BMC A50-XHS

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for circuit breakers, lighting housings, and structural parts.

GENERAL

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	• Outstanding flow	• UL Recognized—File E69414	• UL94-V0 @1.5 mm
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 500to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Available in bulk or extruded slugs.		
Resin	• Unsaturated Polyester Composite		

PHYSICAL	Typical	Unit	Test Method
Density	1.79-1.99	g/cm^3	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.0025	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)	1.7-1.9 x 10^6 (11.7-13.1)	psi (GPa)	ASTM D790
Flexural Strength	18,000-22,000 (124-152)	psi (MPa)	ASTM D790
Compressive Strength	16,800-20,800 (116-143)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	10-12 (534-641)	ft-lb/in (J/m)	ASTM D256

THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature	>500 (>260)	°F (°C)	ASTM D648
UL RTI, Electrical	160	°C	UL 746B
UL RTI, Mechanical with Impact	160	°C	UL 746B
UL RTI, Mechanical without Impact	160	°C	UL 746B

FLAMMABILITY	Typical	Unit	Test Method
Flammability	Pass 1.5	mm	UL94 V-0

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	375-425 (14.8-16.7)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	>180	seconds	ASTM D495
Comparative Tracking Index	500+	volts	ASTM D2303

UL File Number E69414

For additional information, please contact:

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