

Technical Data Sheet
Premi-Glas 2143-24
CR-SX
 Engineered Composites



Product Description

Glass Fiber reinforced Polyester TMC suitable for electrical and flame retardant applications.

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber and Mineral Filler
Features	<ul style="list-style-type: none"> • Better strength vs. BMC • UL 94-V0 @ 2.5 mm • Non-Halogen FR technology • UL Recognized – File E69414
Processing Method	• This TMC product is generally intended to be 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.
Resin	• Unsaturated Polyester

Physical	Typical	Unit	Test Method
Density	1.70 – 1.80	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015 – 0.0020	in/in	ASTM D955
CLTE, X – Y plane	25	ppm/°C	ASTM E831
CLTE, Z plane	35	ppm/°C	ASTM E831
Poisson's Ratio	0.30		ASTM D638
Mechanical (As molded)	Typical	Unit	Test Method
Tensile Modulus	2.1 E+6 (15)	psi (GPa)	ASTM D638
Tensile Strength	12,000 (82)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.5 E+6 (10)	psi (GPa)	ASTM D790
Flexural Strength	20,500 (140)	psi (Mpa)	ASTM D790
Impact	Typical	Unit	Test Method
Izod Notched Impact Strength	20 (1100)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	27(1400)	ft-lb/in (J/m)	ASTM D4812
Thermal	Typical	Unit	Test Method
Thermal Conductivity, 25°C	0.30	W/m-°K	ASTM E1461
UL RTI, Electrical	266 (130)	°F (°C)	UL 746C
UL RTI, Mechanical with Impact	266 (130)	°F (°C)	UL 746C
UL RTI, Mechanical without Impact	266 (130)	°F (°C)	UL 746C
Flammability	Typical	Unit	Test Method
Flammability	Pass 0.10 (205)	in (mm)	UL94 V0
Electrical	Typical	Unit	Test Method
Dielectric Strength	380 (15)	volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	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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