

Product Description

Glass fiber reinforced Vinyl ester BMC suitable for die casting and sheet molding compounds, valve covers, timing chain covers, and engine top covers. This product meets the specification MS-DA-300.

General

Material Status	• Commercial: Active
Availability	• America
Filler / Reinforcement	• Glass Fiber and mineral filler
Features	• Good oil and solvent resistance • Excellent creep resistance in hot environments
Processing Method	• This BMC product is generally intended to be compression molded in matched metal die 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	• Vinyl ester Composite

Physical	Typical	Unit	Test Method
Specific Gravity	1.70 - 1.76	-	ASTM D792
Mold Shrinkage	0.0000 - 0.0022	in/in	ASTM D955
Hardness, Barcol	53 - 67	Barcol Units	ASTM D2583
Glass fiber content	21.7 - 29.0	%	ASTM D2584
Water Absorption	0.18 Max	%	ISO 62

Mechanical (D)	Typical	Unit	Test Method
Tensile Strength	6,000 Min (41 Min)	PSI (MPa)	ASTM D638
	4,641 Min (32 Min)	PSI (MPa)	ISO-178
Tensile Modulus	1.45x10 ⁶ (10 Min)	PSI (GPa)	ISO R527
Flexural Strength	20,000 Min (138 Min)	PSI (MPa)	ASTM D790
	9,427 Min (65 Min)	PSI (MPa)	ISO 178
Flexural Tangent Modulus	1.59x10 ⁶ (11,000 Min)	PSI (MPa)	ISO R527

Impact (D)	Typical	Unit	Test Method
Izod Notched Impact Strength	9.0 Min	ft-Lb/in	ASTM D256
	7.0 Min	kJ/m ²	ISO 180/1A
Unnotched Izod Impact strength	25.0 Min	kJ/m ²	ISO 180/1A

Electrical	Typical	Unit	Test Method
Dielectric Strength	350+	Volts/mil	ASTMD149
Arc Track Resistance	180+	Seconds	ASTM D495

Flammability (S)	Typical	Unit	Test Method
Flammability@V-0	3	mm	UL 94

Thermal	Typical	Unit	Test Method
Glass transition temperature	246	°C	ISO 11357-2

All values were obtained with specimens molded by compression at 280 - 330 °F (138 - 165) °C

All Values were obtained with specimens molded in bulk material

*It includes the type of flammability according with the request of the technical specification

(D) Is considered as a Special Characteristic classified as Characteristic that could affect the performance of the product.

(S) Is considered as a Special Characteristic classified as Characteristic that could affect the safety of the product.

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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