

BMC T40(20)

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable as a direct replacement for aluminum die casting applications. Black or natural only.

GENERAL

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	• Excellent mechanical properties • Good dimensional stability • UL Recognized—File E69414 • UL94-V0 @ 1.8 mm (Black/Natural)		
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. It can be supplied in bulk or pre-weighed slugs		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.68-1.88	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	0.32		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	10,000-12,000 (70-82)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.4-1.6 x 10 ⁶ (9.6-11)	psi (GPa)	ASTM D790
Flexural Strength	18,700-22,700(130-155)	psi (MPa)	ASTM D790
Compressive Strength	19,300-23,300 (130-160)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	11-13 (580-700)	ft-lb/in (J/m)	ASTM D256

THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature	>500 (260)	°F (°C)	ASTM D648

FLAMMABILITY	Typical	Unit	Test Method
Flammability	.071 (1.8)	in (mm)	UL94 V-0

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	335-385 (13.2-15.1)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	>190	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D2303

UL File Number E69414



For additional information, please contact:

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