

Technical Data Sheet

Typical Application — Electrical/Flame Retardant/HVAC

Premi-Glas 2550®B-CR-SX is an advanced fiberglass reinforced thermoset sheet molding compound for electrical, flame retardant, and HVAC applications where stringent flame spread and smoke generation criteria are required.

Key Features and Benefits:

- Non-Halogen FR technology for regulatory compliance.
- Meets Steiner Tunnel < 25 Flame Spread Index and < 50 Smoke Index.
- Required in some instances where >10 square ft of composite is present.
- Suitable for outdoor use in applications involving UV exposure and water immersion in accordance with UL746C (f1). File E42524.

Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	24,000 psi	165 MPa
Flexural Modulus	ASTM D-790	1.38 x 10 ⁶ psi	9.5 GPa
Tensile Strength	ASTM D-638	10,000 psi	70 MPa
Tensile Modulus	ASTM D-638	1.9 x 10 ⁶ psi	13 GPa
Notched Izod	ASTM D 256	13 ft*lb/in	700 Joules/m
Unnotched Impact	ASTM D 4812	18.5 ft*lb/in	1000 Joules/m
UL Relative Thermal Index (electrical)	UL 746C	221 deg F	105 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 VO & 5V	Pass, 0.060 in	Pass, 1.5 mm
Flame Spread Index	UL723 Steiner Tunnel	5	NA
Smoke Developed Index	UL723 Steiner Tunnel	20-50	NA

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 (0.00025 to 0.0015 in/in) and specific gravity (2.00) are approximate. Contact your Premix sales representative for specific design recommendations.

Following physical characteristics are typical of this product:

CLTE, XY direction: 23 ppm/ deg C
CLTE, Z direction: 35 ppm/deg C
Thermal Conductivity: 1.3 W/m*deg K
Poisson's Ratio: 0.21

The values presented in this data sheet are typical values for molded test coupons. The values 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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