

Technical Data Sheet

# Bmc 604

Thermoset Polyester  
LyondellBasell Industries  
Engineering Plastics

## Product Description

BMC 604 molding compound is a low-cost, mineral filled glass-fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is a general purpose material with medium impact strength and good overall electrical properties. Typical applications include slip rings, commutators and brush holders. BMC 604 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 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	• General Purpose	• Good Electrical Properties	• Medium Impact Resistance
Uses	• Communication Applications • General Purpose		
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	2.06	2.05 g/cm <sup>3</sup>	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.13 %	0.13 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	4000 to 6000 psi	27.6 to 41.4 MPa	ASTM D638
Flexural Strength	16000 to 20000 psi	110 to 138 MPa	ASTM D790
Compressive Strength	28000 to 33000 psi	193 to 228 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	2.0 to 4.0 ft-lb/in	110 to 210 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	30 to 40	30 to 40	ASTM D2583
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 Psi (1.8 Mpa), Unannealed	500 °F	260 °C	ASTM D648
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength (Method A (short-time))	330 V/mil	13 kV/mm	ASTM D149
Arc Resistance	180 sec	180 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)	HB	HB	
0.25 In (6.4 Mm)	HB	HB	

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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.