement of Accuracy indicating calibration accuracy traceable to N.I.S.T. Ideal for applications with limited space and immersion. Same as LG-10493 except 200mm length, 50mm immersion.

| Actual Range °C | Subdivision °C | Overall Length mm | Part Number         | Each Price |
|-----------------|----------------|-------------------|---------------------|------------|
| -10 to +110     | 1              | 200               | <b>LG-10496-100</b> | \$15.51    |
| -10 to +150     | 1              | 200               | <b>LG-10496-102</b> | 17.46      |

**Thermometer, Celsius, 10/30 Joint, Mineral Spirits**

Made with environmentally safe mineral spirits filing in white glass. Thermometers are all in 1 degree C divisions.

| Temp Range °C | Sub-Division °C | Length Below Joint (Immersion) mm | Joint | Part Number         | Each Price |
|---------------|-----------------|-----------------------------------|-------|---------------------|------------|
| -20 to +150   | 1               | 25                                | 10/30 | <b>LG-10515-100</b> | \$53.45    |
| -20 to +150   | 1               | 51                                | 10/30 | <b>LG-10515-102</b> | 53.45      |
| -20 to +150   | 1               | 76                                | 10/30 | <b>LG-10515-104</b> | 53.45      |
| -20 to +150   | 1               | 100                               | 10/30 | <b>LG-10515-106</b> | 34.23      |
| -20 to +150   | 1               | 125                               | 10/30 | <b>LG-10515-108</b> | 35.06      |
| -20 to +150   | 1               | 152                               | 10/30 | <b>LG-10515-110</b> | 35.17      |
| -10 to +250   | 1               | 25                                | 10/30 | <b>LG-10515-128</b> | 53.33      |
| -10 to +250   | 1               | 51                                | 10/30 | <b>LG-10515-130</b> | 56.16      |
| -10 to +250   | 1               | 76                                | 10/30 | <b>LG-10515-132</b> | 56.16      |
| -10 to +250   | 1               | 100                               | 10/30 | <b>LG-10515-134</b> | 56.16      |
| -10 to +250   | 1               | 125                               | 10/30 | <b>LG-10515-136</b> | 59.01      |
| -10 to +250   | 1               | 152                               | 10/30 | <b>LG-10515-138</b> | 59.01      |
| -10 to +250   | 1               | 255                               | 10/30 | <b>LG-10515-150</b> | 40.26      |
| -10 to +250   | 1               | 280                               | 10/30 | <b>LG-10515-152</b> | 40.72      |
| -10 to +250   | 1               | 305                               | 10/30 | <b>LG-10515-154</b> | 42.01      |

### Thermometer, Extended Stem, Deep Immersion

Made with environmentally safe alcohol or mineral spirits filling in white glass. Used for temperature measurement in deep vessels like flasks, where greater immersion is required for accurate reading. Graduated in 1 degree C subdivisions.

| Medium          | Immersion Length mm | Temp Range °C | Overall Length mm | Part Number         | Each Price |
|-----------------|---------------------|---------------|-------------------|---------------------|------------|
| Mineral Spirits | 100                 | -20 to +150   | 325               | <b>LG-10535-100</b> | \$22.44    |
| Mineral Spirits | 100                 | -10 to +250   | 406               | <b>LG-10535-102</b> | 24.78      |
| Mineral Spirits | 125                 | -20 to +150   | 355               | <b>LG-10535-104</b> | 22.80      |
| Mineral Spirits | 125                 | -10 to +250   | 430               | <b>LG-10535-106</b> | 25.72      |
| Alcohol         | 152                 | -100 to +50   | 385               | <b>LG-10535-108</b> | 31.56      |
| Alcohol         | 152                 | -50 to +50    | 385               | <b>LG-10535-110</b> | 24.90      |
| Mineral Spirits | 152                 | -20 to +150   | 385               | <b>LG-10535-112</b> | 23.38      |
| Mineral Spirits | 225                 | -10 to +250   | 535               | <b>LG-10535-122</b> | 27.47      |
| Alcohol         | 305                 | -100 to +50   | 535               | <b>LG-10535-124</b> | 34.72      |
| Alcohol         | 305                 | -50 to +50    | 535               | <b>LG-10535-126</b> | 31.80      |
| Mineral Spirits | 305                 | -20 to +150   | 535               | <b>LG-10535-128</b> | 27.12      |
| Mineral Spirits | 305                 | -10 to +250   | 610               | <b>LG-10535-130</b> | 29.93      |
| Mineral Spirits | 457                 | -20 to +150   | 685               | <b>LG-10535-132</b> | 47.00      |

Available  
in Alcohol  
or  
Mineral  
Spirits

**LG-10535**

### Thermometer, Celsius, Partial Immersion with 7/12 Inner Joint

Calibrated for partial immersion at sufficient points to guarantee accuracy over entire range. Thoroughly aged to insure against drift of values of indications with time. Enamel-backed with outside diameter in scale portion of 6 to 7mm. Top of thermometer has plain rounded finish.

| Range °C    | Subdivision °C | Length Below Joint mm (Immersion) | Part Number        | Each Price |
|-------------|----------------|-----------------------------------|--------------------|------------|
| -10 to +250 | 2              | 25                                | <b>ML-1819-702</b> | \$41.20    |
| -10 to +250 | 2              | 40                                | <b>ML-1819-712</b> | 39.70      |

Mineral  
Spirits

**ML-1819**

### Thermometer, Celsius, Partial Immersion with 10/18 Inner Joint

Similar *ML-1819* except with 10/18 inner member.

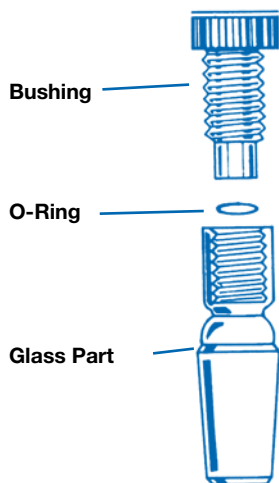
| Range °C    | Subdivision °C | Length Below Joint mm (Immersion) | Part Number        | Each Price |
|-------------|----------------|-----------------------------------|--------------------|------------|
| -10 to +150 | 1              | 25                                | <b>ML-1820-700</b> | \$36.60    |
| -10 to +250 | 1              | 40                                | <b>ML-1820-712</b> | 33.80      |
| -10 to +250 | 1              | 75                                | <b>ML-1820-730</b> | 32.70      |

Mineral  
Spirits

**ML-1820**



**ML-280**  
**LG-1985**



**LG-1986**  
**LG-1991**  
**ML-282**

### Thermometer, Adapter, Straight

With inner member at one end and plain tubulature at opposite end for attachment of a thermometer, gas inlet, bleed tube or stirrer. A rubber fitment, *LG-1988-100*, is supplied to connect these pieces to the adapter.

| Size Joint | Part Number        | Each Price |
|------------|--------------------|------------|
| 14/20      | <b>ML-280-700</b>  | \$13.49    |
| 19/22      | <b>ML-280-702</b>  | 13.60      |
| 24/40      | <b>LG-1985-102</b> | 21.28      |
| 29/26      | <b>LG-1985-103</b> | 23.27      |
| 29/42      | <b>LG-1985-104</b> | 23.25      |

### Thermometer, Adapter, Threaded

With inner joint at bottom. Top is threaded to take *LG-1991* threaded nylon bushing. Bushing makes an O-ring compression seal with thermometers, bleed tubes, etc. when screwed into the adapter. Adapter accommodates thermometers of 7mm O.D. Can be used for vacuum work. Complete includes glass adapter, nylon bushing and Viton® O-ring (*LG-1022-502*). Also available with solid bushing (*LG-1991-102*).

