

# BMC A50-XHS

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for circuit breakers, lighting housings, and structural parts.

#### 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>	• Outstanding flow	• UL Recognized—File E69414	• UL94-V0 @ 1.5 mm
<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. Available in bulk or extruded slugs.		
<b>Resin</b>	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.79-1.99	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.0025	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	8,300-10,300 (57-71)	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	18,000-22,000 (124-152)	psi (MPa)	ASTM D790
Compressive Strength	16,800-20,800 (116-143)	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	10-12 (534-641)	ft-lb/in (J/m)	ASTM D256

<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Heat Deflection Temperature	>500 (>260)	°F (°C)	ASTM D648
UL RTI, Electrical	160	°C	UL 746B
UL RTI, Mechanical with Impact	160	°C	UL 746B
UL RTI, Mechanical without Impact	160	°C	UL 746B

<b>FLAMMABILITY</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Flammability	Pass 1.5	mm	UL94 V-0

<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	375-425 (14.8-16.7)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	>180	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D2303

UL File Number E69414



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