

GE 124 Fused Quartz

GE 124 is a very pure fused quartz, made from crystalline silica. GE 124 is very similar to fused silica, with the exception of less transmission in the UV spectrum and much lower OH content. Other features besides its purity include excellent thermal properties and high resistance to chemicals.

Features:

- Excellent Thermal Properties
- Stain (Chemical) Resistant
- Very Good Optical Transmission

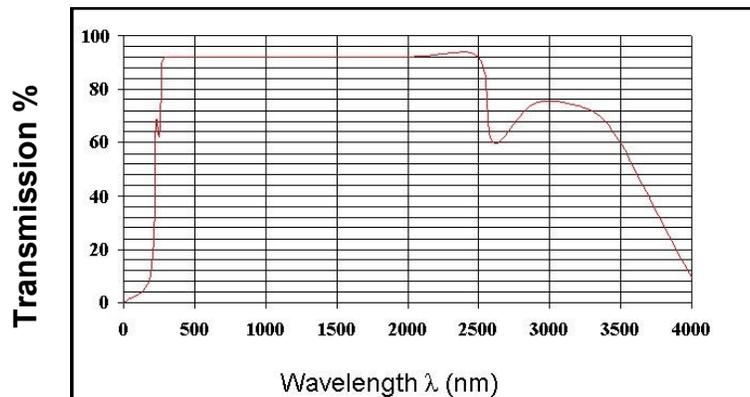
Applications:

- Water Carriers
- Flanges
- Optical Plates
- Test Plates
- Pressure Windows

Dimensions:

- Thicknesses: Up to 4" thick (101.6mm)
- Sizes: Up to 36" (914.4mm) Diameter

Transmission:



Physical Properties:

Optical Properties		
Index of Refraction @ 589.3mm	1.45840	
Thermal Properties		
Thermal Expansion 0 - 200°C (32 - 92°F)	5.5 x 10 ⁻⁷ /°C	
Electrical Properties		
Log10 Volume Resistivity (250°C, 482°F) (350°C, 662°F)	7 x 10 ⁷	
Mechanical Properties		
Density (25°C) ρ	2.21 g/cm ³	38.0 lb/ft ³
Young's Modulus E	70 GPa	10.5 Mpsi
Poisson's Ratio μ	0.17	0.17
Knoop Hardness HK _{0.1/20}	600 kg/mm ²	600 kg/mm ²
Softening Point (10 ^{7.6} poises)	1683°C	3061°F
Annealing Point (10 ¹³ poises)	1214°C	2217°F
Strain Point (10 ^{14.5} poises)	1122°C	2052°F

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Glass Fabrication



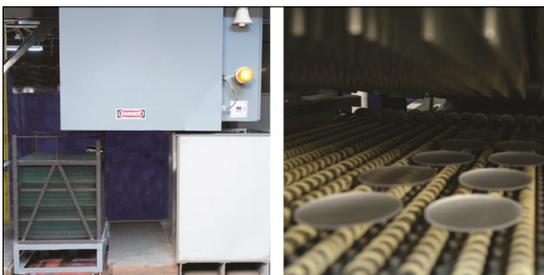
Coating Deposition



CNC Machining



Strengthening - Chemical & Heat



Screen Printing of Graphics



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Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.



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