| Supplied        | Size Joint | Part Number        | Each Price |
|-----------------|------------|--------------------|------------|
| Complete        | 14/20      | <b>ML-282-800</b>  | \$32.75    |
| Complete        | 19/22      | <b>ML-282-802</b>  | 33.44      |
| Complete        | 24/40      | <b>LG-1986-200</b> | 21.08      |
| Complete        | 29/42      | <b>LG-1986-202</b> | 24.23      |
| Glass Part Only | 14/20      | <b>ML-282-700</b>  | 22.55      |
| Glass Part Only | 19/22      | <b>ML-282-702</b>  | 23.35      |
| Glass Part Only | 24/40      | <b>LG-1986-100</b> | 25.72      |
| Glass Part Only | 29/42      | <b>LG-1986-102</b> | 26.93      |
| Bushing w/Hole  |            | <b>LG-1991-100</b> | 5.57       |
| Solid Bushing   |            | <b>LG-1991-102</b> | 6.39       |
| Viton® O-Ring   |            | <b>LG-1022-502</b> | 0.84       |

### Thermometer, Adapter, Inlet

Borosilicate glass equivalent to *LG-1453* which has a wider diameter accommodation range. Inlet seal is made with a Viton® O-Ring. Adapter is capable of sealing thermometers, syringes, pipets, etc. Insert probes can be positioned within the apparatus by loosening the screw cap and tightening to create a seal. Supplied as a complete assembly with a screw cap and Viton® O-Ring.

| ⌘ Joint | Accommodation Range mm | Part Number        | Each Price |
|---------|------------------------|--------------------|------------|
| 14/20   | 5-8                    | <b>LG-1451-108</b> | \$25.15    |
| 24/40   | 5-8                    | <b>LG-1451-304</b> | 26.61      |
| 29/42   | 5-8                    | <b>LG-1451-404</b> | 26.61      |

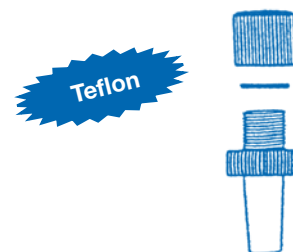


**LG-1451**

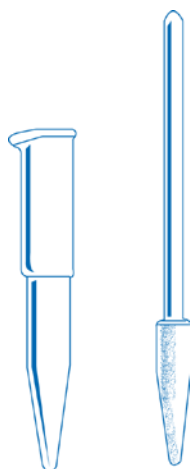
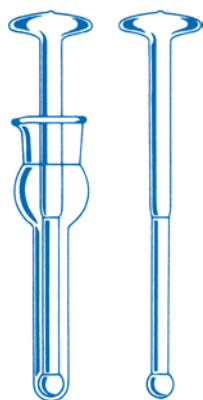
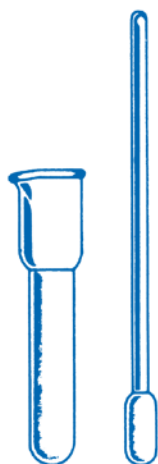
### Adapter, Thermometer, PTFE

Inner joint adapter with compression cap and saddle O-ring for use with plain stem thermometers and inlet tubes. Comes with four saddle O-Rings which accepts O.D.s from 3.8 to 6.3mm.

| ⌘ Joint | May be used in Outer Members | Part Number        | Each Price |
|---------|------------------------------|--------------------|------------|
| 10/18   | 10/18, 10/30                 | <b>LG-1453-100</b> | \$14.10    |
| 14/20   | 14/20, 14/35                 | <b>LG-1453-102</b> | 15.00      |
| 19/22   | 19/22, 19/38                 | <b>LG-1453-104</b> | 18.00      |
| 24/25   | 24/25, 24/40                 | <b>LG-1453-106</b> | 20.00      |
| 29/26   | 29/26, 29/42                 | <b>LG-1453-108</b> | 22.00      |
| 34/28   | 34/28, 34/45                 | <b>LG-1453-110</b> | 35.00      |



**LG-1453**


**LG-10640**

**LG-10645**

**LG-10650**

### Tissue Grinder, Dual Glass Pestle

A universal design which will handle both initial grinding and final homogenization in the same sequence of operations. The lower conical section is intended primarily for the initial grinding. To assist in this work, the clearance between mortar and pestle can be adjusted at will by raising or lowering the pestle. The upper cylindrical section is for the final homogenization. Parts are interchangeable and are finished for a clearance of 0.004" to 0.006".

| Supplied | Effective Capacity mL | Shaft Diameter mm | Part Number         | Each Price |
|----------|-----------------------|-------------------|---------------------|------------|
| Complete | 1                     | 6                 | <b>LG-10640-100</b> | \$60.93    |
| Complete | 3                     | 6                 | <b>LG-10640-102</b> | 68.58      |
| Complete | 5                     | 8                 | <b>LG-10640-104</b> | 85.55      |
| Complete | 15                    | 10                | <b>LG-10640-106</b> | 97.42      |
| Complete | 30                    | 10                | <b>LG-10640-108</b> | 120.90     |
| Complete | 50                    | 16                | <b>LG-10640-110</b> | 156.19     |

### Tissue Grinder, Dounce, Glass Pestle

Complete unit is supplied with two pestles: Large Clearance - for initial reduction of soft tissue or cellular sample, Small Clearance - completes homogenization with retention of a high percentage of nuclei and mitochondria. Smooth glass surfaces eliminate glass particles in the reduced sample. This homogenizer is very useful in enzyme studies and recommended where heat build-up should be avoided.

LARGE CLEARANCE SPECIFICATION: 0.0035" to 0.0055"

SMALL CLEARANCE SPECIFICATION: 0.0010" to 0.0030"

| Supplied | Effective Capacity mL | Part Number         | Each Price |
|----------|-----------------------|---------------------|------------|
| Complete | 2                     | <b>LG-10645-090</b> | \$101.39   |
| Complete | 7                     | <b>LG-10645-100</b> | 118.11     |
| Complete | 15                    | <b>LG-10645-200</b> | 135.52     |
| Complete | 40                    | <b>LG-10645-300</b> | 135.99     |

### Tissue Grinder, Potter-Elvehjem, Glass Pestle

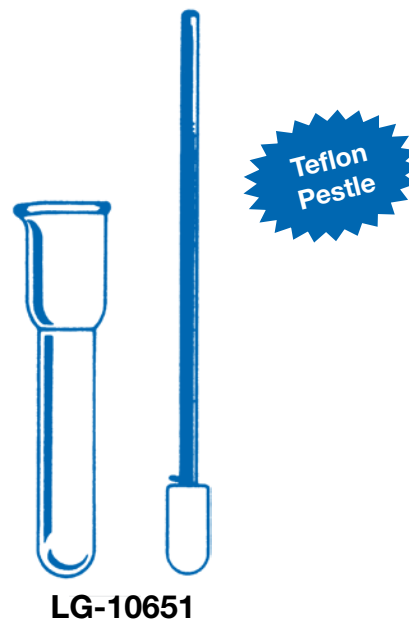
Mortar and pestle are all glass having finely ground contact surfaces. Homogenizer can be motor driven using flexible tubing as a friction clutch to the stirrer motor. Components completely interchangeable and have a clearance of 0.004" to 0.006".

| Supplied | Effective Capacity mL | Shaft Diameter mm | Part Number         | Each Price |
|----------|-----------------------|-------------------|---------------------|------------|
| Complete | 5                     | 6                 | <b>LG-10650-100</b> | \$73.33    |

**Tissue Grinder, Potter-Elvehjem, PTFE Pestle**

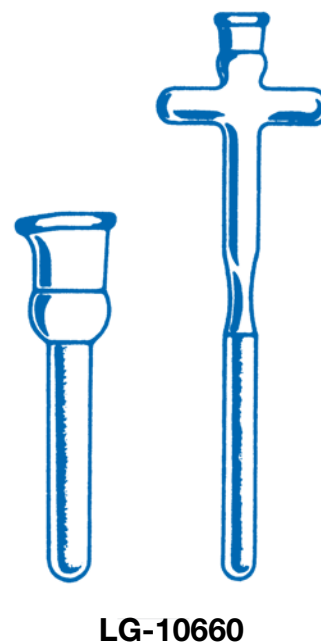
Pestle is PTFE and attached to a stainless steel shaft. Mortar is not ground and is precision formed. Homogenization occurs as the sample and buffer are forced through the cylindrical portion of the mortar as the pestle rotated downward. Tissue grinder standard clearance is 0.004" to 0.006".

