

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 2203-15 CR-SX is a fiberglass reinforced thermoset sheet molding compound for electrical and flame retardant applications.

Key Features and Benefits:

- Excellent stiffness to weight ratio, non-melting.
- 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	14,500 psi	100 MPa
Flexural Modulus	ASTM D-790	1.2 x 10 ⁶ psi	8 GPa
Tensile Strength	ASTM D-638	4,500	30 MPa
Tensile Modulus	ASTM D-638	1.3 x 10 ⁶ psi	9 GPa
Notched Izod	ASTM D 256	9.6 ft*lb/in	500 Joules/m
Unnotched Impact	ASTM D 4812	13 ft*lb/in	700 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	380 Volts/mil	15 kV/mm
Arc resistance, seconds	ASTM D495	180 sec	180 sec

This SMC product is generally intended to be compression 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