

BMC 675

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for replacements for die castings and sheet molding compounds, valve covers, intake manifolds, oil pans and structural components.

GENERAL

| | | | |
|-----------------------------|---|-----------------------------|--|
| Material Status | • Commercial: Active | | |
| Availability | • North America • Asia Pacific | • Europe • South America | |
| Filler/Reinforcement | • Glass Fiber and mineral filler | | |
| Features | • Good oil and solvent resistance • Good creep resistance at high temperatures | | |
| Processing Method | • This BMC product is generally intended to be compression, transfer, or stuffer 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. | | |
| Resin | • Unsaturated Polyester Composite | | |

| PHYSICAL | Typical | Unit | Test Method |
|----------------------------------|---------------|-------------------|-------------|
| Density | 1.97-2.03 | g/cm ³ | ASTM D792 |
| Mold Shrinkage (RT mold/RT part) | 0.0013-0.0033 | in/in | ASTM D955 |
| Water Absorption, 24 hrs, 23°C | 0.3 max | % | ASTM D570 |
| Poisson's Ratio | 0.36 | | ASTM D638 |

| MECHANICAL (As molded) | Typical | Unit | Test Method |
|------------------------|---------------------------------------|-----------|-------------|
| Tensile Strength | 7,000-10,000 (48-69) | psi (MPa) | ASTM D638 |
| Flexural Modulus (RT) | 2.2-2.7 x 10 ⁶ (15.2-18.6) | psi (GPa) | ASTM D790 |
| Flexural Strength | 20,000-28,000 (138-193) | psi (MPa) | ASTM D790 |

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| IMPACT | Typical | Unit | Test Method |
|------------------------------|----------------|----------------|--------------------|
| Izod Notched Impact Strength | 4-7 (213-373) | ft-lb/in (J/m) | ASTM D256 |
| THERMAL | Typical | Unit | Test Method |
| Heat Deflection Temperature | >500 (>260) | °F (°C) | ASTM D648 |

For additional information, please contact:

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