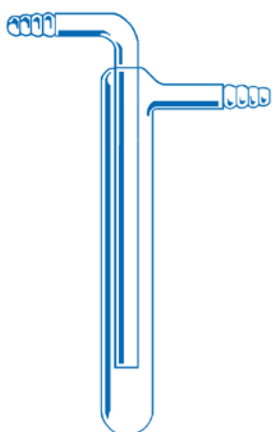
| Supplied | Effective Capacity mL | Shaft Diameter in. | Part Number         | Each Price |
|----------|-----------------------|--------------------|---------------------|------------|
| Complete | 0.5                   | $\frac{3}{16}$     | <b>LG-10651-010</b> | \$103.97   |
| Complete | 1                     | $\frac{3}{16}$     | <b>LG-10651-100</b> | 96.33      |
| Complete | 3                     | $\frac{3}{16}$     | <b>LG-10651-102</b> | 89.72      |
| Complete | 5                     | $\frac{1}{4}$      | <b>LG-10651-104</b> | 91.63      |
| Complete | 8                     | $\frac{1}{4}$      | <b>LG-10651-106</b> | 113.25     |
| Complete | 17                    | $\frac{1}{4}$      | <b>LG-10651-108</b> | 129.34     |
| Complete | 45                    | $\frac{1}{4}$      | <b>LG-10651-110</b> | 118.90     |


**Tissue Grinder, Ten Broeck, Glass Pestle**

All glass construction primarily for manual operation. Interior of pestle is hollow allowing use of a coolant to reduce heat generated in the grinding process. It can be used with a laboratory stirrer at low speed if a rubber stopper is inserted in the top of the pestle. A short steel rod (not supplied) completes the connection to the collet or Jacobs chuck. Standard clearance is 0.004" to 0.006".

| Supplied | Effective Capacity mL | Metal Rod Size in. | Rubber Stopper Number | Part Number         | Each Price |
|----------|-----------------------|--------------------|-----------------------|---------------------|------------|
| Complete | 2                     | $\frac{1}{8}$      | 00                    | <b>LG-10660-100</b> | \$93.20    |
| Complete | 7                     | $\frac{1}{8}$      | 00                    | <b>LG-10660-102</b> | 102.23     |
| Complete | 15                    | $\frac{1}{4}$      | 1                     | <b>LG-10660-104</b> | 99.75      |





LG-11013



LG-11015



LG-11017

### Trap, Vacuum, One Piece, with Hose Connections

Widely used to protect vacuum pumps from contamination  $\frac{3}{8}$ " hose connections are  $180^\circ$  apart to ease connection of heavy wall rubber tubing used in basic vacuum set-ups. Frequently used with liquid nitrogen Dewars to provide rapid condensation of volatiles.

| O.D. of Body<br>x Length<br>mm | Part<br>Number | Each<br>Price |
|--------------------------------|----------------|---------------|
| 25 x 200                       | LG-11013-100   | \$57.57       |
| 35 x 250                       | LG-11013-104   | 71.96         |
| 45 x 275                       | LG-11013-108   | 81.56         |
| 51 x 300                       | LG-11013-110   | 101.96        |
| 70 x 325                       | LG-11013-112   | 173.94        |

### Trap, Vacuum

Fabricated with two  $\frac{5}{16}$ " hose connections to the top of the body. Connection to vacuum source is sealed at a  $45^\circ$  angle.

| O.D. of Body<br>x Length mm | Part<br>Number | Each<br>Price |
|-----------------------------|----------------|---------------|
| 38 x 300                    | LG-11015-102   | \$63.57       |
| 51 x 300                    | LG-11015-106   | 86.36         |

### Trap, Vacuum

One piece design having two vertical hose connections. Design affords use with a wide variety of Dewar Flasks.

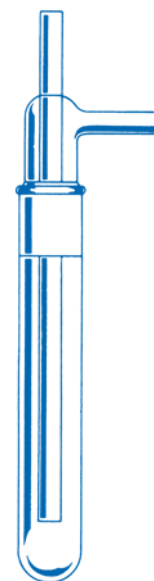
| Hose<br>Connection<br>Size | O.D. of Body<br>x Length mm | Part<br>Number | Each<br>Price |
|----------------------------|-----------------------------|----------------|---------------|
| $\frac{1}{4}$ "            | 60 x 250                    | LG-11017-100   | \$112.27      |
| $\frac{1}{2}$ "            | 60 x 250                    | LG-11017-102   | 118.50        |



**Trap, Vacuum, Two-Piece, Straight Top Stem**

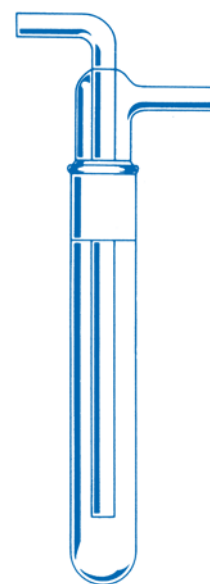
With body and stopper connected by a joint. Both inlet and outlet stems are integral with the stopper.

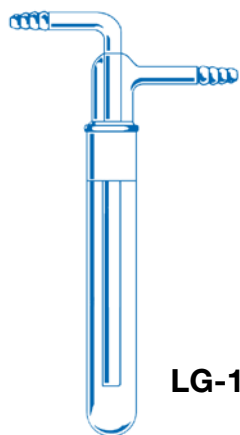
| Supplied     | O.D. of Body<br>x Length<br>mm | Joint | Outside<br>Diameter<br>of Stems<br>mm | Part<br>Number      | Each<br>Price |
|--------------|--------------------------------|-------|---------------------------------------|---------------------|---------------|
| Complete     | 28 x 200                       | 24/40 | 10                                    | <b>LG-11020-098</b> | \$59.41       |
| Complete     | 32 x 200                       | 29/42 | 10                                    | <b>LG-11020-100</b> | 79.06         |
| Complete     | 38 x 225                       | 34/45 | 13                                    | <b>LG-11020-102</b> | 88.50         |
| Complete     | 45 x 250                       | 40/50 | 16                                    | <b>LG-11020-104</b> | 102.27        |
| Complete     | 48 x 250                       | 45/50 | 20                                    | <b>LG-11020-106</b> | 124.27        |
| Complete     | 54 x 275                       | 50/50 | 25                                    | <b>LG-11020-108</b> | 138.83        |
| Complete     | 60 x 300                       | 55/50 | 30                                    | <b>LG-11020-110</b> | 165.73        |
| Body Only    | 28 x 200                       | 24/40 |                                       | <b>LG-11020-198</b> | 24.58         |
| Body Only    | 32 x 200                       | 29/42 |                                       | <b>LG-11020-200</b> | 26.75         |
| Body Only    | 38 x 225                       | 34/45 |                                       | <b>LG-11020-202</b> | 33.50         |
| Body Only    | 45 x 250                       | 40/50 |                                       | <b>LG-11020-204</b> | 42.79         |
| Body Only    | 48 x 250                       | 45/50 |                                       | <b>LG-11020-206</b> | 51.68         |
| Body Only    | 54 x 275                       | 50/50 |                                       | <b>LG-11020-208</b> | 56.16         |
| Body Only    | 60 x 300                       | 55/50 |                                       | <b>LG-11020-210</b> | 62.91         |
| Stopper Only |                                | 24/40 | 10                                    | <b>LG-11020-298</b> | 35.98         |
| Stopper Only |                                | 29/42 | 10                                    | <b>LG-11020-300</b> | 53.50         |
| Stopper Only |                                | 34/45 | 13                                    | <b>LG-11020-302</b> | 57.49         |
| Stopper Only |                                | 40/50 | 16                                    | <b>LG-11020-304</b> | 62.91         |
| Stopper Only |                                | 45/50 | 20                                    | <b>LG-11020-306</b> | 73.10         |
| Stopper Only |                                | 50/50 | 25                                    | <b>LG-11020-308</b> | 84.24         |
| Stopper Only |                                | 55/50 | 30                                    | <b>LG-11020-310</b> | 104.25        |

