

Premi-Glas® 3101-10

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for electrical circuit breakers, switchgear, and other applications where fire retardance is required

GENERAL

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	• Non-Halogen FR technology • UL Recognized—File E69414	• Good dimensional stability • UL94-V-0 @ 1.6 mm	• Excellent electrical properties
Processing Method	• This BMC product is generally intended to be compression or injection 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. Extrusions available.		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.80-1.95	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.0030	in/in	ASTM D955
CLTE, X-Y plane	25	ppm/°C	ASTM E831
CLTE, Z plane	35	ppm/°C	ASTM E831
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As cut)	Typical	Unit	Test Method
Tensile Modulus	1.75 x 10 ⁶ (12)	psi (GPa)	ASTM D638
Tensile Strength	4,800 (33)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.2 x 10 ⁶ (8.3)	psi (GPa)	ASTM D790
Flexural Strength	11,500 (79)	psi (MPa)	ASTM D790

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	3.5 (185)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	6 (320)	ft-lb/in (J/m)	ASTM D4812

THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature, 264 psi	400+ (200+)	°F (°C)	ASTM D792
Thermal Conductivity, 25°C	0.30	W/m**K	ASTM E1461
UL RTI, Electrical	266 (130)	°C	UL 746C
UL RTI, Mechanical with Impact	266 (130)	°C	UL 746C
UL RTI, Mechanical without Impact	266 (130)	°C	UL 746C

FLAMMABILITY	Typical	Unit	Test Method
Flammability	Pass 0.063 (1.6)	in (mm)	UL94-V0
Flammability	Pass 0.102 (2.6)	in (mm)	UL94-5V

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	450 (18)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	220+	seconds	ASTM D495

UL File Number E69414



For additional information, please contact:

A. Schulman Inc., Engineered Composites
 1600 Powis Ct, West Chicago, IL 60185
 p: 630-377-1065
 f: 630-377-7395
www.aschulman.com

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