

Glass Property Sheet

Corning Code: 7052
Glass Type: Borosilicate

	<u>Metric</u>	<u>English</u>
<u>Mechanical</u>		
Density	2.27 g/cm ³	141.7 lb/ft ³
Young's Modulus	5.76 x 10 ³ kg/mm ²	8.2 x 10 ⁶ psi
Poisson's Ratio	0.22	
Shear Modulus	2.39 x 10 ³ kg/mm ²	3.4 x 10 ⁶ psi
Knoop Hardness (KHN ₁₀₀)	403	
<u>Viscosity</u>		
Working Point (10 ⁴ poise)	1128 °C	2062 °F
Softening Point (10 ^{7.6} poise)	712 °C	1314 °F
Annealing Point (10 ¹³ poise)	484 °C	903 °F
Strain Point (10 ¹⁴ poise)	440 °C	824 °F
<u>Thermal</u>		
Coefficient of Expansion (0-300°C)	47.0 x 10 ⁻⁷ /°C	26.1 x 10 ⁻⁷ /°F
(25°C to set point 679°C)	53.1 x 10 ⁻⁷ /°C	29.5 x 10 ⁻⁷ /°F
<u>Optical</u>		
Refractive Index (589.3 nm)	1.484	
<u>Electrical</u>		
Log ₁₀ Volume Resistivity @ 250°C	9.2 ohm-cm	
@ 350°C	7.4 ohm-cm	
Dielectric Constant @ 20°C, 1 MHz	5.1	
Loss Tangent @ 20°C, 1 MHz	0.15%	

Corning Incorporated
Specialty Lighting & Materials