

BMCT40(18)

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for replacement for aluminum die casting applications, fractional H.P. motor end bases, electrical and structural parts.

GENERAL

Material Status	• Commercial: Active	
Availability	• North America • Asia Pacific	• Europe • South America
Filler/Reinforcement	• Glass Fiber and mineral filler	
Features	• Good dimensional stability • UL Recognized—File E69414	• Excellent mechanical properties • 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. It can be supplied in bulk or extruded in pre-weighted slugs.	
Resin	• Unsaturated Polyester Composite	

PHYSICAL	Typical	Unit	Test Method
Density	1.72-1.92	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.001-0.002	in/in	ASTM D955
Hardness, Barcol	50-60	Barcol Units	ASTM D2583
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	9,500-11,500 (65-79)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1-1.2 x 10 ⁶ (6.9-8.2)	psi (GPa)	ASTM D790
Flexural Strength	19,500-23,500 (134-162)	psi (MPa)	ASTM D790
Compressive Strength	19,000-23,000 (131-158)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	8-10 (425-530)	ft-lb/in (J/m)	ASTM D256

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 0.060 (1.5)	in (mm)	UL94 V-0 BK, GY ONLY

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	335-385 (13.1-15.1)	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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