

BMC T10(14)

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for circuit breakers, insulators, bobbins and electrical connectors.

GENERAL

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	• Low shrink • UL Recognized—File E69414	• General purpose • UL94-HB@ 1.4 mm WT	• Outstanding flow
Processing Method	• 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.		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.87-2.07	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0017-0.0022	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)	1.3-1.5 x 10 ⁶ (8.9-10.3)	psi (GPa)	ASTM D790
Flexural Strength	16,800-20,800 (115-143)	psi (MPa)	ASTM D790
Compressive Strength	23,500-27,500 (162-189)	psi (MPa)	ASTM D695

IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	5.2-7.2 (277-384)	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 (1.4)	in (mm)	UL94 HB WT
Flammability	Pass (3.0)	in (mm)	UL94 HB ALL

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	350-400 (13.7-15.7)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D3638

UL File Number E69414



For additional information, please contact:

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