

## Mateck Glass (BK7 Schott or analogous)

Category : Ceramic , Glass , Glass Ceramic

Material Notes:

Optical crystals

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Mateck-Glass-BK7-Schott-or-analogous.php](http://www.lookpolymers.com/polymer_Mateck-Glass-BK7-Schott-or-analogous.php)

Physical Properties	Metric	English	Comments
Density	2.51 g/cc	0.0907 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	81.0 GPa	11700 ksi	
Poissons Ratio	0.206	0.206	
Shear Modulus	33.6 GPa	4870 ksi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	7.10 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	3.94 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature -30.0 - 70.0 $\text{Å}^\circ\text{C}$	@Temperature -22.0 - 158 $\text{Å}^\circ\text{F}$	
Specific Heat Capacity	0.858 J/g- $\text{Å}^\circ\text{C}$	0.205 BTU/lb- $\text{Å}^\circ\text{F}$	
Thermal Conductivity	1.114 W/m-K	7.731 BTU-in/hr-ft <sup>2</sup> - $\text{Å}^\circ\text{F}$	
Melting Point	559 $\text{Å}^\circ\text{C}$	1040 $\text{Å}^\circ\text{F}$	

Optical Properties	Metric	English	Comments
Refractive Index	1.51872	1.51872	at ne
	1.52283	1.52283	at nf
	1.50731	1.50731	
	@Wavelength 1014 nm	@Wavelength 1014 nm	
IR Transmittance	1.53626	1.53626	
	@Wavelength 365 nm	@Wavelength 365 nm	
	75 %	75 %	Internal Transmittance
	@Wavelength 2300 nm	@Wavelength 2300 nm	
	90 %	90 %	

Optical Properties	Metric	English	Internal Transmittance Comments
UV Transmittance	8.0 %	8.0 %	Internal Transmittance
	@Wavelength 2000 nm	@Wavelength 2000 nm	
	92 %	92 %	Internal Transmittance
	@Wavelength 300 nm	@Wavelength 300 nm	
	92 %	92 %	Internal Transmittance
	@Wavelength 350 nm	@Wavelength 350 nm	

Descriptive Properties	Value	Comments
Thermal Coefficient of Refractive Index	2.8E-06	0.546 microns for $\Delta \pm 20^\circ\text{C}$
Transmission Range (microns)	0.35 - 2	

## Contact Songhan Plastic Technology Co.,Ltd.

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