Typical Application — Electrical/Flame Retardant

Premi-Glas® 3101-15 is a fiberglass reinforced thermoset bulk molding compound for electrical circuit breakers, switchgear, and other applications where fire retardance is required.

Key Features and Benefits:

- Non-Halogen FR technology for regulatory compliance.
- Excellent dimensional stability and electrical properties.
- Recognized by Underwriters Laboratories, File #E42524.
- Outstanding flow and fill in Compression, Transfer, and Injection molding.
- Pigmentable for molded-in color, best appearance with mold texture.

Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	13,500 psi	93 MPa
Flexural Modulus	ASTM D-790	1.4 x 10^6 psi	9.7 GPa
Tensile Strength	ASTM D-638	4,800 psi	33 MPa
Tensile Modulus	ASTM D-638	1.8 x 10^6 psi	12 GPa
Notched Izod	ASTM D 256	6 ft*lb/in	320 Joules/m
Unnotched Impact	ASTM D 4812	9 ft*lb/in	480 Joules/m
Flame Resistance	UL94-V0	pass, 0.063"	pass, 1.6 mm
Flame Resistance	UL94-5V	pass, 0.102"	pass, 2.6 mm
UL Relative Thermal Index (electrical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (mechanical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (impact)	UL 746C	266 deg F	130 deg C
Dielectric Strength, KV/mm	ASTM D149	450 Volts/mil	18 kV/mm
Arc resistance, seconds	ASTM D495	210 sec	210 sec
Heat Deflection Temperature, 264 psi	ASTM D792	400+ deg F	200+ deg C

This BMC product is generally intended to be compression, transfer or injection molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Nominal values for polymerization shrinkage (0.0015 to 0.003 in/in) and specific gravity (1.80-1.95) may be customized for individual applications. Contact your Premix sales representative for specific design recommendations.

Following physical characteristics are typical of this product:

CLTE, XY direction: 25 ppm/ deg C
CLTE, Z direction: 35 ppm/deg C
Thermal Conductivity: 0.3 W/m*deg K
Poisson's Ratio: 0.3

Last modified: 7/29/2009