



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