**LG-11020****Trap, Vacuum, Two-Piece, Bent Top Stem**

With body and stopper connected by a joint. Both inlet and outlet stems are integral with the stopper. See LG-11020 for body only.

| Supplied     | O.D. of Body<br>x Length<br>mm | Joint | Outside<br>Diameter<br>of Stems<br>mm | Part<br>Number      | Each<br>Price |
|--------------|--------------------------------|-------|---------------------------------------|---------------------|---------------|
| Complete     | 32 x 200                       | 29/42 | 10                                    | <b>LG-11025-100</b> | \$81.58       |
| Complete     | 38 x 225                       | 34/45 | 13                                    | <b>LG-11025-102</b> | 93.51         |
| Complete     | 45 x 250                       | 40/50 | 16                                    | <b>LG-11025-104</b> | 106.91        |
| Complete     | 48 x 250                       | 45/50 | 20                                    | <b>LG-11025-106</b> | 126.01        |
| Complete     | 54 x 275                       | 50/50 | 25                                    | <b>LG-11025-108</b> | 141.74        |
| Complete     | 60 x 300                       | 55/50 | 30                                    | <b>LG-11025-110</b> | 168.37        |
| Stopper Only |                                | 29/42 | 10                                    | <b>LG-11025-300</b> | 53.50         |
| Stopper Only |                                | 34/45 | 13                                    | <b>LG-11025-302</b> | 61.46         |
| Stopper Only |                                | 40/50 | 16                                    | <b>LG-11025-304</b> | 59.06         |
| Stopper Only |                                | 45/50 | 20                                    | <b>LG-11025-306</b> | 74.84         |
| Stopper Only |                                | 50/50 | 25                                    | <b>LG-11025-308</b> | 86.88         |
| Stopper Only |                                | 55/50 | 30                                    | <b>LG-11025-310</b> | 106.91        |

**LG-11025**

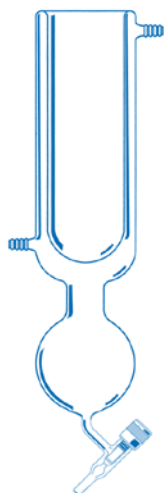


LG-11026

### Trap, Vacuum, Two-Piece, with Hose Connections

Traps have a joint to ease disassembly and allow cleaning/draining.  $\frac{3}{8}$ " hose connections provide an easy connection when using rubber tubing. Sidearms are 180° apart. See LG-11020 for body only.

| Supplied     | Body O.D.<br>x Height<br>Below<br>Joint mm | Joint | Outside<br>Diameter<br>of Stems<br>mm | Part<br>Number      | Each<br>Price |
|--------------|--------------------------------------------|-------|---------------------------------------|---------------------|---------------|
| Complete     | 32 x 200                                   | 29/42 | 10                                    | <b>LG-11026-100</b> | \$86.88       |
| Complete     | 38 x 225                                   | 34/45 | 13                                    | <b>LG-11026-102</b> | 98.95         |
| Complete     | 45 x 250                                   | 40/50 | 16                                    | <b>LG-11026-104</b> | 112.32        |
| Complete     | 48 x 250                                   | 45/50 | 20                                    | <b>LG-11026-106</b> | 136.48        |
| Complete     | 54 x 275                                   | 50/50 | 25                                    | <b>LG-11026-108</b> | 147.04        |
| Complete     | 60 x 300                                   | 55/50 | 30                                    | <b>LG-11026-110</b> | 173.81        |
| Stopper Only |                                            | 29/42 | 10                                    | <b>LG-11026-300</b> | 61.46         |
| Stopper Only |                                            | 34/45 | 13                                    | <b>LG-11026-302</b> | 66.90         |
| Stopper Only |                                            | 40/50 | 16                                    | <b>LG-11026-304</b> | 70.87         |
| Stopper Only |                                            | 45/50 | 20                                    | <b>LG-11026-306</b> | 93.61         |
| Stopper Only |                                            | 50/50 | 25                                    | <b>LG-11026-308</b> | 92.20         |
| Stopper Only |                                            | 55/50 | 30                                    | <b>LG-11026-310</b> | 112.32        |

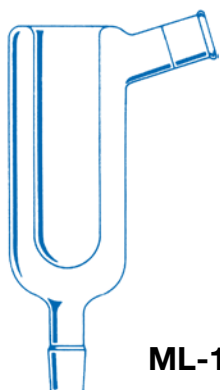


LG-11065

### Trap, Vacuum, Dewar Shape

Designed to remove relatively large volumes of solvent. Can be used with rotary evaporators. Inner cylinder is charged with dry ice/alcohol or liquid nitrogen. Lower reservoir has a PTFE valve to remove condensate.

| Inner<br>Chamber<br>Approx.<br>I.D. x<br>Depth | Lower<br>Reservoir<br>Capacity<br>mL | PTFE<br>Valve<br>Size | Part<br>Number      | Each<br>Price |
|------------------------------------------------|--------------------------------------|-----------------------|---------------------|---------------|
| 59 x 230                                       | 250                                  | 0-4mm                 | <b>LG-11065-094</b> | \$324.34      |
| 75 x 275                                       | 500                                  | 0-4mm                 | <b>LG-11065-096</b> | 405.42        |
| 95 x 330                                       | 1L                                   | 0-8mm                 | <b>LG-11065-098</b> | 436.63        |
| 110 x 325                                      | 2L                                   | 0-8mm                 | <b>LG-11065-100</b> | 480.65        |



ML-1825

### Trap, Dewar

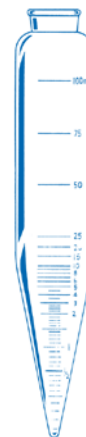
Similar to a Dewar flask but with addition of inner joint at bottom and an outer joint of the same size and style extending in an upward direction from the side of jacket near the top. The inside diameter of flask is approximately 32mm and the inside height is approximately 120mm.

| Joint | Part<br>Number     | Each<br>Price |
|-------|--------------------|---------------|
| 14/20 | <b>ML-1825-700</b> | \$112.09      |
| 19/22 | <b>ML-1825-702</b> | 118.23        |

**Tube, Centrifuge, Oil, ASTM**

Calibrated to contain. Used for determinations of water and sediment in petroleum and its products, including fuel oils and lubricating oils. See ASTM Methods D96, D1796 and D91 and also API Code 2500.

| Capacity<br>mL | Subdivision<br>mL                                                                                                                     | Approx.<br>O.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------|---------------|
| 100            | 0 to 5/10 in 5/100;<br>5/10 to 2 in 1/10;<br>2 to 3 in 2/10;<br>3 to 5 in 5/10;<br>5 to 10 in 1;<br>10 to 25 in 5;<br>25 to 100 in 25 | 38 x 200                       | <b>LG-4470-100</b> | \$47.97       |

**LG-4470****Tube, Centrifuge, Oil, ASTM**

Calibrated to contain. For use in petroleum test methods ASTM D96 and API Code 2500. Designed to be used in the field.

| Capacity<br>mL | Subdivision<br>mL                                                                                                                    | Approx.<br>O.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------|---------------|
| 100            | 0 to 5/10 in 5/100;<br>5/10 to 2 in 1/10;<br>2 to 3 in 2/10;<br>3 to 5 in 5/10;<br>5 to 10 in 1;<br>10 to 25 in 5;<br>and at 50, 100 | 45 x 165                       | <b>LG-4472-100</b> | \$52.78       |

