

**Product Description**

Glass Fiber reinforced Polyester BMC suitable for injection molding circuit breakers.

**General**

Material Status	• Commercial: Active		
Availability	• North America • Asia Pacific	• Europe • South America	
Filler / Reinforcement	• Glass Fiber and Mineral Filler		
Features	• Medium Strength • UL94-V0 @ 1.5 mm	• Low Cost • Good electrical properties	• UL Recognized – File E69414
Processing Method	• This BMC product is generally intended to be compression, injection or transfer 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.		
Resin	• Unsaturated Polyester		

Physical	Typical	Unit	Test Method
Density	1.88 – 1.94	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.001 - 0.003	in/in	ASTM D955
Water Absorption, 24 hrs. 23°C	0.07 – 0.12	%	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	5,000 – 6,000 (34 – 41)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.4 – 1.6 E+6 (9.6 – 11)	psi (GPa)	ASTM D790
Flexural Strength	11,000 – 13,000 (75 - 89)	psi (Mpa)	ASTM D790
Compressive Strength	23,000 – 25,000 (158 – 172)	psi (Mpa)	ASTM D695
Impact	Typical	Unit	Test Method
Izod Notched Impact Strength	4.5 – 5.5 (240 – 293)	ft-lb/in (J/m)	ASTM D256
Thermal	Typical	Unit	Test Method
Heat Deflection Temperature, 264 PSI	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 0.06 (1.5)	in (mm)	UL94 V-0
Electrical	Typical	Unit	Test Method
Dielectric Strength	517 (20.3)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	213	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D3638
Hot Wire Ignition	60 – 119	sec	ASTM D3874
High Amp Arc Ignition, HAI	120+	arcs	UL746A
High Voltage Arc Tracking Rate, HVTR	0 – 10	mm/min	UL746A
Dissipation Factor, 60Hz, Condition A	0.027		ASTM D150
Dissipation Factor, 60Hz, Condition D	0.058		ASTM D150
Dissipation Factor, 1 MHz, Condition A	0.140		ASTM D150
Dissipation Factor, 1 MHz, Condition D	0.154		ASTM D150

#### **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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