

BMC 605L

Bulk Molding Compound

PRODUCT DESCRIPTION

Low cost glass fiber reinforced Polyester BMC suitable for circuit breakers, transformer bobbins and motor end bells.

GENERAL

Material Status	• Commercial: Active	
Availability	• North America • Asia Pacific	• Europe • South America
Filler/Reinforcement	• Glass Fiber and mineral filler	
Features	• Medium impact strength • UL Recognized—File E69414	• Excellent electrical properties • UL94-V0 @ 1.8 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 500 to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Can be supplied as logs, slugs or bulk forms.	
Resin	• Unsaturated Polyester Composite	

PHYSICAL	Typical	Unit	Test Method
Density	1.95	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0025-0.004	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	0.14	%	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	6,000-8,000 (41-55)	psi (MPa)	ASTM D638
Flexural Strength	16,000-20,000 (110-138)	psi (MPa)	ASTM D790
Compressive Strength	24,000-28,000 (165-193)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	2.0-4.0 (105-212)	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 0.07 (1.8)	in (mm)	UL94 V-0

ELECTRICAL	Typical	Unit	Test Method
Dielectric Strength	350 (13.8)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	190+	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D2303

UL File Number E69414



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