

## Sumitomo Bakelite North America E 8353-706R-1 Hardware Grade Epoxy

Category : Polymer , Thermoset , Epoxy , Filled/Reinforced Thermoset

### Material Notes:

Fiberglass and mineral reinforced epoxy molding compound with excellent dimensional stability and good strength at elevated temperatures. Information provided by Vyncolit, a Sumitomo Bakelite Group

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Sumitomo-Bakelite-North-America-E-8353-706R-1-Hardware-Grade-Epoxy.php](http://www.lookpolymers.com/polymer_Sumitomo-Bakelite-North-America-E-8353-706R-1-Hardware-Grade-Epoxy.php)

Physical Properties	Metric	English	Comments
Density	1.98 g/cc	0.0715 lb/in <sup>3</sup>	Relative Density; ASTM D792
Linear Mold Shrinkage	0.0050 cm/cm	0.0050 in/in	Compression Molding; ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	72.0 MPa	10400 psi	ASTM D638
Flexural Strength	114 MPa	16500 psi	At Rupture; ASTM D790
Flexural Modulus	18.0 GPa	2610 ksi	ASTM D790
Compressive Strength	235 MPa	34100 psi	ASTM D695
Izod Impact, Notched	0.220 J/cm	0.412 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	13.9 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E-831
	@Temperature 20.0 $\text{Å}^\circ\text{C}$	@Temperature 68.0 $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.600 W/m-K	4.16 BTU-in/hr-ft <sup>2</sup> - $\text{Å}^\circ\text{F}$	ASTM C-518
Deflection Temperature at 1.8 MPa (264 psi)	$\geq 282 \text{ Å}^\circ\text{C}$	$\geq 540 \text{ Å}^\circ\text{F}$	Post Baked; ASTM D648A

Electrical Properties	Metric	English	Comments
Dielectric Constant	4.5	4.5	Wet; ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	14.2 kV/mm	361 kV/in	60Hz, Step-by-Step, wet; ASTM D149
	15.2 kV/mm	386 kV/in	60Hz, Step-by-Step, dry; ASTM D149
	16.4 kV/mm	417 kV/in	60Hz, Short Time, wet; ASTM D149

Electrical Properties	17.1 kV/mm Metric	434 kV/in English	60Hz, Short Time, dry; ASTM D149 Comments
Dissipation Factor	0.010 @Frequency 1e+6 Hz	0.010 @Frequency 1e+6 Hz	wet; ASTM D150
Arc Resistance	180 sec	180 sec	ASTM D495

Descriptive Properties	Value	Comments
Color	Black	
Form	Granular	
Main Filler	Glass Fiber & Mineral	
Molding Method	Compression, transfer	

## Contact Songhan Plastic Technology Co.,Ltd.

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