

# Premi-Ject® 6100-10

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Glass fiber reinforced Polyester BMC suitable for electrical and flame retardant applications.

### GENERAL

<b>Material Status</b>	• Commercial: Active	
<b>Availability</b>	• North America • Asia Pacific	• Europe • South America
<b>Filler/Reinforcement</b>	• Glass Fiber and mineral filler	
<b>Features</b>	• Good dimensional stability • UL Recognized—File E69414	• Excellent thermal resistance • UL94-V0 @1.5 mm
<b>Processing Method</b>	• 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.	
<b>Resin</b>	• Unsaturated Polyester Composite	

PHYSICAL	Typical	Unit	Test Method
Density	1.70-1.85	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.0035	in/in	ASTM D955
CLTE, X-Y plane	25	ppm/°C	ASTM E831
CLTE, Z plane	35	ppm/°C	ASTM E831
Poisson's Ratio	0.36		ASTM D638

MECHANICAL (As cut)	Typical	Unit	Test Method
Tensile Modulus	1.75 x 10 <sup>6</sup> (12)	psi (GPa)	ASTM D638
Tensile Strength	4,800 (33)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.4 x 10 <sup>6</sup> (9.7)	psi (GPa)	ASTM D790
Flexural Strength	12,000 (82)	psi (MPa)	ASTM D790

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<b>IMPACT</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Izod Notched Impact Strength	3.5 (185)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	6 (320)	ft-lb/in (J/m)	ASTM D4812
<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Thermal Conductivity, 25°C	0.3	W/m-°K	ASTM E1461
UL RTI, Electrical	266 (130)	°F (°C)	UL 746C
UL RTI, Mechanical with Impact	266 (130)	°F (°C)	UL 746C
UL RTI, Mechanical without Impact	266 (130)	°F (°C)	UL 746C
<b>FLAMMABILITY</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Flammability	Pass 0.060 (1.5)	in (mm)	UL94 V-0
<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	380 (15)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	600	volts	ASTM D2303

UL File Number E69414



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