

Technical Data Sheet

Bmc 675

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 675 molding compound is a mineral filled, glass reinforced polyester molding compound suitable for compression, transfer or stuffer injection molding. It is characterized by good moldability, oil and solvent resistance and creep resistance at elevated temperatures. Typical applications include replacements for die castings and sheet molding compounds, valve covers, intake manifolds, oil pans and structural components.

BMC 675 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.

General

Automotive Specifications	• CHRYSLER MS-DA-300 CPN4571 Color: 15419 Black		
Forms	• Pellets		
Processing Method	• Compression Molding	• Extrusion	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.85	1.85 g/cm ³	ASTM D792
Water Absorption (24 Hr, 73°F (23°C))	0.25 %	0.25 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2.15E+6 psi	14800 MPa	ASTM D638
Tensile Strength	4500 psi	31.0 MPa	ASTM D638
Flexural Modulus	1.90E+6 psi	13100 MPa	ASTM D790
Flexural Strength	12500 psi	86.2 MPa	ASTM D790
Compressive Strength	24000 psi	165 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Instrumented Dart Impact			ASTM D3763
Energy To Max Load	27.0 in·lb	3.05 J	
0.125 In (3.18 Mm), Total Energy	44.4 in·lb	5.02 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	55	55	ASTM D2583

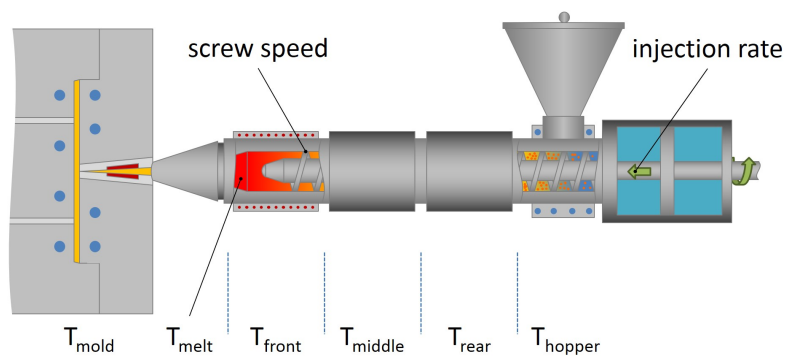
Additional Information

Density Specific Gravity, ASTM D792: 1.80 to 1.90 sp gr 23/23°C
Flexural Strength, ASTM D790: 11000 to 14000 psi
Flexural Modulus, ASTM D790: 1800000 to 2000000 psi
Compressive Strength, ASTM D695: 23000 to 25000 psi
Tensile Strength, ASTM D638: 4000 to 5000 psi
Tensile Modulus, ASTM D638: 2000000 to 2300000 psi
Water Absorption @ 24 hrs, ASTM D570, 23°C: 0.23 to 0.27 %
Barcol Hardness, ASTM D2583: 50 to 60
Instrumented Dart Impact, ASTM D3763, 0.125 in, Total Energy: 3 to 4.4 ft·lb
Instrumented Dart Impact, ASTM D3763, Energy to Max Load: 1.8 to 2.7 ft·lb
Instrumented Dart Impact, ASTM D3763, Maximum Load: 170 to 200 lbs

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Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	280 to 330 °F	138 to 166 °C

Notes

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