

# Technical Information

## Borosilicate Glass Properties

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

Major Physical Characteristics	Type 1, Class A	PYREX®
Linear Coefficient of Expansion	32-33 x 10 <sup>-7</sup> cm/cm°C	32.5 x 10 <sup>-7</sup> cm/cm°C
Strain Point		510°C
Annealing Point	560°C±10°C	560°C
Softening Point	815-820°C±10°C	821°C
Density, Annealed	2.23-2.24±0.02g/cm <sup>3</sup>	2.23g/cm <sup>3</sup>
Refractive Index		1.474 @ Sodium D Line
Temperature Limits		490°C / 230°C**
Maximum Thermal Shock		160°C

\*\* *Extreme Service / Normal Service*

Chemical Compound	Type 1, Class A	PYREX®
SiO <sub>2</sub>	81%	80.6%
B <sub>2</sub> O <sub>3</sub>	13%	13.0%
Na <sub>2</sub> O	4%	4.0%
Al <sub>2</sub> O <sub>3</sub>	2%	2.3%