

Glass designation :	Soda Borosilicate	Code	7740
Color : White			
Glass type : Soda Borosilicate			



*Low expansion,
good durability*

	Metric	English
Mechanical		
Density	2.23 g/cm ³	139.2 lb/ft ³
Youngs Modulus	6.4 x 10 ³ kg/mm ²	9.1 x 10 ⁶ psi
Poissons Ratio	0.20	
Shear Modulus	2.67 x 10 ³ kg/mm ²	3.8 x 10 ⁶ psi
Viscosity		
Working Point (10 ⁴ poise)	1252 °C	2286 °F
Softening Point (10 ^{7.6} poise)	820 °C	1508 °F
Annealing Point (10 ¹³ poise)	560 °C	1040 °F
Strain Point (10 ¹⁴ poise)	510 °C	950 °F
Thermal		
Coefficient of Expansion (0 °C - 300 °C)	32.5 x 10 ⁻⁷ / °C	17.7 x 10 ⁻⁷ / °F
(25 °C to set point 515 °C)	35.0 x 10 ⁻⁷ / °C	21.7 x 10 ⁻⁷ / °F
Specific Heat, 25 °C	0.75 kJ/Kg °C	0.18 BTU/lb °F
Thermal Conductivity, 25 °C	1.09 W/m.K ⁻¹	0.63 $\frac{\text{BTU.ft}}{\text{h.ft}^2.\text{°F}}$
Optical		
Refractive index (589.3nm)	1.474	
Electrical		
Log ₁₀ Volume Resistivity @ 250 °C	8.1 ohm-cm	
Log ₁₀ Volume Resistivity @ 350 °C	6.6 ohm-cm	
Dielectric Constant @ 20 °C, 1 MHz	4.6	
Loss Tangent @ 20 °C, 1 MHz	0.4%	
Chemical		
Weathering: 1		
Acid Durability:1		
<p>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,particularly if weathering products cannot be removed; those glasses rated (3) will require more carreful consideration.</p> <p>Acid durability classified glasses according to their behavior in 5% hydrochloric acid at 95 °C (203 °F) for 24 hours.</p> <p>Classification: Thickness loss (inches) (1) < 10⁻⁶ (2) 10⁻⁶ - 10⁻⁵ (3) 10⁻⁵ - 10⁻⁴ (4) > 10⁻⁴</p>		