



Technical Data Sheet
Typical Application — Structural

Premi-Glas® 1281-47VE is a fiberglass reinforced thermoset sheet molding compound based on vinyl ester resin technology, for use in structural applications.

Key Features and Benefits:

- Excellent stiffness to weight ratio, non-melting.
- Good dimensional stability, creep resistant.
- Excellent resistance to automotive chemicals and salt spray.
- Excellent property retention in hot and cold environments.
- Designed for compression molding for optimal strength.

Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D790-1	39,000 psi	270 MPa
Flexural Modulus	ASTM D790-1	2.0 x 10 ⁶ psi	14 GPa
Tensile Strength	ASTM D-638	20,500 psi	140 MPa
Tensile Modulus	ASTM D-638	1.9 x 10 ⁶ psi	13 GPa
Tensile Elongation	ASTM D-638	1.3%	1.3%
Notched Impact	ASTM D-256	19 ft*lb/in	1000 Joules/m
Unnotched Impact	ASTM D 4812	32 ft*lb/in	1700 Joules/m

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 (0.00075 in/in) and specific gravity (1.80) 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: 20 ppm/ deg C
CLTE, Z direction: 35 ppm/deg C
Thermal Conductivity: 0.3 W/m*deg K
Poisson's Ratio: 0.33