



FM 3000

Description	FM 3000 is a self-lubricated cellulose reinforced phenolic molding compound, modified for applications requiring reduced friction and low wear.
Available colors	Black
Available molding grades	Compression, Transfer, Injection
Form	Granular

PHENOLIC

Properties		International Units	English Units	Method	
Physical	Specific Gravity	1.45	1.45	ASTM D792	
	Apparent (Powder) density	0.45 g/cm ³	3.8 lb/gal	ASTM D1895	
	Molding shrinkage	0.4 %	0.0040 in/in	ASTM D955	
	Post shrinkage	- %	- in/in	ASTM D955	
	Water absorption				
	24 hour	0.5 %	0.5 %	ASTM D570	
	48 hour	1.2 %	1.2 %	ASTM D570	
Thermal	Temperature of deflection under load				
		As Molded	180 °C at 1.8 MPa	356 °F at 264 psi	ASTM D648A
		Post Baked	- °C at 1.8 MPa	- °F at 264 psi	ASTM D648A
	Thermal Conductivity	-	W/mK	W/mK	ASTM C518
	UL Temperature Index	-	°C	°F	UL 746B
	UL-flammability				
	3.2 mm	-	-	UL 94	
	1,6 mm	-	-	UL 94	
Mechanical	Coefficient of linear thermal expansion				
		parallel	26 10 E-6/°C	14 10 E-6/°F	ASTM E831
		perpendicular	- 10 E-6/°C	- 10 E-6/°F	ASTM E831
	Flexural strength	55 MPa	8000 psi	ASTM D790	
	Flexural modulus	7 GPa	1.0 Mpsi	ASTM D790	
	Tensile strength	38 MPa	5500 psi	ASTM D638	
	Izod impact strength, notched	27 J/m	0.5 ft lb/in	ASTM D256A	
	Compressive strength	103 MPa	15,000 Psi	ASTM D695	
Rockwell Hardness	M Scale	-	-		
	E Scale	115	115	ASTM D785	
Electrical	Dielectric Constant, 1 MHz, wet	-	-	ASTM D150	
	Dissipation Factor, 1 MHz, wet	-	-	ASTM D150	
	Arc Resistance	-	Seconds	Seconds	ASTM D495
	Dielectric strength, 60 Hz, dry				
		ST	10.2 kV/mm	260 V/mil	ASTM D149
	SS	7.9 kV/mm	200 V/mil	ASTM D149	
Tracking resistance	-	V	-	V	ASTM D3638 (IEC 112)

Properties measured on compression molded ASTM specimens. Values are typical, not statistical minimums.

Contact your Sumitomo Bakelite representative for specifications and post baking recommendations.

ST = short time. SS = step-by-step. Wet = immersed in H₂O for 48 hrs. at 50 °C prior to testing.

Certification to ASTM D-5948 requires batch testing. All testing in accordance with ASTM D-5948. ASTM D-5948 supersedes MIL-M-14.

RoHS: FM 3000 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: FM 3000 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : FM 3000 does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA..

Revision Date: 7/8/2014. Shelf life 1 year when stored at 70 °F maximum.

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