



## Material Series: MB2000-22

### SERIES DESCRIPTION & APPLICATION

MB2000-22 is an excellent flame and track resistant material possessing outstanding electrical and mechanical properties. The 2000 Series' good dielectric strength and low shrink allow close dimensional control. Key features include: Overall good strengths as well as rated UL 94 V0 @1.6mm and UL 94 5VA @2.6mm. UL file number E80533.

General Material Properties			
Property (Test Method)	Value	Units	
Density (ASTM D792)	1.80-1.90	g/cm3	
Mold Shrinkage (ASTM D955)	0.0005-0.002	in/in	
Water Absorption (ASTM D570)	0.13	%	
Barcol Hardness (ASTM D2583)	40-50	Barcol Units	

  

Mechanical Material Properties (Cut Coupons)			
Property (Test Method)	Value (US)	Value (Metric)	Units
Tensile Strength (ASTM D638)	4,500-6,500	30-45	psi (MPa)
Tensile Modulus (ASTM D638)	1.7-1.85 x 10 <sup>6</sup>	11.7-12.7	psi (GPa)
Flexural Strength (ASTM D790)	11,500-15,000	80-100	psi (MPa)
Flexural Modulus (ASTM D790)	1-1.3 x 10 <sup>6</sup>	6.9-8.9	psi (GPa)
Notched Izod Impact (ASTM D256)	6-10	320-530	ft-lb/in (J/m)

  

Mechanical Material Properties (Net-Shape Coupons)			
Property (Test Method)	Value (US)	Value (Metric)	Units
Tensile Strength (ASTM D638)	8,000-10,000	55-70	psi (MPa)
Tensile Modulus (ASTM D638)	2.15-2.45 x 10 <sup>6</sup>	14.8-16.9	psi (GPa)
Flexural Strength (ASTM D790)	20,000-26,000	135-180	psi (MPa)
Flexural Modulus (ASTM D790)	1.4-1.6 x 10 <sup>6</sup>	9.6-11.0	psi (GPa)
Notched Izod Impact (ASTM D256)	10-15	530-800	ft-lb/in (J/m)

  

Thermal and Electrical Material Properties			
Property (Test Method)	Value (US)	Value (Metric)	Units
Flammability (UL 94 V0)	Pass 0.063	Pass 1.6	in (mm)
Flammability (UL 94 5VA)		Pass 2.6	in (mm)
Heat Deflection Temperature (ASTM D648)	>500	>260	°F (°C)
UL RTI Elec, Imp, Str (UL 746B)	-	130, 130, 130	°C
Dielectric Strength (ASTM D149)	350+	13.8	Volts/mil (kV/mm)
Arc Track Resistance (ASTM D495)	185+	185+	Seconds

All property values are based on test performed on standard ASTM test samples and according to standard ASTM test methods unless otherwise indicated. This information is offered solely for your consideration and is to be used as a guide only. No other warranty is implied.

### Contact Us:

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