

## Sumitomo Bakelite North America FM 4005X4649 Fiberglass Reinforced Phenolic Novolac

Category : Polymer , Thermoset , Filled/Reinforced Thermoset , Phenolic , Phenolic, Novolac, Glass Filled

### Material Notes:

FM 4005X4649 a fiberglass reinforced two-step phenolic molding compound formulated to increase thermal conductivity, to provide static dissipation and good wear resistance to abrasive media. Information supplied by Sumitomo Bakelite North America.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Sumitomo-Bakelite-North-America-FM-4005X4649-Fiberglass-Reinforced-Phenolic-Novolac.php](http://www.lookpolymers.com/polymer_Sumitomo-Bakelite-North-America-FM-4005X4649-Fiberglass-Reinforced-Phenolic-Novolac.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.750 g/cc	0.0271 lb/in <sup>3</sup>	Powder; ASTM D1895
Density	1.83 g/cc	0.0661 lb/in <sup>3</sup>	ASTM D-792
Water Absorption	0.070 %	0.070 %	24 hour; ASTM D570
	0.20 %	0.20 %	48 hour; ASTM D570
Linear Mold Shrinkage	0.0020 cm/cm	0.0020 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	90	90	ASTM D785
Tensile Strength, Ultimate	48.0 MPa	6960 psi	ASTM D638
Flexural Strength	105 MPa	15200 psi	ASTM D790
Flexural Modulus	14.0 GPa	2030 ksi	ASTM D790
Compressive Strength	210 MPa	30500 psi	ASTM D695
Izod Impact, Notched	0.220 J/cm	0.412 ft-lb/in	ASTM D256A

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	29.0 μm/m-°C	16.1 μin/in-°F	ASTM E831
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	0.750 W/m-K	5.20 BTU-in/hr-ft <sup>2</sup> -°F	ASTM C518
Maximum Service Temperature, Air	150 °C	302 °F	UL Temperature Index; UL 746B
Deflection Temperature at 1.8 MPa (264 psi)	195 °C	383 °F	As Molded; ASTM D648A
	>= 282 °C	>= 540 °F	Post Baked; ASTM D648A

Thermal Properties	V-0 Metric	V-0 English	Comments
	@Thickness 3.20 mm	@Thickness 0.126 in	

Descriptive Properties	Value	Comments
Available Molding Grades	Compression, Transfer, Injection	
Color	Black	
Form	Granular	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China