**LG-4472****Tube, Capillary Tip Centrifuge, ASTM**

A long form 100mL capacity oil centrifuge tube as required in ASTM D2709. The capillary tip makes it ideal for use when only small amounts of solids are present. Approximate widest O.D. is 38mm, approximate length is 200mm.

| Capacity<br>mL | Graduations<br>mL                                                                                                                                                          | Part<br>Number     | Each<br>Price |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|
| 100            | 0.005 to 0.010 x 0.0025<br>0.01 to 0.05 x 0.005<br>0.05 to 0.5 x 0.05<br>0.5 to 2.0 x 0.1<br>2 to 3 x 0.2<br>3 to 5 x 0.5<br>5 to 10 x 1<br>10 to 25 x 5<br>25 to 100 x 25 | <b>LG-4473-100</b> | \$75.32       |

Replaces LX3694

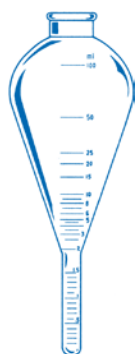
**LG-4473**



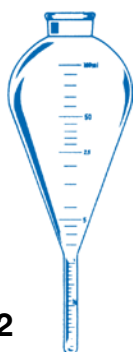
**LG-4474**



**LG-4420**



**LG-4490**



**LG-4492**

### Tube, Capillary Tip Centrifuge, ASTM

A capillary tipped long form 100mL centrifuge tube designed for use in ASTM D2273 and ASTM D2709. Approximate widest O.D. is 38mm, approximate length is 200mm.

| Capacity<br>mL | Graduations<br>mL                                                                        | Part<br>Number     | Each<br>Price |
|----------------|------------------------------------------------------------------------------------------|--------------------|---------------|
| 100            | 0.005 to 0.01 x 0.0005<br>0.01 to 0.05 x 0.01<br>0.05 to 0.5 x 0.05<br>and at 50 and 100 | <b>LG-4474-100</b> | \$64.82       |

Replaces LX3698

### Tube, Centrifuge, Oil, ASTM

Calibrated to contain. Originally devised for determination of bottom sediment and water in petroleum and its products.

| Capacity<br>mL | Subdivision<br>mL                                                    | Approx.<br>Widest<br>O.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|----------------------------------------------------------------------|------------------------------------------|--------------------|---------------|
| 100            | 0 to 1 in 5/100;<br>1 to 5 in 1;<br>5 to 50 in 5;<br>50 to 100 in 10 | 58 x 158                                 | <b>LG-4420-100</b> | \$80.39       |

### Tube, Centrifuge, Oil, ASTM

Calibrated to contain. Similar in shape to *LG-4420*, but with a lower stem calibrated to hold 1.5mL. Specified in ASTM Method D96 as suitable for a number of tests on petroleum products.

| Capacity<br>mL | Subdivision<br>mL                                                                           | Approx.<br>Widest<br>O.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|---------------------------------------------------------------------------------------------|------------------------------------------|--------------------|---------------|
| 100            | 1 to 1.5 in 1/10;<br>1.5 to 5 in 5/10;<br>5 to 10 in 1;<br>10 to 25 in 5;<br>and at 50, 100 | 58 x 158                                 | <b>LG-4490-100</b> | \$85.56       |

### Tube, Centrifuge, Oil, ASTM

Calibrated to contain. Similar in shape to *LG-4490*, but the stem is calibrated to hold 1mL.

| Capacity<br>mL | Subdivision<br>mL                                                    | Approx.<br>Widest<br>O.D. x Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|----------------------------------------------------------------------|------------------------------------------|--------------------|---------------|
| 100            | 0 to 1 in 5/100;<br>1 to 5 in 1;<br>5 to 50 in 5;<br>50 to 100 in 10 | 58 x 158                                 | <b>LG-4492-100</b> | \$93.55       |

**Tube, PYREX®, Weathering Test, Graduated**

Graduated upward to 0.5mL in divisions of 0.05mL, from 0.5mL to 3mL in 0.1mL divisions, from 3mL to 5mL in 0.5mL divisions and from 5mL to 100mL in 1mL divisions. Made with a 3mm vent hole located 180° from the front of the tube.

For testing propane, butane and isobutane mixtures.

Reference: "California Natural Gasoline Association, "Specifications TS-441-3, ASTM D-1837, D-2158.

| Capacity<br>mL | Approx.<br>O.D. x<br>Height<br>mm | Part<br>Number    | Each<br>Price |
|----------------|-----------------------------------|-------------------|---------------|
| 100            | 37 x 200                          | <b>C-9610-100</b> | \$46.49       |

**C-9610****Tube, PYREX®, Centrifuge, Conical, Pennyhead Stopper, Graduated**

These tubes have white enamel graduations. The 5 and 15mL sizes are graduated upward from the tip in 0.1mL divisions. The 50mL size is graduated upward from tip to 10mL in 0.5mL divisions, and from 10 to 50 in 1mL divisions. The pennyhead stopper is solid.

| Capacity<br>mL | Stopper<br>No. | Approx.<br>O.D. x<br>Length mm<br>Exclusive<br>of Stopper | Part<br>Number   | Each<br>Price |
|----------------|----------------|-----------------------------------------------------------|------------------|---------------|
| 5.0            | 9              | 13 x 120                                                  | <b>C-8084-5</b>  | \$30.02       |
| 15.0           | 13             | 17 x 139                                                  | <b>C-8084-15</b> | 26.66         |
| 50.0           | 16             | 28 x 151                                                  | <b>C-8084-50</b> | 36.56         |

**C-8084****Tube, PYREX®, Centrifuge, Conical, Beaded Rim**

Uniform glass distribution in the wall, taper and bottom provides improved mechanical strength, prevents the formation of failure-causing stress regions during centrifuging and insures the highest degree of accuracy.

| Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | Part<br>Number   | Each<br>Price |
|----------------|-----------------------------------|------------------|---------------|
| 3.0            | 11 x 76                           | <b>C-8060-3</b>  | \$3.83        |
| 5.0            | 13 x 101                          | <b>C-8060-5</b>  | 3.83          |
| 15.0           | 17 x 120                          | <b>C-8060-15</b> | 4.44          |
| 50.0           | 28 x 135                          | <b>C-8060-50</b> | 7.77          |

**C-8060**



**C-8080**



**C-8360**



**C-7952**

**Tube, PYREX®, Centrifuge, Conical, Beaded Rim, Graduated**

These tubes have white enamel graduations. The 15mL size is graduated upward from tip in 0.1mL divisions. The 50mL size is graduated upward from tip to 10mL in 0.5mL divisions, and from 10mL to 50mL in 1mL divisions.

| Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | Part<br>Number   | Each<br>Price |
|----------------|-----------------------------------|------------------|---------------|
| 15.0           | 17 x 119                          | <b>C-8080-15</b> | \$12.27       |
| 50.0           | 28 x 135                          | <b>C-8080-50</b> | 18.87         |

**Tube, PYREX®, Centrifuge, Beaded Rim, Graduated**

Used to measure H<sub>2</sub>O content and potassium ions in oil muds. API RP 13B standard testing method. Graduated in 0.1mL divisions up to 4mL, and 0.2mL divisions from 4 to 10mL. Tolerances: to 0.5mL  $\pm 0.02$ mL; 0.5 to 2mL  $\pm 0.04$ mL; over 2mL  $\pm 0.1$ mL. Graduations are durable white enamel.

| Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | Part<br>Number   | Each<br>Price |
|----------------|-----------------------------------|------------------|---------------|
| 10.0           | 17 x 125                          | <b>C-8360-10</b> | \$37.89       |

**Tube, PYREX® Lifetime Red™, Taylor, Universal, Graduated**

This tube is for general hospital laboratory work. It was designed by Dr. F.N.L. Taylor, Boston City Hospital, for determinations involving multiple calibrations and or carrying out digestions. Graduated at 12.5, 25, 35 and 50mL, and supplied with a durable white enamel marking spot.

