

Technical Data Sheet

# Bmc 5436

Thermoset Polyester  
LyondellBasell Industries  
Engineering Plastics

### Product Description

BMC 5436 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 and excellent overall electrical properties. Typical applications include circuit breakers, transformer bobbins and motor end bells. BMC 5436 molding compound is produced in extruded form in a range on industrial colors. Because of the soft consistency of this product, it is only available in logs from 3 inches to 12 inches in length and from 1" to 2 1/2" in diameter. Within this range, smaller diameters are supplied as multiple extrusions.

### General

Filler / Reinforcement	• Glass\Mineral
Features	• 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
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Density / Specific Gravity	2.02 to 2.07	2.01 to 2.06 g/cm <sup>3</sup>	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
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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
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Notched Izod Impact	2.0 to 4.0 ft-lb/in	110 to 210 J/m	ASTM D256
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Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
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Barcol Hardness	40 to 60	40 to 60	ASTM D2583
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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load 264 Psi (1.8 Mpa), Unannealed	> 500 °F	> 260 °C	ASTM D648
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Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Dielectric Strength (Method A (short-time))	340 V/mil	13 kV/mm	ASTM D149
Arc Resistance	> 180 sec	> 180 sec	ASTM D495
Comparative Tracking Index (CTI)	> 600 V	> 600 V	UL 746A

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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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	300 to 350 °F	149 to 177 °C

**Notes**

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