

Technical Data Sheet  
**Premi-Glas 2143-24**  
**CR-SX-HT**  
 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	• Excellent thermal resistance • UL 94-V0 @ 2.5 mm	• Non-Halogen FR technology • UL Recognized – File E69414	• Excellent property retention in hot environments
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 <sup>3</sup>	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	311 (155)	°F (°C)	UL 746C
UL RTI, Mechanical with Impact	320 (160)	°F (°C)	UL 746C
UL RTI, Mechanical without Impact	320 (160)	°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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