

# Premi-Glas® 1200H-25

## Sheet Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester SMC suitable for general purpose and HVAC applications requiring thermal stability and stiffness.

### GENERAL

|                             |   |   |
|-----------------------------|---|---|
| <b>Material Status</b>      | • Commercial: Active  |   |
| <b>Availability</b>         | • North America   | • South America                                   |
| <b>Filler/Reinforcement</b> | • Glass Fiber and mineral filler  |   |
| <b>Features</b>             | • Excellent property retention in cold/hot environments<br>• Suitable for outdoor use in accordance with UL746C (f1)  | • UL Recognized—File E69414<br>• UL94-HB @ 1.5 mm |
| <b>Processing Method</b>    | • This SMC product is generally intended to be compression molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. |   |
| <b>Resin</b>                | • Unsaturated Polyester Composite   |   |

| PHYSICAL                         | Typical       | Unit              | Test Method |
|----------------------------------|---------------|-------------------|-------------|
| Density                          | 1.70-1.85     | g/cm <sup>3</sup> | ASTM D792   |
| Mold Shrinkage (RT mold/RT part) | 0.0015-0.0025 | in/in             | ASTM D955   |
| CLTE, X-Y plane                  | 25            | ppm/°C            | ASTM E831   |
| CLTE, Z plane                    | 35            | ppm/°C            | ASTM E831   |
| Poisson's Ratio                  | 0.30          |                   | ASTM D638   |

| MECHANICAL (As cut)   | Typical                      | Unit      | Test Method |
|-----------------------|------------------------------|-----------|-------------|
| Tensile Modulus       | 1.8 x 10 <sup>6</sup> (12.4) | psi (GPa) | ASTM D638   |
| Tensile Strength      | 9,000 (60)                   | psi (MPa) | ASTM D638   |
| Flexural Modulus (RT) | 1.6 x 10 <sup>6</sup> (11)   | psi (GPa) | ASTM D790   |
| Flexural Strength     | 22,000 (150)                 | psi (MPa) | ASTM D790   |
| Compressive Strength  | 27,500 (190)                 | psi (MPa) | ASTM D695   |

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| <b>IMPACT</b>                | <b>Typical</b> | <b>Unit</b>    | <b>Test Method</b> |
|------------------------------|----------------|----------------|--------------------|
| Izod Notched Impact Strength | 13 (700)       | ft-lb/in (J/m) | ASTM D256          |
| Unnotched Impact Strength    | 19 (1000)      | ft-lb/in (J/m) | ASTM D4812         |

| <b>THERMAL</b>                    | <b>Typical</b> | <b>Unit</b> | <b>Test Method</b> |
|-----------------------------------|----------------|-------------|--------------------|
| Thermal Conductivity, 25°C        | 0.30           | W/m-°K      | ASTM E1461         |
| UL RTI, Electrical                | 266 (130)      | °F (°C)     | UL 746C            |
| UL RTI, Mechanical with Impact    | 266 (130)      | °F (°C)     | UL 746C            |
| UL RTI, Mechanical without Impact | 266 (130)      | °F (°C)     | UL 746C            |

| <b>FLAMMABILITY</b> | <b>Typical</b>  | <b>Unit</b> | <b>Test Method</b> |
|---------------------|-----------------|-------------|--------------------|
| Flammability        | Pass 0.60 (1.5) | in (mm)     | UL94 HB            |

| <b>ELECTRICAL</b>    | <b>Typical</b> | <b>Unit</b>       | <b>Test Method</b> |
|----------------------|----------------|-------------------|--------------------|
| Dielectric Strength  | 380 (15)       | Volts/mil (kV/mm) | ASTM D149          |
| Arc Track Resistance | 180            | seconds           | ASTM D495          |

UL File Number E69414



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