# Technical Data Sheet *F 4401*

## **Engineered Composites**



Glass Fiber reinforced Polyester BN	MC, typical applications include circuit bre	akers, insulators and contact holders.	
General			
Material Status	Commercial: Active		
Availability	North America     Asia Pacific	Europe     South America	
Filler / Reinforcement	<ul> <li>Glass Fiber and Mineral Filler</li> </ul>		
Features	Good Dimensional Stability	<ul><li>REACH and RoHS compliant</li><li>Free of halogene</li></ul>	<ul><li>UL recognized - File E107758</li><li>UL94-V0 @ 1.6 mm</li></ul>
Processing Method	<ul> <li>This BMC product is generally inten molds, typically at 300°F (150°C) ar affected by the molding process.</li> </ul>	ded to be compression, injection or trand 500 to 1,000 psi (35-65 BAR) mold	
Resin	<ul> <li>Unsaturated Polyester</li> </ul>		
Physical	Typical	Unit	Test Method
Density	1.7 - 1.9	g/cm <sup>3</sup>	ISO 1183
Mold Shrinkage (RT mold/RT part)	0,02 - 0,2 (0.0002 - 0.002)	% (in/in)	ISO 2755
Water Absorption, 24 hrs. 23°C	0.1 - 0.3	%	ISO 62
Poisson's Ratio	0.36		ISO 527
Heat Deflection Temperature - A	> 250	°C	ISO 75
Mechanical (As molded)	Typical	Unit	Test Method
Tensile Strength	3,600 - 7,200 (25 - 50)	psi (MPa)	ISO 527
Flexural Modulus (RT)	1.4 - 2.0E+6 (10 - 14)	psi (GPa)	ISO 178
Flexural Strength	13,000 - 19,000 (90 - 130)	psi (MPa)	ISO 178
Compressive Strength	16,000 - 20,000 (110 - 138)	psi (MPa)	ISO 604
mpact Strength, Charpy	10 - 30	kJ/m²	ISO 179
Electrical	Typical	Unit	Test Method
Surface resistivity	10 <sup>12</sup>	Ω	IEC 60093
olume resistivity	10 <sup>14</sup>	$\Omega$ cm	IEC 60093
Electric strength	15-20	kV/mm	IEC 60243
Γracking resistance	600	СТІ	IEC 60112
Arc resistance	180 - 210	S	ASTM D 495

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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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