

Premi-Glas[®] 1203-28

Sheet Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester SMC for automotive body panel, structural and semi-structural applications

GENERAL

| | | | |
|-----------------------------|---|--|---|
| Material Status | • Commercial: Active | | |
| Availability | • North America | • South America | |
| Filler/Reinforcement | • Glass Fiber and mineral filler | | |
| Features | • Excellent surface appearance • Low moisture absorption | • High Strength • Unpigmented or grey | • Accepts automotive primers and powder in-mold coating |
| Processing Method | • 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. | | |
| Resin | • Unsaturated Polyester Composite | | |

| PHYSICAL | Typical | Unit | Test Method |
|----------------------------------|---------|-------------------|-------------|
| Density | 1.92 | g/cm ³ | ASTM D792 |
| Mold Shrinkage (RT mold/RT part) | -0.0008 | 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 molded) | Typical | Unit | Test Method |
|------------------------|----------------------------|-----------|-------------|
| Tensile Modulus | 1.9 x 10 ⁶ (13) | psi (GPa) | ASTM D638 |
| Tensile Strength | 12,500 (85) | psi (MPa) | ASTM D638 |
| Flexural Modulus (RT) | 1.9 x 10 ⁶ (13) | psi (GPa) | ASTM D790 |
| Flexural Strength | 35,000 (240) | psi (MPa) | ASTM D790 |
| Tensile Elongation | 0.9 | % | ASTM D638 |

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| IMPACT | Typical | Unit | Test Method |
|------------------------------|----------------|----------------|--------------------|
| Izod Notched Impact Strength | 18 (950) | ft-lb/in (J/m) | ASTM D256 |
| Unnotched Impact Strength | 28 (1,500) | ft-lb/in (J/m) | ASTM D4812 |
| THERMAL | Typical | Unit | Test Method |
| Thermal Conductivity, 25°C | 0.30 | W/m-°C | ASTM E1461 |
| FLAMMABILITY | Typical | Unit | Test Method |
| Flammability | Pass | Pass/Fail | FMVSS302 |

For additional information, please contact:

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