

Technical Data Sheet

**Bmc 620M**

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 620M molding compound is a mineral filled, glass-fiber-reinforced polyester compound suitable for compression, and stuffer injection molding. It is characterized by high impact strength, good moldability, excellent overall electrical properties and flame resistance. Typical applications include phase separators, circuit breaker housings, and applications requiring the properties of Military specification Mil-M-14G Type MAI-60. Although BMC 620M was designed to meet this specification, it has not been submitted for QPL recognition. BMC 620M molding compound is produced in a range of industrial colors, and is supplied in bulk form only.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber/Mineral
Features	• Flame Retardant • Good Moldability • Good Electrical Properties • High Impact Resistance
Uses	• Electrical/Electronic Applications
Appearance	• Colors Available
Forms	• BMC - Bulk Molding Compound
Processing Method	• Compression Molding • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.86	1.86 g/cm ³	ASTM D792
Water Absorption (24 hr, 73°F (23°C))	0.13 %	0.13 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, Compression Molded)	9000 psi	62.1 MPa	ASTM D638
Flexural Strength (Compression Molded)	22000 psi	152 MPa	ASTM D790
Compressive Strength	26000 psi	179 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	10 ft·lb/in	530 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	35	35	ASTM D2583
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, Compression Molded	500 °F	260 °C	ASTM D648
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength (Method A (Short-Time))	360 V/mil	14 kV/mm	ASTM D149
Dielectric Constant (60 Hz)	5.20	5.20	ASTM D150
Dissipation Factor (60 Hz)	0.020	0.020	ASTM D150
Arc Resistance	185 sec	185 sec	ASTM D495
Comparative Tracking Index (CTI)	500 V	500 V	UL 746A
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.6 mm)	V-0	V-0	
0.13 in (3.2 mm)	V-0	V-0	
0.25 in (6.4 mm)	V-0	V-0	

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Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	280 to 330 °F	138 to 166 °C

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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