

# Premi-Glas® 3101-20

## 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

<b>Material Status</b>	• Commercial: Active		
<b>Availability</b>	• North America • Asia Pacific	• Europe • South America	
<b>Filler/Reinforcement</b>	• Glass Fiber and mineral filler		
<b>Features</b>	• Non-Halogen FR technology • Outstanding flow	• Good dimensional stability • UL Recognized—File E69414	• Pigmentable • UL94-V-0 @1.6 mm
<b>Processing Method</b>	• This BMC product is generally intended to be compression or injection molded in matched metal die molds, typically at 300°F (150°C) and 500to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process.		
<b>Resin</b>	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.80-1.95	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	.0015-.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	0.30		ASTM D638

MECHANICAL (As cut)	Typical	Unit	Test Method
Tensile Modulus	1.9 x 10 <sup>6</sup> (13.0)	psi (GPa)	ASTM D638
Tensile Strength	4,800 (33)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.5 x 10 <sup>6</sup> (10.3)	psi (GPa)	ASTM D790
Flexural Strength	16,000 (110)	psi (MPa)	ASTM D790

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<b>IMPACT</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Izod Notched Impact Strength	8 (425)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	10 (530)	ft-lb/in (J/m)	ASTM D4812

<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
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

<b>FLAMMABILITY</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Flammability	.063 (1.6)	in (mm)	UL94-V0
Flammability	.102 (2.6)	in (mm)	UL94-5V

<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	450 (18)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	210+	seconds	ASTM D495
Inclined Plane Track Resistance	> 2,000	minutes	ASTM D2303

UL File Number E69414



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