

## Schott SF1 Glass

Category : Ceramic , Glass

### Material Notes:

Information Provided by SCHOTT North America, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Schott-SF1-Glass.php](http://www.lookpolymers.com/polymer_Schott-SF1-Glass.php)

Physical Properties	Metric	English	Comments
Density	4.46 g/cc	0.161 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Knoop Microhardness	390	390	.1/20
Modulus of Elasticity	56.0 GPa	8120 ksi	
Poissons Ratio	0.232	0.232	
Shear Modulus	23.0 GPa	3340 ksi	calculated

Thermal Properties	Metric	English	Comments
CTE, linear	8.10 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	4.50 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature -30.0 - 70.0 $\text{Å}^\circ\text{C}$	@Temperature -22.0 - 158 $\text{Å}^\circ\text{F}$	
	8.80 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	4.89 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature 20.0 - 300 $\text{Å}^\circ\text{C}$	@Temperature 68.0 - 572 $\text{Å}^\circ\text{F}$	
Transformation Temperature, Tg	417 $\text{Å}^\circ\text{C}$	783 $\text{Å}^\circ\text{F}$	

Optical Properties	Metric	English	Comments
Refractive Index	1.71736	1.71736	n <sub>d</sub>
	@Wavelength 587.6 nm	@Wavelength 587.6 nm	
	1.7231	1.7231	n <sub>e</sub>
	@Wavelength 546.1 nm	@Wavelength 546.1 nm	
Transmission, Visible	91 %	91 %	
	@Thickness 10.0 mm, Wavelength 380 nm	@Thickness 0.394 in, Wavelength 380 nm	
	97.1 %	97.1 %	

Optical Properties	Metric @Thickness 10.0 mm, Wavelength 405 nm	English @Thickness 0.394 in, Wavelength 405 nm	Comments
	99.4 %	99.4 %	
	@Thickness 10.0 mm, Wavelength 460 nm	@Thickness 0.394 in, Wavelength 460 nm	
	99.8 %	99.8 %	
	@Thickness 10.0 mm, Wavelength 580 nm	@Thickness 0.394 in, Wavelength 580 nm	
	99.8 %	99.8 %	
	@Thickness 10.0 mm, Wavelength 700 nm	@Thickness 0.394 in, Wavelength 700 nm	
IR Transmittance	84.2 %	84.2 %	
	@Thickness 10.0 mm, Wavelength 2500 nm	@Thickness 0.394 in, Wavelength 2500 nm	
	99.4 %	99.4 %	
	@Thickness 10.0 mm, Wavelength 1530 nm	@Thickness 0.394 in, Wavelength 1530 nm	
UV Transmittance	30 %	30 %	
	@Thickness 10.0 mm, Wavelength 350 nm	@Thickness 0.394 in, Wavelength 350 nm	
	75.8 %	75.8 %	
	@Thickness 10.0 mm, Wavelength 365 nm	@Thickness 0.394 in, Wavelength 365 nm	
	83.7 %	83.7 %	
	@Thickness 10.0 mm, Wavelength 370 nm	@Thickness 0.394 in, Wavelength 370 nm	

Chemical Properties	Metric	English	Comments
Acid Class, SR	3.2	3.2	
Alkali Class, AR	2.3	2.3	
Stain Resistance Class, FR	1.0	1.0	

Descriptive Properties	Value	Comments
B	1	
Climatic Resistance Test CR	2	
HG	1	

<small>K (10-6mm<sup>2</sup>/N)</small> Descriptive Properties	Value	Comments
Phosphate Resistance PR	3	
T1013.0 (Å°C)	415	
T107.6 (Å°C)	566	

## Contact Songhan Plastic Technology Co.,Ltd.

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