

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 3101-25 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	18,000 psi	124 MPa
Flexural Modulus	ASTM D-790	1.7 x 10 ⁶ psi	11.7 GPa
Tensile Strength	ASTM D-638	4,800 psi	33 MPa
Tensile Modulus	ASTM D-638	1.95 x 10 ⁶ psi	13.4 GPa
Notched Izod	ASTM D 256	10 ft*lb/in	530 Joules/m
Unnotched Impact	ASTM D 4812	13 ft*lb/in	690 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 ² deg K
Poisson's Ratio: 0.3

The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, expressed or implied.

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