

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 2205-20 CR-SX is a fiberglass reinforced thermoset sheet molding compound for electrical and flame retardant applications.

Key Features and Benefits:

- Good dimensional stability, including excellent thermal resistance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Excellent property retention in cold and hot environments.
- Recognized by Underwriters Laboratories, File # E42524.
- UL 94-5V flame resistance at 2.5mm and 94V0 at 1.8mm 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	18,500 psi	125 MPa
Flexural Modulus	ASTM D-790	1.3 x 10 ⁶ psi	9 GPa
Tensile Strength	ASTM D-638	7,000 psi	50 MPa
Tensile Modulus	ASTM D-638	1.5 x 10 ⁶ psi	10 GPa
Notched Izod	ASTM D 256	12 ft*lb/in	650 Joules/m
Unnotched Impact	ASTM D 4812	16 ft*lb/in	850 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 5V	Pass, 0.100 in	Pass, 2.5 mm
Flame Resistance	U.L. 94 V0	Pass, 0.071 in	Pass, 1.8 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.
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