

BMC T14

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	• General purpose • UL Recognized—File E69414	• Outstanding flow • UL94-V0@ 1.5 mm BK, GY ONLY
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	1.83-2.03	g/cm ³	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 ⁶ (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 (267-373)	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	320 (160)	°F (°C)	UL 746B
UL RTI, Mechanical with Impact	320 (160)	°F (°C)	UL 746B
UL RTI, Mechanical without Impact	320 (160)	°F (°C)	UL 746B

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

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	365-415 (14.3-16.3)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D3638

UL File Number E69414



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