

Product Description

Glass Fiber reinforced Polyester BMC suitable for circuit breakers, transformer bobbins, brush holders and motor end bells.

General

Material Status	• Commercial: Active		
Availability	• North America	• Europe	
	• Asia Pacific	• South America	
Filler / Reinforcement	• Glass Fiber and Mineral Filler		
Features	• UL Recognized – File E69414	• Excellent Flame Resistance	
	• Excellent electrical properties	• UL94 V0 @ 1.8 mm	
Processing Method	• This BMC product is generally intended to be injection, transfer or compression 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. Extrusions available.		
Resin	• Unsaturated Polyester		

Physical	Typical	Unit	Test Method
Density	1.99 – 1.99	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0025 - 0.0042	in/in	ASTM D955
Water Absorption, 24 hrs., 23°C	0.14	%	ASTM D570
Hardness, Barcol	35 – 45	Barcol Units	ASTM D2583
CLTE, X – Y plane	25	ppm/°C	ASTM E831
CLTE, Z plane	30	ppm/°C	ASTM E831
Poisson's Ratio	0.36		ASTM D638
Mechanical (As molded)	Typical	Unit	Test Method
Tensile Modulus	1.8 – 2.1 E+6 (12.4 – 14.5)	psi (GPa)	ASTM D638
Tensile Strength	5,000 – 7,000 (35 – 45)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.6 – 1.8 E+6 (11.0 – 12.4)	psi (GPa)	ASTM D790
Flexural Strength	14,000 – 17,000 (95 – 115)	psi (Mpa)	ASTM D790
Compressive Strength	22,000 – 26,000 (150 – 180)	psi (Mpa)	ASTM D695
Impact	Typical	Unit	Test Method
Izod Notched Impact Strength	2.0 – 4.0 (105 – 210)	ft-lb/in (J/m)	ASTM D256
Thermal	Typical	Unit	Test Method
Heat Deflection Temperature, 264 PSI	500+ (260+)	°F (°C)	ASTM D648
Glass Transition Tg	320 – 338 (160 – 170)	°F (°C)	ASTM D4065
Thermal Conductivity, 25°C	0.87	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
Specific Heat Capacity	797	J/kg-K	ASTM E1461
Flammability	Typical	Unit	Test Method
Flammability	1.8	mm	UL94 V-0
Electrical	Typical	Unit	Test Method
Dielectric Strength	350 – 375 (13.75 – 14.75)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	190	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D2303

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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