

Technical Data Sheet

# Bmc 5209-12940

Thermoset Polyester  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

BMC 5209-12940 molding compound is a mineral filled, glass fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is a high impact material produced in bulk form for maximum strength. Other characteristics are good over all electrical properties and flame resistance. Typical applications include circuit breaker housings, standoff insulators, bus supports and tool housings. BMC 5209-12940 molding compound can be produced in a range on industrial colors.

**General**

Filler / Reinforcement	• Glass\Mineral		
Features	• Flame Retardant	• Good Electrical Properties	• High Impact Resistance
Uses	• Electrical Housing	• 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	1.89	1.89 g/cm <sup>3</sup>	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.080 %	0.080 %	ASTM D570

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, Compression Molded)	8500 psi	58.6 MPa	ASTM D638
Flexural Strength (Compression Molded)	24000 psi	165 MPa	ASTM D790
Compressive Strength	26000 psi	179 MPa	ASTM D695

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	8.0 ft·lb/in	430 J/m	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	44	44	ASTM D2583

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 Psi (1.8 Mpa), Unannealed, Compression Molded	500 °F	260 °C	ASTM D648

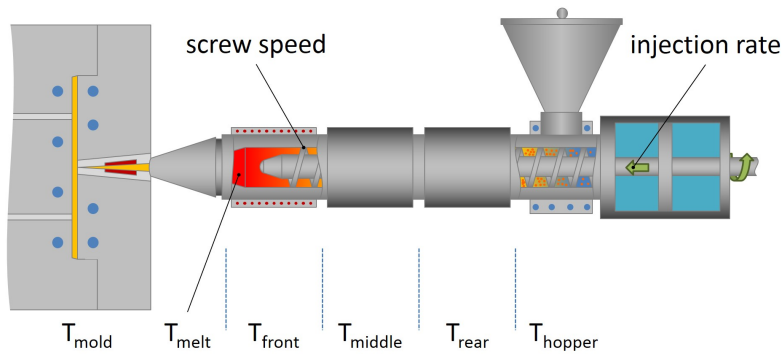
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength (Method A (short-time))	400 V/mil	16 kV/mm	ASTM D149
Arc Resistance	180 sec	180 sec	ASTM D495
Comparative Tracking Index (CTI)	600 V	600 V	UL 746A

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 In (1.6 Mm)	V-0	V-0	
0.13 In (3.2 Mm)	V-0	V-0	
0.25 In (6.4 Mm)	5V	5V	
	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.