

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 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 furnished as bulk or logs.		
Resin	• Unsaturated Polyester		

Physical	Typical	Unit	Test Method
Density	1.69 – 1.89	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.002 – 0.003	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 E+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 E+6 (13.8 – 15.8)	psi (GPa)	ASTM D790
Compressive Strength	19,000 – 23,000 (130 – 155)	psi (Mpa)	ASTM D695
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	>500 (>260)	°F (°C)	ASTM D648
Glass Transition T _g	>165	°C	ASTM D4065
Thermal Conductivity	0.70	W/m-°K	ASTM E1461
UL RTI, Electrical	266 (130)	°C	UL 746B
UL RTI, Mechanical with Impact	266 (130)	°C	UL 746B
UL RTI, Mechanical without Impact	266 (130)	°C	UL 746B
Flammability	Typical	Unit	Test Method
Flammability	Flame class dependent on color	Please see UL yellow card	UL94 V-0/5VA
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

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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