

Premi-Glas[®] 2143-24 CR-SX-HT

Thick Molding Compound[®]

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 • Non-Halogen FR technology • UL94-V0 @2.5 mm • Excellent property retention in hot environments • UL Recognized—File E69414
Processing Method	• This TMC product is generally intended to be injection molding, injection-compression, or 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	• Unsaturated Polyester Composite

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 x 10 ⁶ (15.0)	psi (GPa)	ASTM D638
Tensile Strength	12,000 (82)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.5 x 10 ⁶ (10.0)	psi (GPa)	ASTM D790
Flexural Strength	20,500 (140)	psi (MPa)	ASTM D790

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	20 (1,100)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	27 (1,400)	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	0.10 (2.5)	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

UL File Number E69414



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