

Premi-Glas® 3406

Sheet Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester SMC suitable for mass transit third rail insulators and other semi-structural applications where low smoke and low flammability are required

GENERAL

Material Status	• Commercial: Active		
Availability	• North America	• South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	<ul style="list-style-type: none"> • 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) • Meets NYCTA 60-MTA requirements <ul style="list-style-type: none"> • Non-Halogen FR technology 		
Processing Method	• This SMC product is generally intended to be compression molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process.		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.88	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0005	in/in	ASTM D955
CLTE, X-Y plane	10-20	ppm/°C	ASTM E831
CLTE, Z plane	20-30	ppm/°C	ASTM E831
Poisson's Ratio	0.3		ASTM D638

MECHANICAL (As cut)	Typical	Unit	Test Method
Tensile Modulus	2.1 x 10 ⁶ (14.5)	psi (GPa)	ASTM D638
Tensile Strength	18,500 (125)	psi (MPa)	ASTM D638
Tensile Elongation	1.2%	%	ASTM D638
Flexural Modulus (RT)	1.8 x 10 ⁶ (12.5)	psi (GPa)	ASTM D790
Flexural Strength	29,500 (270)	psi (MPa)	ASTM D790

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	25 (1300)	ft-lb/in (J/m)	ASTM D256
THERMAL	Typical	Unit	Test Method
Thermal Conductivity, 25°C	0.3	W/m-°K	ASTM E1461
FLAMMABILITY	Typical	Unit	Test Method
Radiant Panel Flame Index	20 or less		ASTM E-162
NBS Smoke Density Index, Ds @ 4 minutes	25 or less		ASTM E-662
ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	400 (15.7)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	190+	seconds	ASTM D495
Track Resistance	>750 minutes @ 2.5kV		ASTM D6303

For additional information, please contact:

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