

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 3200-30 is a fiberglass reinforced thermoset sheet molding compound for electrical and flame retardant applications.

**Key Features and Benefits:**

- Good dimensional stability, including excellent thermal resistance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Excellent property retention in cold and hot environments.
- Recognized by Underwriters Laboratories, File # E42524.
- Underwriters Laboratories 94-VO flame resistance at 1.5mm thickness.

| Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels. |             |                           |                 |
|---|-------------|---------------------------|-----------------|
| Properties  | Test Method | Values (US)               | Values (Metric) |
| Flexural Strength   | ASTM D-790  | 26,000 psi                | 180 MPa         |
| Flexural Modulus  | ASTM D-790  | 1.4 x 10 <sup>6</sup> psi | 10 GPa          |
| Tensile Strength  | ASTM D-638  | 12,000 psi                | 80 MPa          |
| Tensile Modulus   | ASTM D-638  | 1.7 x 10 <sup>6</sup> psi | 12 GPa          |
| Notched Izod  | ASTM D 256  | 16 ft*lb/in               | 850 Joules/m    |
| Unnotched Impact  | ASTM D 4812 | 23 ft*lb/in               | 1,200 Joules/m  |
| Comparative Tracking Index  | ASTM D-2303 | 600                       | 600             |
| UL Relative Thermal Index (electrical)  | UL 746C     | 266 deg F                 | 130 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 V0  | Pass, 0.060 in            | Pass, 1.5 mm    |
| Dielectric Strength, KV/mm  | ASTM D149   | 380 Volts/mil             | 15 kV/mm        |
| Arc resistance, seconds   | ASTM D495   | 180+ sec                  | 180+ sec        |

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 (0.0015 to 0.0035 in/in) and specific gravity (1.70 to 1.85) 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: 25 ppm/ deg C   |
| CLTE, Z direction: 35 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.

*Last modified: 7/29/2009*