

Technical Data Sheet



Premi-glas 3100-20

Thermoset, Unspecified
LyondellBasell Industries
Engineering Plastics

Product Description

Premi-Glas® 3100-20 is a fiberglass reinforced thermoset bulk molding compound for electrical and flame retardant applications.

- Good dimensional stability, including excellent thermal resistance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Excellent property retention in cold and hot environments.
- Recognized by Underwriters Laboratories, File # E42524.
- Underwriters Laboratories 94-VO flame resistance at 1.5mm thickness.

General

Material Status	• Commercial: Active	
Availability	• North America	
Filler / Reinforcement	• Glass Fiber	
Additive	• Flame Retardant	
Features	• Flame Retardant • Good Colorability	• Good Dimensional Stability • Medium Heat Resistance
Uses	• Electrical/Electronic Applications	
UL File Number	• E42524	
Forms	• BMC - Bulk Molding Compound	

Physical	Nominal Value (English)	Nominal Value (SI)	
Density / Specific Gravity	1.70 to 1.85	1.70 to 1.85 g/cm ³	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (Compression Molded)	1.80E+6 psi	12400 MPa	ASTM D638
Tensile Strength (Compression Molded)	5500 psi	37.9 MPa	ASTM D638
Flexural Modulus (Compression Molded)	1.50E+6 psi	10300 MPa	ASTM D790
Flexural Strength (Compression Molded)	16000 psi	110 MPa	ASTM D790
Poisson's Ratio	0.30	0.30	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	8.0 ft·lb/in	430 J/m	ASTM D256
Unnotched Izod Impact (Compression Molded)	10 ft·lb/in	530 J/m	ASTM D4812
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
CLTE			
Flow ¹	1.4E-5 in/in/°F	2.5E-5 cm/cm/°C	
Transverse ²	1.9E-5 in/in/°F	3.5E-5 cm/cm/°C	
Thermal Conductivity	2.1 Btu·in/hr/ft ² /°F	0.30 W/m/K	
RTI Elec	266 °F	130 °C	UL 746B
RTI Imp	266 °F	130 °C	UL 746B
RTI Str	266 °F	130 °C	UL 746B
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength	380 V/mil	15 kV/mm	ASTM D149
Arc Resistance	> 180 sec	> 180 sec	ASTM D495
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm))	V-0	V-0	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	300 °F	149 °C
Injection Pressure	500 to 1000 psi	3.45 to 6.89 MPa

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Notes

¹ XY Direction

² Z Direction

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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