| Capacity<br>mL | Total<br>$\pm$ mL | Approx.<br>O.D. x<br>Length<br>mm | Part<br>Number   | Each<br>Price |
|----------------|-------------------|-----------------------------------|------------------|---------------|
| 50.0           | 0.4               | 25 x 200                          | <b>C-7952-25</b> | \$24.57       |

**Tube, PYREX®, Culture, Rimless**

Rimless for greater convenience in plugging and rack storage. Walls and bottoms are of uniform thickness. Ends are fire-polished. The 6, 22 and 25mm O.D. tubes do not have marking spots.

| Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | Part<br>Number     | Each<br>Price |
|----------------|-----------------------------------|--------------------|---------------|
| 0.5            | 6 x 50                            | <b>C-9820-6</b>    | \$.35         |
| 3.0            | 10 x 75                           | <b>C-9820-10</b>   | .37           |
| 5.0            | 12 x 75                           | <b>C-9820-12</b>   | .37           |
| 9.0            | 13 x 100                          | <b>C-9820-13</b>   | .39           |
| 11.0           | 16 x 100                          | <b>C-9820-16</b>   | .46           |
| 15.0           | 16 x 125                          | <b>C-9820-6X</b>   | .46           |
| 20.0           | 16 x 150                          | <b>C-9820-16XX</b> | .57           |
| 27.0           | 18 x 150                          | <b>C-9820-18</b>   | .62           |
| 34.0           | 20 x 150                          | <b>C-9820-20</b>   | .71           |
| 50.0           | 22 x 175                          | <b>C-9820-22</b>   | 1.13          |
| 55.0           | 25 x 150                          | <b>C-9820-25</b>   | 1.20          |
| 70.0           | 25 x 200                          | <b>C-9820-25X</b>  | 1.57          |

**C-9820****Tube, PYREX®, Culture, Screw Cap**

Furnished with deep-form phenolic caps to facilitate handling and sealing after autoclaving. Caps are fabricated from a formula resistant to the effects of temperature and steam in autoclaving. Caps are provided with a glued-in, white rubber liner. The white enamel marking spot gives an excellent surface for pencil notations. Pencil marks are easily erased.

| Approx.<br>Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | G.P.I.<br>Thread<br>Finish | Part<br>Number     | Each<br>Price |
|---------------------------|-----------------------------------|----------------------------|--------------------|---------------|
| 9.0                       | 13 x 100                          | 13-415                     | <b>C-9825-13</b>   | \$1.15        |
| 11.0                      | 16 x 100                          | 15-415                     | <b>C-9825-16</b>   | 1.58          |
| 15.0                      | 16 x 125                          | 15-415                     | <b>C-9825-16X</b>  | 1.58          |
| 20.0                      | 16 x 150                          | 15-415                     | <b>C-9825-16XX</b> | 1.58          |
| 25.0                      | 20 x 125                          | 18-415                     | <b>C-9825-20</b>   | 1.93          |
| 34.0                      | 20 x 150                          | 18-415                     | <b>C-9825-20X</b>  | 2.19          |
| 50.0                      | 22 x 175                          | 18-415                     | <b>C-9825-22</b>   | 2.54          |
| 55.0                      | 25 x 150                          | 24-410                     | <b>C-9825-25</b>   | 2.45          |
| 70.0                      | 25 x 200                          | 24-410                     | <b>C-9825-25X</b>  | 2.82          |
| 170.0                     | 38 x 200                          | 38-430M                    | <b>C-9825-38</b>   | 9.74          |

**C-9825**





C-9826

### Tube, PYREX®, Culture, Screw Cap WITH PTFE LINER

Similar to No. 9825, but phenolic cap has a PTFE interface firmly bonded to the glued-in liner, providing a sure and highly inert sealing face.

| Approx.<br>Capacity<br>mL | Approx.<br>O.D. x<br>Length<br>mm | G.P.I.<br>Thread<br>Finish | Part<br>Number     | Each<br>Price |
|---------------------------|-----------------------------------|----------------------------|--------------------|---------------|
| 9.0                       | 13 x 100                          | 13-415                     | <b>C-9826-13</b>   | \$1.51        |
| 11.0                      | 16 x 100                          | 15-415                     | <b>C-9826-16</b>   | 1.67          |
| 15.0                      | 16 x 125                          | 15-415                     | <b>C-9826-16X</b>  | 1.84          |
| 20.0                      | 16 x 150                          | 15-415                     | <b>C-9826-16XX</b> | 1.93          |
| 25.0                      | 20 x 125                          | 18-415                     | <b>C-9826-20</b>   | 2.42          |
| 34.0                      | 20 x 150                          | 18-415                     | <b>C-9826-20X</b>  | 2.53          |
| 55.0                      | 25 x 150                          | 24-410                     | <b>C-9826-25</b>   | 3.06          |
| 70.0                      | 25 x 200                          | 24-410                     | <b>C-9826-25X</b>  | 2.23          |

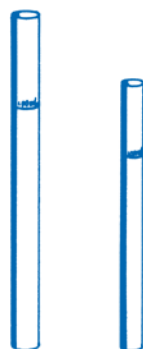


LG-10715

### Tube, Color Comparison, Nessler, Low Form

Unmatched, graduated at specific points.

| Graduated<br>at mL | Approx.<br>O.D. x<br>Height<br>mm | Graduated<br>Length<br>mm | Part<br>Number      | Each<br>Price |
|--------------------|-----------------------------------|---------------------------|---------------------|---------------|
| 50                 | 25 x 175                          | 126 - 136                 | <b>LG-10715-100</b> | \$15.06       |
| 100                | 32 x 200                          | 145 - 163                 | <b>LG-10715-102</b> | 18.40         |



LG-10717

### Tube, Color Comparison, Nessler, Tall Form

Unmatched with graduations.

| Graduated<br>at mL | Approx.<br>O.D. x<br>Height<br>mm | Graduated<br>Length<br>mm | Part<br>Number      | Each<br>Price |
|--------------------|-----------------------------------|---------------------------|---------------------|---------------|
| 50                 | 20 x 300                          | 200 - 220                 | <b>LG-10717-100</b> | \$16.43       |
| 100                | 24 x 375                          | 274 - 296                 | <b>LG-10717-102</b> | 20.26         |

### Tube, Hybridization Vessels

Made of borosilicate glass. Require minimal probe volumes. Tubes have heavy walls, reference graduations and are straight sided with no hold-up at thread. Supplied with threaded, leakproof screw cap. Additional caps and O-Rings can be purchased separately.

| Approx.<br>O.D. x Height<br>mm | Part<br>Number     | Each<br>Price |
|--------------------------------|--------------------|---------------|
| Hybridization Vessel, 35 x 100 | <b>LG-3310-100</b> | \$42.26       |
| Hybridization Vessel, 35 x 150 | <b>LG-3310-102</b> | 44.18         |
| Hybridization Vessel, 35 x 225 | <b>LG-3310-104</b> | 47.40         |
| Hybridization Vessel, 35 x 300 | <b>LG-3310-106</b> | 50.59         |
| Screw Cap Only                 | <b>LG-3310-108</b> | 3.42          |
| O-Ring Only                    | <b>LG-3310-110</b> | 2.48          |

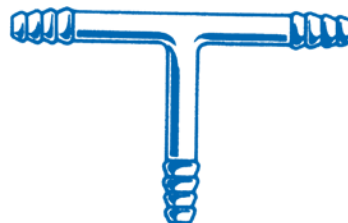


**LG-3310**

### Tube, Connecting, T-Shaped

With serrated ends.

| Outside<br>Diameter of Tube<br>mm | Part<br>Number      | Each<br>Price |
|-----------------------------------|---------------------|---------------|
| 8                                 | <b>LG-10825-100</b> | \$13.38       |
| 10                                | <b>LG-10825-102</b> | 14.82         |



**LG-10825**

### Tube, Connecting, Y-Shaped

With serrated ends.

