

BMC 5436

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for circuit breaker, transformer bobbin, and motor end bell applications

GENERAL

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler/Reinforcement	• Glass fiber and mineral filler		
Features	• Medium impact strength • UL Recognized—File E69414	• Excellent electrical properties • UL94 HB @ 1.5 mm	• Pigmentable
Processing Method	• This BMC product is generally intended to be compression or stuffer 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. This product is available in extruded logs.		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	2.02 – 2.07	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	.0003 – .00045	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	.14	%	ASTM D570
Hardness, Barcol	40 – 60	Barcol Units	ASTM D2583

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	4,000 – 6,000 (25 – 40)	psi (MPa)	ASTM D638
Flexural Strength	16,000 – 20,000 (110 – 135)	psi (MPa)	ASTM D790
Compressive Strength	28,000-33,000 (190 – 225)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	2.0 – 4.0 (105-210)	ft-lb/in (J/m)	ASTM D256
THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature, 264 psi	>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	.0625 (1.5)	in (mm)	UL94 HB
ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	340 (13)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D2303

UL File Number

E69414



For additional information, please contact

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