

# BMC 810

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for structural components, mechanical applications, and bearing plates.

### GENERAL

<b>Material Status</b>	• Commercial: Active		
<b>Availability</b>	• North America • Asia Pacific	• Europe • South America	
<b>Filler/Reinforcement</b>	• Glass Fiber and mineral filler		
<b>Features</b>	• Controlled Reactivity	• Outstanding flow	• Good for injection molding
<b>Processing Method</b>	• This BMC product is generally intended to be compression, injection or transfer 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. Can be made in slugs, logs or bulk forms.		
<b>Resin</b>	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.75-1.85	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.001-0.003	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	0.15-0.25	%	ASTM D570
Hardness, Barcol	45-52	Barcol Units	ASTM D2583
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	10,000-12,000 (70-82)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.7-1.9 x 10 <sup>6</sup> (11.7-13.1)	psi (GPa)	ASTM D790
Flexural Strength	24,000-27,000 (165-185)	psi (MPa)	ASTM D790
Compressive Strength	19,000-22,000 (130-150)	psi (MPa)	ASTM D695

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<b>IMPACT</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Izod Notched Impact Strength	14-17 (745-905)	ft-lb/in (J/m)	ASTM D256

  

<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Heat Deflection Temperature	450+ (232+)	°F (°C)	ASTM D648
Glass Transition T <sub>g</sub>	190+ (87+)	°F (°C)	ASTM D4065

  

<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	425 (16.7)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D3638

For additional information, please contact:

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