Technical Data Sheet

Bmc 605L

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description
BMC 605L molding compound is a low cost, mineral filled, glass-fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is characterized by good moldability, medium impact strength, excellent overall electrical properties and flame resistance. Typical applications include circuit breakers, transformer bobbins and motor end bells. BMC 605L 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 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 Electrical Properties	• Good Moldability • Medium 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	1.95	1.95 g/cm³	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)	6000 to 8000 psi	41.4 to 55.2 MPa	ASTM D638
Flexural Strength (Compression Molded)	1600 to 20000 psi	11.0 to 138 MPa	ASTM D790
Compressive Strength	24000 to 28000 psi	165 to 193 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (Compression Molded)	2.0 to 6.0 ft·lb/in	110 to 320 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	40 to 50	40 to 50	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	500 °F	260 °C	
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
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	**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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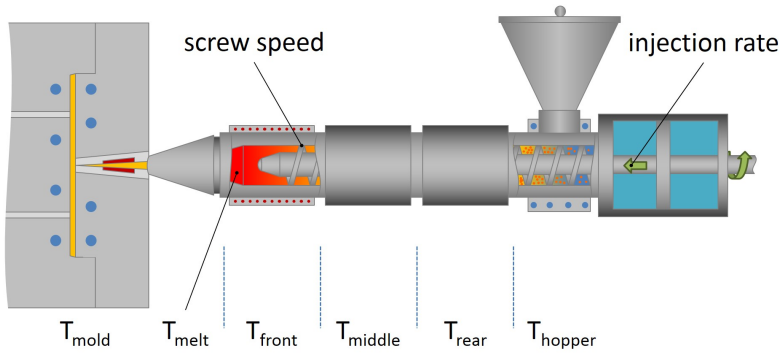

Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	280 to 330 °F	138 to 166 °C

Notes

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