

Technical Data Sheet



Premi-glas 3406

Thermoset, Unspecified
LyondellBasell Industries
Engineering Plastics

Product Description

Premi-Glas® 3406 is a fiberglass reinforced thermoset sheet molding compound for mass transit third rail insulators and other semi-structural applications where low smoke and low flammability are required.

- Radiant panel flame spread index of less than 20 per ASTM E-162.
- Smoke Density of less than 25 per ASTM E662 (NBS smoke chamber).
- Excellent flexural strength and outstanding toughness.
- Halogen-free flame retardant system for reduced smoke toxicity.
- Material properties conform to requirements of NYCTA 60-MTA.

General

Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber		
Additive	• Flame Retardant		
Features	• Flame Retardant • Good Strength	• Good Toughness • Halogen Free	• Low Smoke Emission
Uses	• Electrical/Electronic Applications • Industrial Applications		
UL File Number	• E42524		
Forms	• SMC - Sheet Molding Compound		

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (Compression Molded)	2.10E+6 psi	14500 MPa	ASTM D638
Tensile Strength (Compression Molded)	18500 psi	128 MPa	ASTM D638
Tensile Elongation Break, Compression Molded	1.2 %	1.2 %	ASTM D638
Flexural Modulus (Compression Molded)	1.80E+6 psi	12400 MPa	ASTM D790
Flexural Strength (Compression Molded)	39500 psi	272 MPa	ASTM D790
Poisson's Ratio	0.30	0.30	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Compression Molded)	25 ft·lb/in	1300 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	
CLTE			
Flow ¹	5.6E-6 to 1.1E-5 in/in/°F	1.0E-5 to 2.0E-5 cm/cm/°C	
Transverse ²	1.1E-5 to 1.7E-5 in/in/°F	2.0E-5 to 3.0E-5 cm/cm/°C	
Thermal Conductivity	2.1 Btu·in/hr/ft²/°F	0.30 W/m/K	
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Strength	400 V/mil	16 kV/mm	ASTM D149
Arc Resistance	190 sec	190 sec	ASTM D495
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
NBS Smoke Density - Ds at 4 min	< 25.0	< 25.0	ASTM E662
Radiant Panel Flame Spread Index	< 20.0	< 20.0	ASTM E162
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Track Resistance - 2.5 kV	> 12.5 hr	> 12.5 hr	ASTM D6303

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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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