| Outside<br>Diameter of Tube<br>mm | Part<br>Number      | Each<br>Price |
|-----------------------------------|---------------------|---------------|
| 8                                 | <b>LG-10835-100</b> | \$16.74       |
| 10                                | <b>LG-10835-102</b> | 18.21         |



**LG-10835**

### Tube, Entrained Air Indicator

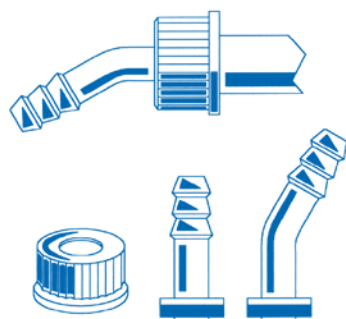
Used for quick field determination of air content in fresh concrete batches. Stem of the precision bore tube is graduated to read percent of air per cubic foot of concrete. Complete unit consists of the glass tube and a rubber stopper assembly with a brass cup attached for holding the cement sample.

| Item             | Part<br>Number      | Each<br>Price |
|------------------|---------------------|---------------|
| Complete         | <b>LG-10805-100</b> | \$33.19       |
| Glass Tube Only  | <b>LG-10805-102</b> | 12.83         |
| Stopper Assembly | <b>LG-10805-104</b> | 23.08         |
| Brass Cup        | <b>LG-10805-106</b> | 4.10          |

Replaces LX7032



**LG-10805**



**LG-10818**

### Tube, Hose Connection, GL Threads

Hose connections used for apparatus using GL14 or GL18 connections. Complete consists of cap with hole in center and connector either straight or bent.

| Supplied       | Hose Connection | GL Thread Size | Part Number         | Each Price |
|----------------|-----------------|----------------|---------------------|------------|
| Complete       | Bent            | GL14           | <b>LG-10818-100</b> | \$2.75     |
| Complete       | Straight        | GL14           | <b>LG-10818-102</b> | 2.65       |
| Complete       | Bent            | GL18           | <b>LG-10818-104</b> | 6.70       |
| Complete       | Straight        | GL18           | <b>LG-10818-106</b> | 6.60       |
| Cap Only       |                 | GL14           | <b>LG-10818-110</b> | 1.50       |
| Cap Only       |                 | GL18           | <b>LG-10818-112</b> | 1.60       |
| Connector Only | Bent            | GL14           | <b>LG-10818-120</b> | 1.55       |
| Connector Only | Straight        | GL14           | <b>LG-10818-122</b> | 1.45       |
| Connector Only | Bent            | GL18           | <b>LG-10818-124</b> | 5.85       |
| Connector Only | Straight        | GL18           | <b>LG-10818-126</b> | 5.75       |



**LG-10842**

### Tube, Hose Connector, Serrated

Serrations are tooled in reverse on one end of a tube so that the largest serration is at the end. The tube is merely to act as a convenient means of holding the serrated portion while it is being sealed to an apparatus. When seal is completed, the tube is cut off and discarded. The diameter given below is that of the smallest serration.

| Diameter | Part Number         | Each Price |
|----------|---------------------|------------|
| 5/16"    | <b>LG-10842-100</b> | \$2.55     |
| 3/8"     | <b>LG-10842-102</b> | 2.90       |
| 1/2"     | <b>LG-10842-104</b> | 3.13       |



**LG-10860**

### Tube, Direct Seal, Kovar Metal to Borosilicate

Kovar metal is polished and fabricated to avoid sharp edges at the seal.

| Diameter | Part Number         | Each Price |
|----------|---------------------|------------|
| 1/8"     | <b>LG-10860-102</b> | \$34.06    |
| 3/16"    | <b>LG-10860-104</b> | 35.10      |
| 1/4"     | <b>LG-10860-106</b> | 36.34      |
| 3/8"     | <b>LG-10860-110</b> | 40.31      |
| 1/2"     | <b>LG-10860-112</b> | 45.20      |
| 3/4"     | <b>LG-10860-118</b> | 88.58      |
| 1"       | <b>LG-10860-122</b> | 107.89     |

**Tube, Melting Point, Thiele-Dennis**

Results in more rapid circulation of the bath liquid.

|  | Part Number        | Each Price |
|--|--------------------|------------|
|  | <b>LG-9045-100</b> | \$87.04    |

**LG-9045****Tube, PYREX®, Melting Point, Capillary**

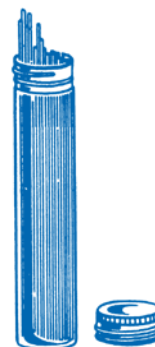
| Description     | Approx. Length (mm) | Wall Range (mm) | O.D. Range (mm) | I.D. Range (mm) | Approx. Vial/CS | Part Number     | Case Price |
|-----------------|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
| Open Ends       | 100                 | 0.20            | 1.5 - 1.8       | -               | 20              | <b>C-9530-1</b> | \$134.27   |
| Open Ends       | 100                 | 0.25            | -               | 0.8 - 1.1       | 20              | <b>C-9530-2</b> | 134.27     |
| 1 Open/1 Closed | 90                  | 0.20            | 1.5 - 1.8       | -               | 20              | <b>C-9530-3</b> | 134.27     |
| 1 Open/1 Closed | 90                  | 0.25            | -               | 0.8 - 1.1       | 20              | <b>C-9530-4</b> | 134.27     |

(100 pcs. per vial)

**C-9530****Tube, Capillary, Melting Point**

Fabricated from low extractable borosilicate glass. Will not react with organic compounds. Capillary tube is closed at one end and packed in vials containing approximately 100 tubes.

| Length mm | Approx. O.D. x I.D. mm | Part Number        | Each Price |
|-----------|------------------------|--------------------|------------|
| 75        | 1.5 x 1                | <b>LG-9060-100</b> | \$8.78     |
| 100       | 1.5 x 1                | <b>LG-9060-102</b> | 9.39       |
| 125       | 1.5 x 1                | <b>LG-9060-104</b> | 11.28      |
| 150       | 1.5 x 1                | <b>LG-9060-106</b> | 11.91      |

**LG-9060****Tube, Solubility**

| Description                                | Part Number         | Each Price |
|--------------------------------------------|---------------------|------------|
| $\frac{5}{8}$ " x 11" with constriction    | <b>LG-10700-100</b> | \$12.35    |
| $\frac{5}{8}$ " x 11" without constriction | <b>LG-10700-102</b> | 6.18       |

**LG-10700**

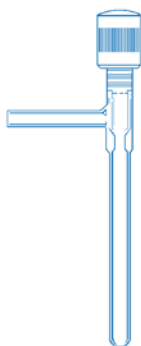


LG-10760

### Tube, Test, Outer Joint

Round bottom having a ground joint. See LG-10300 and LG-10310 for stoppers.

| Approx.<br>O.D. x Length<br>mm | Joint | Part<br>Number | Each<br>Price |
|--------------------------------|-------|----------------|---------------|
| 16 x 150                       | 14/20 | LG-10760-102   | \$18.23       |
| 20 x 175                       | 19/22 | LG-10760-104   | 19.61         |
| 25 x 200                       | 24/40 | LG-10760-106   | 20.05         |
| 25 x 250                       | 24/40 | LG-10760-108   | 24.85         |



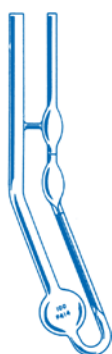
LG-10803

### Tube, Vacuum Hydrolysis

Designed for sealed tube reactions. High temperatures can be generated if used with an aluminum block to transfer heat directly to the glass tube. Applications include sample concentration, protein hydrolysis, and freeze drying.

| Tube<br>Volume<br>mL | Tube O.D.<br>x Height<br>mm | Approx.<br>Overall<br>Height<br>mm | Vacuum<br>Valve<br>Size<br>mm | Part<br>Number | Each<br>Price |
|----------------------|-----------------------------|------------------------------------|-------------------------------|----------------|---------------|
| 5                    | 10 x 100                    | 160                                | 0-4                           | LG-10803-100   | \$73.88       |
| 7.5                  | 10 x 150                    | 210                                | 0-4                           | LG-10803-102   | 76.85         |
| 20                   | 19 x 100                    | 165                                | 0-8                           | LG-10803-104   | 121.50        |

Other sizes available upon request.



