Technical Data Sheet

Bmc 5592

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 5592 molding compound is an arc, track and weather resistant grade polyester compound suitable for compression, transfer and stuffer injection molding. It has excellent impact strength, flame resistance and electrical characteristics. Typical applications include third rail and other rapid transit insulators. BMC 5592 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" to 2 ½" . 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

Features	• Flame Retardant • Good Electrical Properties	• Good Weather Resistance • High Impact Resistance
Uses	• Electronic Insulation	
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	1.87	1.87 g/cm³	ASTM D792
Water Absorption (24 Hr, 73°f (23°c))	0.10 %	0.10 %	ASTM D570
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield)	11500 psi	79.3 MPa	ASTM D638
Flexural Strength	25000 psi	172 MPa	ASTM D790
Compressive Strength	23000 psi	159 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact	14 ft·lb/in	750 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	40	40	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))	390 V/mil	15 kV/mm	ASTM D149
Arc Resistance	195 sec	195 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
0.04 In (1.0 Mm)	V-0	V-0	
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)	V-0	V-0	

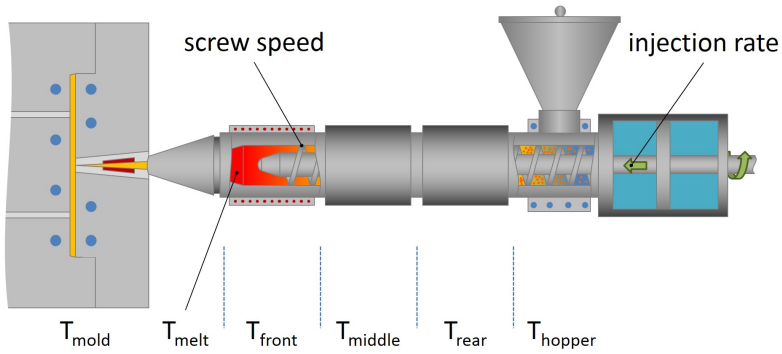
Additional Information

Inclined plane track resistance @ 2500 volts: 1000
Flame resistance, ASTM D229, Ignition time: 200 sec
Flame resistance, ASTM D229, Burn time: 50 sec

Technical Data Sheet

Bmc 5592

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics



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.