BMC T40(25) XHS

Bulk Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for structural and circuit breakers applications; often used to replace die castings

GENERAL

Material Status	• Commercial: Active	
Availability	• North America • Asia Pacific	• Europe • South America
Filler/Reinforcement	• Glass Fiber and mineral filler	
Features	• High strength • UL Recognized—File E69414	• Good dimensional stability • Pigmentable •See UL Yellow Card for colors/flame ratings
Processing Method	• This BMC product is generally intended to be compression or injection 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. Can be furnished as bulk, or logs.	
Resin	• Unsaturated Polyester Composite	

PHYSICAL	Typical	Unit	Test Method
Density	1.69-1.89	g/cm^3	ASTM D792
Mold Shrinkage (RT mold/RT part)	.002-.003	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	<0.30	%	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 Modulus	2.1 – 2.4 x 10^6 (14.5-16.5)	psi (GPa)	ASTM D638
Tensile Strength	9,500 – 11,500 (65-80)	psi (MPa)	ASTM D638
Flexural Strength	34,500 – 38,500 (235-265)	psi (MPa)	ASTM D790
Flexural Modulus	2.0 – 2.3 x 10^6 (13.8-15.8)	psi (GPa)	ASTM D790
Compressive Strength	19,000 – 23,000 (130-155)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	14 – 16 (750-850)	ft-lb/in (J/m)	ASTM D256

THERMAL	Typical	Unit	Test Method
Heat Deflection Temperature, 264PSI	>500 (>260)	°F (°C)	ASTM D648
Glass Transition T_g	>165	°C	ASTM D4065
Thermal Conductivity, 25°C	0.70	W/m-°K	ASTM E1461
UL RTI, Electrical	130	°C	UL 746B
UL RTI, Mechanical with Impact	130	°C	UL 746B
UL RTI, Mechanical without Impact	130	°C	UL 746B

FLAMMABILITY	Typical	Unit	Test Method
Flammability	Flame class dependent on color, please see UL yellow card.		UL94 V-0/5V

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	335-385 (13-15)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D3638

UL File Number E69414

For additional information, please contact:

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