Technical Data Sheet

LyondellBasell

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 ½" in diameter. Within this range, smaller diameters are supplied as multiple extrusions.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber\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
Density / Specific Gravity	2.02 to 2.07	2.01 to 2.06 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)	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	40 to 60	40 to 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))	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**
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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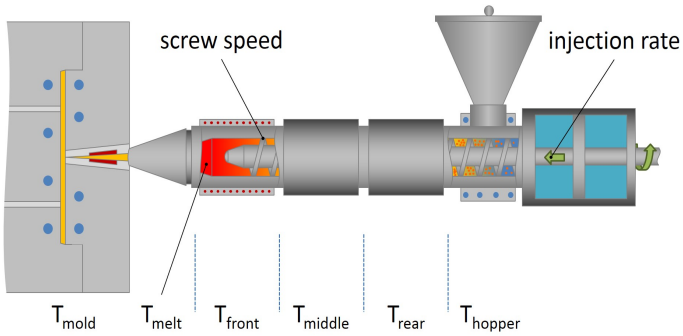

Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	300 to 350 °F	149 to 177 °C

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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