

Technical Data Sheet

Typical Application — Mass Transit

Premi-Glas® 3406 is a fiberglass reinforced thermoset sheet molding compound for mass transit third rail insulators and other semi-structural applications where low smoke and low flammability are required.

**Key Features and Benefits:**

- Radiant panel flame spread index of less than 20 per ASTM E-162.
- Smoke Density of less than 25 per ASTM E662 (NBS smoke chamber).
- Excellent flexural strength and outstanding toughness.
- Halogen-free flame retardant system for reduced smoke toxicity.
- Material properties conform to requirements of NYCTA 60-MTA.

**Typical Values. Mechanical values are for Specimens Compression-Molded to net shape.**

Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	39,500 psi	270 MPa
Flexural Modulus	ASTM D-790	1.8x 10 <sup>6</sup> psi	12.5 GPa
Tensile Strength	ASTM D-638	18,500 psi	125 MPa
Tensile Modulus	ASTM D-638	2.1 x 10 <sup>6</sup> psi	14.5 GPa
Tensile Elongation	ASTM D-638	1.2%	1.2%
Notched Izod	ASTM D 256	25 ft*lb/in	1300 Joules/m
Radiant Panel Flame Index	ASTM E-162	20 or less	20 or less
NBS Smoke Density Index, Ds @ 4 minutes.	ASTM E-662	25 or less	25 or less
Dielectric Strength	ASTM D149	400 Volts/mil	15.7 kV/mm
Arc resistance	ASTM D495	190 sec	190 sec
Track resistance	ASTM D6303	>750 minutes @ 2.5kV	>750 minutes @ 2.5kV

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 (0.0005 in/in) and specific gravity (1.88) are typical. Contact your Premix sales representative for specific design recommendations.

**The following physical characteristics are typical of this product:**

CLTE, XY direction: 10-20 ppm/ deg C
CLTE, Z direction: 20-30 ppm/deg C
Thermal Conductivity: 0.3 W/m*deg K
Poisson's Ratio: 0.3