

# Premi-Ject® 1100V-10

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for electrical and flame retardant applications.

### GENERAL

|                             |  |   |
|-----------------------------|--|---|
| <b>Material Status</b>      | • Commercial: Active   |   |
| <b>Availability</b>         | • North America<br>• Asia Pacific  | • Europe<br>• South America                       |
| <b>Filler/Reinforcement</b> | • Glass Fiber and mineral filler   |   |
| <b>Features</b>             | • Excellent thermal resistance<br>• UL Recognized—File E69414  | • Non-Halogen FR technology<br>• UL94-V0 @ 1.5 mm |
| <b>Processing Method</b>    | • This BMC product is generally intended to be compression or injection 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) | 0.0015-0.0035 | in/in             | ASTM D955   |
| CLTE, X-Y plane                  | 25            | ppm/°C            | ASTM E831   |
| CLTE, Z plane                    | 35            | ppm/°C            | ASTM E831   |
| Poisson's Ratio                  | .36           |                   | ASTM D638   |

| MECHANICAL (As cut)   | Typical                     | Unit      | Test Method |
|-----------------------|-----------------------------|-----------|-------------|
| Tensile Modulus       | 2.0 x 10 <sup>6</sup> (14)  | psi (GPa) | ASTM D638   |
| Tensile Strength      | 4,500 (31)                  | psi (MPa) | ASTM D638   |
| Flexural Modulus (RT) | 1.4 x 10 <sup>6</sup> (9.7) | psi (GPa) | ASTM D790   |
| Flexural Strength     | 10,500 (72)                 | psi (MPa) | ASTM D790   |

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| <b>IMPACT</b>                     | <b>Typical</b>   | <b>Unit</b>       | <b>Test Method</b> |
|-----------------------------------|------------------|-------------------|--------------------|
| Izod Notched Impact Strength      | 3.5 (185)        | ft-lb/in (J/m)    | ASTM D256          |
| Unnotched Impact Strength         | 6 (320)          | ft-lb/in (J/m)    | ASTM D4812         |
| <b>THERMAL</b>                    | <b>Typical</b>   | <b>Unit</b>       | <b>Test Method</b> |
| Thermal Conductivity, 25°C        | 0.3              | W/m-°K            | ASTM E1461         |
| UL RTI, Electrical                | 266 (130)        | °F (°C)           | UL 746B            |
| UL RTI, Mechanical with Impact    | 266 (130)        | °F (°C)           | UL 746B            |
| UL RTI, Mechanical without Impact | 266 (130)        | °F (°C)           | UL 746B            |
| <b>FLAMMABILITY</b>               | <b>Typical</b>   | <b>Unit</b>       | <b>Test Method</b> |
| Flammability                      | Pass 0.060 (1.5) | in (mm)           | UL94 V-0           |
| <b>ELECTRICAL</b>                 | <b>Typical</b>   | <b>Unit</b>       | <b>Test Method</b> |
| Dielectric Strength               | 400 (15)         | Volts/mil (kV/mm) | ASTM D149          |
| Arc Track Resistance              | 180+             | seconds           | ASTM D495          |

UL File Number E69414



For additional information, please contact:

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