

Technical Data Sheet**Bmc 404**

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description

BMC 404 is a general purpose, mineral filled, glass fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is of medium strength and meets Ford Specification ESF-M3D121-A. This material has excellent electrical properties. As with all other BMC compounds, this series can be supplied in logs, slugs or bulk. Typical applications are bobbins, electrical connectors, circuit breakers and as phenolic replacement.

General

Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber	• Mineral	
Features	• Good Electrical Properties	• Good Strength	
Uses	• Appliances	• Bobbins/Spools	• Electrical Parts
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		

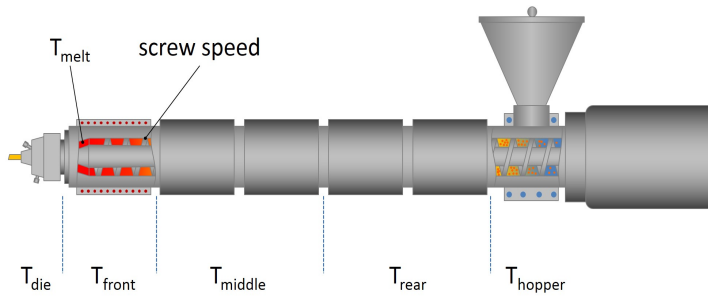
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.80 to 1.90	1.80 to 1.90 g/cm ³	ASTM D792
Water Absorption (24 hr)	0.12 %	0.12 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	5500 to 8000 psi	37.9 to 55.2 MPa	ASTM D638
Flexural Strength (Yield)	15000 to 18000 psi	103 to 124 MPa	ASTM D790
Compressive Strength	18000 to 21000 psi	124 to 145 MPa	ASTM D695
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	5.0 to 9.0 ft-lb/in	270 to 480 J/m	ASTM D256
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Barcol Hardness	45 to 55	45 to 55	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	350 to 370 V/mil	14 to 15 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	V-0	UL 94

Technical Data Sheet



Bmc 404

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics



Extrusion	Nominal Value (English)	Nominal Value (SI)
Cylinder Zone 1 Temp.	280 to 330 °F	138 to 166 °C
Cylinder Zone 2 Temp.	280 to 330 °F	138 to 166 °C
Cylinder Zone 3 Temp.	280 to 330 °F	138 to 166 °C
Cylinder Zone 4 Temp.	280 to 330 °F	138 to 166 °C
Cylinder Zone 5 Temp.	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/>.

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.