

Corning Pyrex® 7740 Borosilicate Glass

Categories: [Ceramic](#); [Glass](#); [Optical](#); [Oxide](#); [Oxide, Silicon](#)

Material Notes: Pyrex® sheet provides unique chemical, thermal, mechanical, and optical properties. Available in thicknesses from 3/32 inches to 2.25 inches. Tempering increases temperature and pressure capability. Available as polished and machined glass wafers for use in the MST/MEMS (Micro Systems Technology/Micro-Electrical-Mechanical Systems) technologies. Also available in as powdered/crushed in mesh sizes 4 through 325 and is used for sealing and other applications.

Information provided by Corning Incorporated.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	2.23 g/cc	0.0806 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Knoop	418	418	
Modulus of Elasticity	62.75 GPa	9101 ksi	
Poissons Ratio	0.200	0.200	
Shear Modulus	26.1 GPa	3790 ksi	Calculated

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.20e+9 ohm-cm	1.20e+9 ohm-cm	350°C
	1.60e+11 ohm-cm	1.60e+11 ohm-cm	250°C
Dielectric Constant	4.10	4.10	
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dissipation Factor	0.00500	0.00500	
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Thermal Properties	Metric	English	Comments
CTE, linear	3.25 µm/m-°C	1.81 µin/in-°F	
	@Temperature 0.000 - 300 °C	@Temperature 32.0 - 572 °F	
	3.25 µm/m-°C	1.81 µin/in-°F	
	@Temperature 0.000 - 300 °C	@Temperature 32.0 - 572 °F	
Softening Point	821 °C	1510 °F	10 ⁷⁶ Poise
Working Point	1252 °C	2286 °F	10 ⁴ Poise
Annealing Point	560 °C	1040 °F	10 ¹³ Poise
Strain Point	510 °C	950 °F	10 ¹⁴ Poise

Optical Properties	Metric	English	Comments
Refractive Index	1.474	1.474	589.3 nm wavelength

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's disclaimer and terms of use regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.

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