

Premi-Glas[®] 2243-24 CR-SX

Thick Molding Compound[®]

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester TMC suitable for electrical and flame retardant applications

GENERAL

| | | |
|-----------------------------|---|--|
| Material Status | • Commercial: Active | |
| Availability | • North America | |
| Filler/Reinforcement | • Glass Fiber and mineral filler | |
| Features | • Better strength vs. BMC • UL94-V0 @2.5 mm | • Non-Halogen FR technology • UL Recognized—File E69414 |
| Processing Method | • This TMC product is generally intended to be injection molding, injection-compression, or 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 | 1.73 | g/cm ³ | ASTM D792 |
| Mold Shrinkage (RT mold/RT part) | 0.00175 | 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 | 1.6 x 10 ⁶ (11.0) | psi (GPa) | ASTM D638 |
| Tensile Strength | 9,500 (65) | psi (MPa) | ASTM D638 |
| Flexural Modulus (RT) | 1.5 x 10 ⁶ (10.0) | psi (GPa) | ASTM D790 |
| Flexural Strength | 20,500 (140) | psi (MPa) | ASTM D790 |

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| IMPACT | Typical | Unit | Test Method |
|------------------------------|----------------|----------------|--------------------|
| Izod Notched Impact Strength | 14 (750) | ft-lb/in (J/m) | ASTM D256 |
| Unnotched Impact Strength | 19 (1,000) | ft-lb/in (J/m) | ASTM D4812 |

| THERMAL | Typical | Unit | Test Method |
|-----------------------------------|----------------|-------------|--------------------|
| 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 |

| FLAMMABILITY | Typical | Unit | Test Method |
|---------------------|-----------------|-------------|--------------------|
| Flammability | Pass 0.10 (2.5) | in (mm) | UL94 V0 |

| ELECTRICAL | Typical | Unit | Test Method |
|----------------------------|----------------|-------------------|--------------------|
| Dielectric Strength | 380 (15) | Volts/mil (kV/mm) | ASTM D149 |
| Arc Track Resistance | 180+ | seconds | ASTM D495 |
| Comparative Tracking Index | 600 | volts | ASTM D2303 |

UL File Number E69414



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