

Technical Data Sheet

Bmc 620

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 620 molding compound is a mineral filled, glass-fiber-reinforced polyester compound suitable for compression, and stuffer injection molding. It is characterized by good moldability, high impact strength, excellent overall electrical properties and flame resistance. Typical applications include molded replacements for die castings, buss supports, circuit breaker housings, phase separators and contactor blocks. BMC 620 molding compound is produced in a range of industrial colors, and is supplied in bulk form.

General

Filler / Reinforcement	• Glass/Mineral
Features	• Flame Retardant • Good Electrical Properties • Good Moldability • High Impact Resistance
Uses	• Electrical/Electronic Applications
Automotive Specifications	• CHRYSLER MS-DA-209
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	1.73 to 1.79	1.73 to 1.79 g/cm ³	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.14 %	0.14 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, Compression Molded)	5000 to 8000 psi	34.5 to 55.2 MPa	ASTM D638
Flexural Strength (Compression Molded)	19000 to 23000 psi	131 to 159 MPa	ASTM D790
Compressive Strength	22000 to 26000 psi	152 to 179 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	6.0 to 9.0 ft-lb/in	320 to 480 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	22 to 42	22 to 42	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	190 sec	190 sec	ASTM D495
Comparative Tracking Index (CTI)	> 500 V	> 500 V	UL 746A
Inclined-Plane Tracking (2.5 Kv)	> 900 min	> 900 min	ASTM D2303
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.