

Technical Data Sheet**Bmc 400**

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 400 is a high strength, low shrink molding compound. It can be supplied in bulk or extruded in pre-weighted slugs. Typical applications are HVAC condensation drain pans, power tool housings, insulators and circuit breakers.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• High Strength	• Low Shrinkage	
Uses	• Appliances	• Electrical Housing	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.75 to 1.95	1.75 to 1.95 g/cm ³	ASTM D792
Water Absorption (24 hr, 73°F (23°C))	0.12 to 0.20 %	0.12 to 0.20 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	5000 to 8000 psi	34.5 to 55.2 MPa	ASTM D638
Flexural Modulus	1.70E+6 to 1.90E+6 psi	11700 to 13100 MPa	ASTM D790
Flexural Strength (Yield)	14000 to 20000 psi	96.5 to 138 MPa	ASTM D790
Compressive Strength	18000 to 23000 psi	124 to 159 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	3.0 to 8.0 ft-lb/in	160 to 430 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	40 to 50	40 to 50	ASTM D2583
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	> 500 °F	> 260 °C	ASTM D648
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength (Method A (Short-Time))	350 to 400 V/mil	14 to 16 kV/mm	ASTM D149
Arc Resistance (0.0625 in (1.59 mm))	> 180 sec	> 180 sec	ASTM D495
Comparative Tracking Index (CTI) 0.0625 in (1.59 mm)	500 V	500 V	UL 746A
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	• V-0 • 5V	• V-0 • 5V	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	280 to 330 °F	138 to 166 °C
Middle Temperature	280 to 330 °F	138 to 166 °C
Front Temperature	280 to 330 °F	138 to 166 °C
Mold Temperature	280 to 330 °F	138 to 166 °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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