

BMC 800

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for marine applications and pump housings.

GENERAL

| | | | |
|-----------------------------|---|---|----------------------------------|
| Material Status | • Commercial: Active | | |
| Availability | • North America | • South America | |
| Filler/Reinforcement | • Glass Fiber and mineral filler | | |
| Features | • Excellent Strength • UL Recognized—File E69414 | • Excellent weather resistance • UL94-V0 @ 1.5 mm (NC, BK, RD, YL) @ 3.0mm All | • Excellent corrosion resistance |
| Processing Method | • This SMC 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. Available in logs, slugs or bulk | | |
| Resin | • Unsaturated Polyester Composite | | |

| PHYSICAL | Typical | Unit | Test Method |
|----------------------------------|-------------|-------------------|-------------|
| Density | 1.75-1.95 | g/cm ³ | ASTM D792 |
| Mold Shrinkage (RT mold/RT part) | 0.001-0.003 | in/in | ASTM D955 |
| Water Absorption, 24 hrs, 23°C | 0.10-0.15 | % | ASTM D570 |
| Hardness, Barcol | 40-50 | Barcol Units | ASTM D2583 |
| Poisson's Ratio | 0.36 | | ASTM D638 |

| MECHANICAL (As molded) | Typical | Unit | Test Method |
|------------------------|---------------------------------------|-----------|-------------|
| Tensile Strength | 6,000-8,000 (40-55) | psi (MPa) | ASTM D638 |
| Flexural Modulus (RT) | 1.7-1.9 x 10 ⁶ (11.7-13.1) | psi (GPa) | ASTM D790 |
| Flexural Strength | 14,000-20,000 (95-135) | psi (MPa) | ASTM D790 |
| Compressive Strength | 18,000-20-000 (120-135) | psi (MPa) | ASTM D695 |

BMC/PG

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| IMPACT | Typical | Unit | Test Method |
|-----------------------------------|---------------------|-------------------|---------------------------|
| Izod Notched Impact Strength | 4-10 (214-534) | ft-lb/in (J/m) | ASTM D256 |
| THERMAL | Typical | Unit | Test Method |
| Heat Deflection Temperature | >500 (>260) | °F (°C) | ASTM D648 |
| UL RTI, Electrical | 130 | °C | UL 746B |
| UL RTI, Mechanical with Impact | 130 | °C | UL 746B |
| UL RTI, Mechanical without Impact | 130 | °C | UL 746B |
| FLAMMABILITY | Typical | Unit | Test Method |
| Flammability | Pass 0.06" (1.5) | in (mm) | UL94 V-0 (NC, BK, RD, YL) |
| Flammability | Pass 0.12" (3.0) | in (mm) | UL94 V-0 (All) |
| ELECTRICAL | Typical | Unit | Test Method |
| Dielectric Strength | 350-400 (13.8-15.7) | Volts/mil (kV/mm) | ASTM D149 |
| Arc Track Resistance | >190 | seconds | ASTM D495 |
| Comparative Tracking Index | >500 | volts | ASTM D2303 |

UL File Number E69414



For additional information, please contact:

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