

# BMC A50-MS

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for appliance bodies, insulators, bobbins and electrical connectors.

### 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>	• High appearance • UL Recognized—File E69414	• Medium strength • UL94-V0 @ 1.5 mm	• Outstanding flow
<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 supplied in logs, pre-weighed slugs or bulk forms.		
<b>Resin</b>	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.83-2.03	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0025-0.003	in/in	ASTM D955
Hardness, Barcol	30-40	Barcol Units	ASTM D2583
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	6,900-8,900 (47-61)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.2-1.4 x 10 <sup>6</sup> (8.2-9.6)	psi (GPa)	ASTM D790
Flexural Strength	14,500-18,500 (100-127)	psi (MPa)	ASTM D790
Compressive Strength	19,500-23,500 (134-162)	psi (MPa)	ASTM D695

IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	5-7 (265-370)	ft-lb/in (J/m)	ASTM D256

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THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature	500+ (260+)	°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

FLAMMABILITY	Typical	Unit	Test Method
Flammability	Pass 0.06 (1.5)	in (mm)	UL94 V-0

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	365-415 (14.3-16.3)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	190+	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D3638

UL File Number E69414



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