

# BMC 900

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for electrical coil encapsulations and armature shafts.

### 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>	• Encapsulation grade	• Outstanding flow	• Excellent electrical properties
<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. This product can be supplied in logs, slugs or bulk form.		
<b>Resin</b>	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.75-1.90	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	0.10-0.20	%	ASTM D570
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	5,000-6,000 (34-41)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.5-1.8 x 10 <sup>6</sup> (10.3-12.4)	psi (GPa)	ASTM D790
Flexural Strength	10,000-12,000 (69-82)	psi (MPa)	ASTM D790
Compressive Strength	18,000-20,000 (124-138)	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	1-3 (53-160)	ft-lb/in (J/m)	ASTM D256

<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Heat Deflection Temperature	>392 (>200)	°F (°C)	ASTM D648
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 0.06 (1.5)	in (mm)	UL94 V-0

<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	350-400 (13.8-15.8)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180-190	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D3638

UL File Number E69414



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