CORNING SAS - Specialty Glass
Rue St Laurent - CS 10243 Bagneaux sur Loing - 77797 NEMOURS CEDEX - FRANCE

Glass designation : **Alkali Barium** Code **9013**

Color : **White**
Glass type : **Alkali barium (Low Lead)**

CORNING

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

Mechanical

	Metric	English
Density	2.640 g/cm3	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 428 °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 @ 350 °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 an carbon dioxide. Glasses rated(1) will almost never show weathering effects;those rated (2) will occasionally be troublesome,particulary if weathering products cannot be removed; those glasses rated (3) will require more carreful 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}

Non-toleranced numerical values are typical values