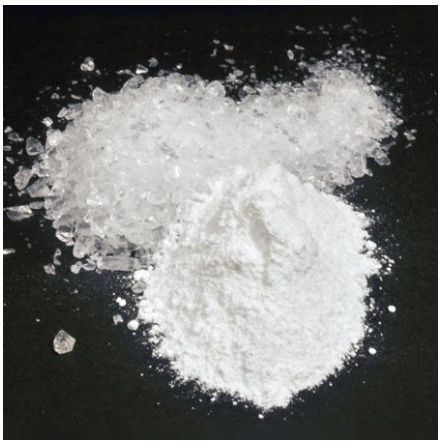
Corning® Glass Material Properties

Glass Type: Alkali Barium (low lead)

Corning Code: 9013

CORNING



Excellent for glass to metal sealing, historically leveraged in space applications

	Metric	English
Mechanical		
Density	2.640 g/cm^3	165 lb/ft^3
Viscosity		
Softening Point ($10^{7.6}$ poise)	656 °C	1213 °F
Annealing Point (10^{13} poise	462 °C	864 °F
Strain Point (10^{14} poise)	423 °C	793 °F
Thermal		
Coefficient of Expansion (0 °C - 300 °C)	88.5 x 10^{-7} / °C	49.2 x 10^{-7} / °F
(25 °C to set point 679 °C)	99.2 x 10^{-7} / °C	55.1 x 10^{-7} / °F
Electrical		
Log_{10} Volume Resistivity @ 250 °C	8.9 ohm-cm	
Log_{10} Volume Resistivity @ 250 °C	7.0 ohm-cm	
Dielectric Constant @ 20 °C, 1 MHz	6.7	
Loss Tangent@ 20 °C, 1 MHz	0.20 %	

Chemical

Weathering: 3

Acid Durability: 2

Weathering is defined as corrosion by atmospheric-borne gases and vapors such as water and carbon dioxide. Glasses rated 1 will almost never show weathering effects; those rated 2 will occasionally be troublesome, particularly if weathering products cannot be removed; those glasses rated 3 will require more careful consideration.

Acid durability classified glasses according to their behavior in 5% hydrochloric acid at 95 °C (203 °F) for 24 hours.

Classification: Thickness loss (inches) (1) < 10^{-6} (2) 10^{-6} – 10^{-5} (3) 10^{-5} – 10^{-4} (4) > 10^{-4}

Available in US Standard Mesh 4 through 325 with a minimum order quantity of 100 lbs.