# Technical Data Sheet **BMC** 610

**Engineered Composites** 



Product Description			
Glass fiber reinforced Polyester BMC s	uitable for transformer bobbins, terminal	boards, arc chutes and contactors.	
General			
Material Status	Commercial: Active		
Availability	<ul><li>North America</li><li>Asia Pacific</li></ul>	<ul><li>Europe</li><li>South America</li></ul>	
Filler / Reinforcement	Glass Fiber and Mineral Filler		
Features	<ul><li>UL Recognized – File E69414</li><li>Outstanding Flame Resistance</li></ul>	<ul><li>Excellent Arc Resistance</li><li>UL94 V0 @ 1.1 mm</li></ul>	
Processing Method	<ul> <li>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. Available in extruded logs, slugs or bulk form.</li> </ul>		
Resin	Unsaturated Polyester		
Physical	Typical	Unit	Test Method
Density	1.89 – 1.95	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0025 - 0.0046	in/in	ASTM D955
Water Absoprtion, 24 hrs., 23°C	0.10	%	ASTM D570
Hardness, Barcol	28 – 43	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	14,000 - 18,000 (96 - 124)	psi (Mpa)	ASTM D790
Compressive Strength	24,000 - 28,000 (165 - 193)	psi (Mpa)	ASTM D695
Impact	Typical	Unit	Test Method
Izod Notched Impact Strength	2 – 4 (106 – 213)	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 0.043 (1.1)	in (mm)	UL94 V-0 NC, BK
Electrical	Typical	Unit	Test Method
Dielectric Strength	360 (14.1)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	210+	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D2303

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#### **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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