

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 2103-10 CR-SX is a fiberglass reinforced thermoset bulk molding compound for electrical and flame retardant applications.

**Key Features and Benefits:**

- Non-Halogen FR technology for regulatory compliance.
- Good dimensional stability, including excellent thermal resistance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Recognized by Underwriters Laboratories, File # E42524.
- Underwriters Laboratories 94-VO flame resistance at 2.5mm thickness.

Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	12,000 psi	95 MPa
Flexural Modulus	ASTM D-790	1.4x 10 <sup>6</sup> psi	9.7 GPa
Tensile Strength	ASTM D-638	4,800	33 MPa
Tensile Modulus	ASTM D-638	1.75 x 10 <sup>6</sup> psi	12 GPa
Notched Izod	ASTM D 256	3.5 ft*lb/in	185 Joules/m
Unnotched Impact	ASTM D 4812	6 ft*lb/in	320 Joules/m
Comparative Tracking Index	ASTM D-2303	600	600
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
Flame Resistance	U.L. 94 V0	Pass, 0.100 in	Pass, 2.5 mm
Dielectric Strength, KV/mm	ASTM D149	400 Volts/mil	15 kV/mm
Arc resistance, seconds	ASTM D495	180 sec	180 sec

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 1000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Nominal values for polymerization shrinkage (0.0015 to 0.0035 in/in) and specific gravity (1.70 to 1.85) 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

**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.

*Last modified: 7/29/2009*