(+) 188 1699 6168
hongrunplastics.com

Technical Data Sheet

Bmc 685

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 685 molding compound is a mineral filled, glass fiber reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is characterized by good moldability, oil and solvent resistance and creep resistance at elevated temperatures. Typical applications include replacements for die castings and sheet molding compounds, valve covers, intake manifolds, oil pans and circuit breakers.

BMC 685 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 in to 2.5 in. 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	• Creep Resistant • Good Moldability	• Oil Resistant • Solvent Resistant	
Uses	• Automotive Applications	• Automotive Under the Hood	
Appearance	• Colors Available		
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding	• Injection Molding	• Resin Transfer Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.75	1.75 g/cm³	ASTM D792
Water Absorption (24 Hr, 73°f (23°c))	0.11 %	0.11 %	ASTM D570
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength	10500 psi	72.4 MPa	ASTM D638
Flexural Strength	28500 psi	197 MPa	ASTM D790
Compressive Strength	28500 psi	197 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact	17 ft·lb/in	880 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	60	60	ASTM D2583
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed	500 °F	260 °C	
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Dielectric Strength (Method A (short-time))	400 V/mil	16 kV/mm	ASTM D149
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)	HB	HB	
0.13 In (3.2 Mm)	V-0	V-0	
0.25 In (6.4 Mm)	V-0	V-0	

Notes

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