

Technical Data Sheet

Bmc 620X

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 620X molding compound is a mineral filled, glass-fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is a high impact material produced in extruded form for ease of handling. Other characteristics are good moldability, excellent overall electrical properties and flame resistance. Typical applications include brush holders, circuit breaker housings and welding gun handles. BMC 620X molding compound is produced in extruded form in a range of industrial colors. It is available in logs up to 12 inches in length or as precut slugs, of specific weight, in diameters 1" to 2 ½". Within this range, smaller diameters are supplied as multiple extrusions and weight tolerances are plus or minus 5 %, up to a maximum of plus or minus 15 grams.

General

Filler / Reinforcement	• Glass\Mineral
Features	• Flame Retardant • Good Moldability • Good Electrical Properties • High Impact Resistance
Uses	• Electrical/Electronic Applications • Handles
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	1.79	1.79 g/cm ³	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.19 %	0.19 %	ASTM D570

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, Compression Molded)	8000 psi	55.2 MPa	ASTM D638
Flexural Strength (Compression Molded)	21000 psi	145 MPa	ASTM D790
Compressive Strength	24000 psi	165 MPa	ASTM D695

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	6.0 ft·lb/in	320 J/m	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	30	30	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))	380 V/mil	15 kV/mm	ASTM D149
Dielectric Constant (60 Hz)	5.40	5.40	ASTM D150
Dissipation Factor (60 Hz)	0.020	0.020	ASTM D150
Arc Resistance	190 sec	190 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.