

Technical Data Sheet

Bmc 605LS

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 605LS molding compound is a low-shrink, mineral filled, glass-fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is characterized by good moldability, medium impact strength and excellent overall electrical properties and flame resistance. Typical applications include circuit breakers, transformer bobbins and motor end bells.

BMC 605LS 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 pre-cut slugs, of specific weight, in dia meters from 1" to 2 1/2". 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	• Good Moldability • Low Shrinkage	• Medium Impact Resistance
Uses	• Electrical/Electronic Applications		
Appearance	• Colors Available		
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding	• Injection Molding	

	Nominal Value (English)	Nominal Value (SI)	Test Method
Physical			
Density / Specific Gravity	1.88 to 1.96	1.88 to 1.96 g/cm ³	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.14 %	0.14 %	ASTM D570
Mechanical			
Tensile Strength (Yield, Compression Molded)	6000 to 8000 psi	41.4 to 55.2 MPa	ASTM D638
Flexural Strength (Compression Molded)	16000 to 20000 psi	110 to 138 MPa	ASTM D790
Compressive Strength	24000 to 28000 psi	165 to 193 MPa	ASTM D695
Impact			
Notched Izod Impact (Compression Molded)	2.0 to 6.0 ft-lb/in	110 to 320 J/m	ASTM D256
Hardness			
Barcol Hardness	40 to 50	40 to 50	ASTM D2583
Thermal			
Deflection Temperature Under Load 264 Psi (1.8 Mpa), Unannealed	> 500 °F	> 260 °C	ASTM D648
Electrical			
Dielectric Strength (Method A (short-time))	350 V/mil	14 kV/mm	ASTM D149
Arc Resistance	190 sec	190 sec	ASTM D495
Comparative Tracking Index (CTI)	> 600 V	> 600 V	UL 746A
Flammability			
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.