LG-11120

### Tube, Viscometer, Cannon-Fenske

Ranges shown below are for an out-flow time of 200 seconds except size 25. The minimum time for 0.5 centistokes viscosity should be 250 seconds. Tubes comply with ASTM D2515 and are used to obtain kinematic viscosities by ASTM D445. Certificates of calibration are not supplied with this product.

| Size | Range<br>Kinematic<br>Centistokes | Part<br>Number | Each<br>Price |
|------|-----------------------------------|----------------|---------------|
| 25   | 0.5 to 2                          | LG-11120-100   | \$80.34       |
| 50   | 0.8 to 4                          | LG-11120-102   | 80.34         |
| 75   | 1.6 to 8                          | LG-11120-104   | 80.34         |
| 100  | 3 to 15                           | LG-11120-106   | 80.34         |
| 150  | 7 to 35                           | LG-11120-108   | 80.34         |
| 200  | 20 to 100                         | LG-11120-110   | 80.34         |

**Vials, Mini-Vial, Screw Cap, Clear, Graduated**

Fabricated from Pyrex glass, vials are exceptionally sturdy having a flat bottom and are free standing. No racks or support systems are required. The interior conical bottom eases retrieval of microliter volumes and the thick wall magnifies the interior of the vial. Supplied with an open-style phenolic screw cap and PTFE faced silicone liner. Micro-vial is versatile and can be used in many microscale techniques including: Acetylation, Centrifugation, Air-Sensitive Reactions, Extractions, Flash Evaporation, Radio-Synthesis, Silylation, Magnetic Stirring and Sample Storage.

| Total Capacity, mL | Approx. O.D. x Height mm | GPI Thread | Part Number        | Each Price |
|--------------------|--------------------------|------------|--------------------|------------|
| 0.1                | 13 x 35                  | 13-425     | <b>LG-4394-098</b> | \$11.00    |
| 0.3                | 13 x 36                  | 13-425     | <b>LG-4394-100</b> | 14.00      |
| 1.0                | 13 x 49                  | 13-425     | <b>LG-4394-102</b> | 14.00      |
| 2.0                | 20 x 43                  | 20-400     | <b>LG-4394-104</b> | 15.00      |
| 3.0                | 20 x 51                  | 20-400     | <b>LG-4394-106</b> | 15.10      |
| 5.0                | 20 x 63                  | 20-400     | <b>LG-4394-108</b> | 15.10      |
| 10.0               | 24 x 74                  | 24-400     | <b>LG-4394-110</b> | 20.40      |

See LG-4341 & LG-4342 for replacement caps and septums.

**LG-4394****Vial, Cap, Black Phenolic Open Top**

Cap has an open top which allows the use of septa or O-Rings which extends user options. Suitable in applications to 180°C Compression molded cap is autoclavable.

| GPI Thread | Approx. Hole Diameter mm | Part Number        | Each Price |
|------------|--------------------------|--------------------|------------|
| 8-425      | 5                        | <b>LG-4341-100</b> | \$.13      |
| 13-425     | 9                        | <b>LG-4341-102</b> | .13        |
| 15-425     | 9                        | <b>LG-4341-104</b> | .21        |
| 18-400     | 12                       | <b>LG-4341-106</b> | .26        |
| 20-400     | 12                       | <b>LG-4341-108</b> | .27        |
| 24-400     | 14                       | <b>LG-4341-110</b> | .30        |

**LG-4341****Vial, Septum, PTFE-Faced Silicone**

PTFE face provides an inert contact surface while the silicone backing material effects a positive seal. Frequently used when syringe techniques are indicated. Septa is .065" thick - (0.005 PTFE-0.065 silicone).

| Fits Thread Cap Size | Part Number        | Each Price |
|----------------------|--------------------|------------|
| 8                    | <b>LG-4342-100</b> | \$.40      |
| 13                   | <b>LG-4342-102</b> | .50        |
| 15                   | <b>LG-4342-104</b> | .70        |
| 18                   | <b>LG-4342-106</b> | .80        |
| 20                   | <b>LG-4342-108</b> | .95        |
| 24                   | <b>LG-4342-110</b> | 1.10       |

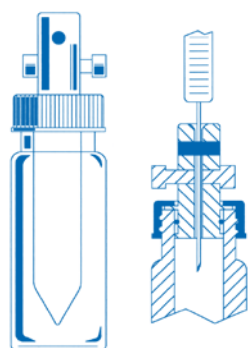
**LG-4342**



#### Vial, Spinvane for Vials

Magnet is encased in PTFE and is designed to fit conical shaped Mini-Vials. Provides efficient mixing and stirring for microscale titrations and reactions.

| For Vial Size<br>mL    | Part<br>Number      | Each<br>Price |
|------------------------|---------------------|---------------|
| 0.1 and 1.0            | <b>LG-4394A-100</b> | \$5.00        |
| 2.0, 3.0, 5.0 and 10.0 | <b>LG-4394A-102</b> | 5.50          |



#### Vial, Mininert Valve for Mini-Vials and Economy Reaction Vial

An extremely simple sealing system - push green button to open, insert syringe and take sample, withdraw syringe needle, and push red button to close. No tools required, simply screw onto Mini-Vials and Economy Reaction Vials. Back-up seal seals needle during sampling but is not exposed to contents when valve is closed.

| Description                    | Part<br>Number     | Each<br>Price |
|--------------------------------|--------------------|---------------|
| For 0.1mL & 1.0mL Vial         | <b>LG-4397-100</b> | \$97.11       |
| For 2.0mL Vial                 | <b>LG-4397-102</b> | 98.76         |
| For 3.0mL, 5.0mL & 10.0mL Vial | <b>LG-4397-104</b> | 110.01        |
| Replacement Septa (pkg. of 50) | <b>LG-4397-200</b> | 33.08         |



#### Vial, Reaction, Economy

This economical concentration/reaction tube features the same perforated screw cap with PTFE faced silicone liner which is widely used for syringe penetration. The tapered top enhances sample concentration and recovery. The screw thread closure allows the use of PTFE sampling valves.

| Capacity<br>mL | Height<br>mm | Part<br>Number     | Each<br>Price |
|----------------|--------------|--------------------|---------------|
| 3.0            | 60           | <b>LG-4395-102</b> | \$16.95       |
| 5.0            | 80           | <b>LG-4395-104</b> | 16.95         |



# A

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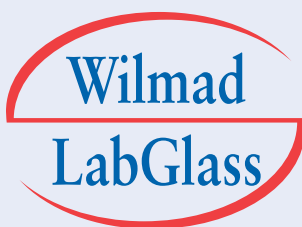








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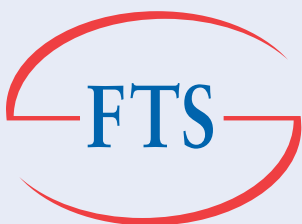


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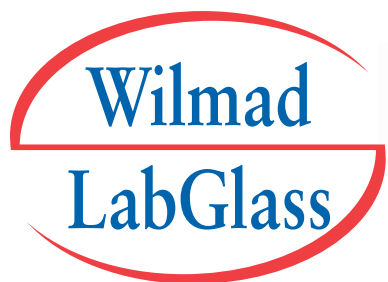
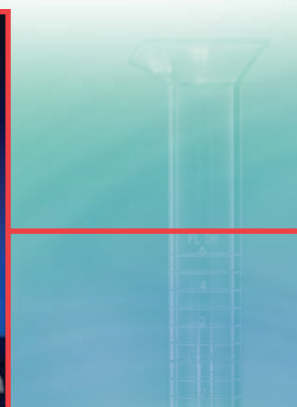
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