Technical Data Sheet

Bmc 615

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description
BMC 615 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 overall electrical properties and flame resistance. Typical applications include circuit breaker housing, standoff insulators, bus supports and collector rings. BMC 615 molding compound is produced in extruded form in a range on 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 extrusion and weight tolerances are plus or minus 5 %, up to a maximum of plus or minus 15 grams.

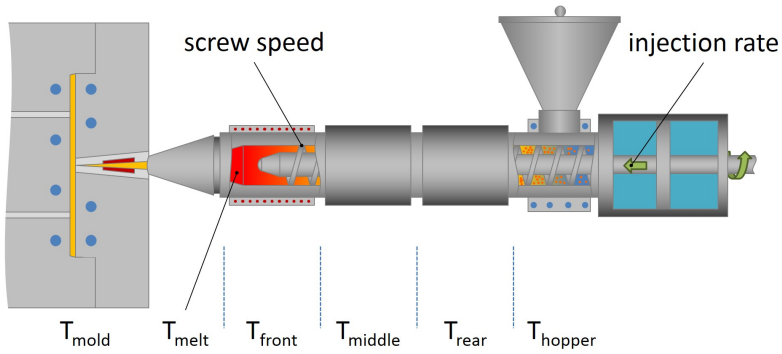
General			
Filler / Reinforcement	• Glass\Mineral		
Features	• Flame Retardant	• Good Electrical Properties	• High Impact Resistance
Uses	• Electrical/Electronic Applications		
Appearance	• Colors Available		
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.88	1.88 g/cm³	ASTM D792
Water Absorption (24 Hr, 73°f (23°c))	0.15 %	0.15 %	ASTM D570
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield, Compression Molded)	7000 psi	48.3 MPa	ASTM D638
Flexural Strength (Compression Molded)	17500 psi	121 MPa	ASTM D790
Compressive Strength	22000 psi	152 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (Compression Molded)	5.0 ft·lb/in	270 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	40	40	ASTM D2583
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, Compression Molded	600 °F	316 °C	
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Dielectric Strength (Method A (short-time))	350 V/mil	14 kV/mm	ASTM D149
Dielectric Constant (60 Hz)	5.30	5.30	ASTM D150
Dissipation Factor (60 Hz)	0.015	0.015	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	

Technical Data Sheet

Bmc 615

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics



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.