

BMC 840

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced vinyl ester BMC suitable for pump housings and impellers.

GENERAL

Material Status	• Commercial: Active	
Availability	• North America • Asia Pacific	• Europe • South America
Filler/Reinforcement	• Glass Fiber and mineral filler	
Features	• Very high strength • UL Recognized—File E69414	• Corrosion resistant • UL94-HB @ 1.5 mm TN, BK
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.	
Resin	• Vinyl ester Composite	

PHYSICAL	Typical	Unit	Test Method
Density	1.75-1.85	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.0025	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	0.07-0.13	%	ASTM D570
Hardness, Barcol	40-50	Barcol Units	ASTM D2583
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Strength	9,000-11,000 (62-75)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.7-1.9 x 10 ⁶ (11.7-13.1)	psi (GPa)	ASTM D790
Flexural Strength	18,000-22,000 (124-150)	psi (MPa)	ASTM D790
Compressive Strength	15,000-17,000 (103-117)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	8-11 (425-585)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	14-17 (750-900)	ft-lb/in (J/m)	ASTM D4812
THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature	450-500 (232-260)	°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 0.06 (1.5)	in (mm)	UL94 HB TN, BK Only

UL File Number E69414



For additional information, please contact:

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