

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 ⁶ psi	12.5 GPa
Tensile Strength	ASTM D-638	18,500 psi	125 MPa
Tensile Modulus	ASTM D-638	2.1 x 10 ⁶ 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

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.

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