

Premi-Glas® 1140-18

Thick Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester TMC suitable for general purpose applications requiring thermal stability and stiffness.

GENERAL

Material Status	• Commercial: Active
Availability	• North America
Filler/Reinforcement	• Glass Fiber and mineral filler
Features	<ul style="list-style-type: none"> • Good dimensional stability • Excellent stiffness to weight ratio • Good corrosion resistance except in acid environments. • Excellent property retention in cold/hot environments
Processing Method	• This TMC 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	• Unsaturated Polyester Composite

PHYSICAL	Typical	Unit	Test Method
Density	1.70-1.85	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.0015-0.003	in/in	ASTM D955
CLTE, X-Y plane	25	ppm/°C	ASTM E831
CLTE, Z plane	35	ppm/°C	ASTM E831
Poisson's Ratio	0.3		ASTM D638

MECHANICAL (As cut)	Typical	Unit	Test Method
Tensile Modulus	1.7 x 10 ⁶ (12)	psi (GPa)	ASTM D638
Tensile Strength	7,000 (50)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.5 x 10 ⁶ (10)	psi (GPa)	ASTM D790
Flexural Strength	18,000 (125)	psi (MPa)	ASTM D790
Compressive Strength	24,000 (165)	psi (MPa)	ASTM D695

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	10 (550)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	15 (800)	ft-lb/in (J/m)	ASTM D4812

For additional information, please contact:

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