

PremierUV™ VQH-55S

Sheet Molding Compound

PRODUCT DESCRIPTION

Glass fiber reinforced Polyester SMC suitable for structural and semi-structural applications where, high strength, UV resistance and durability are required in a low density composite.

GENERAL

Material Status	• Commercial: Active		
Availability	• North America	• South America	
Filler/Reinforcement	• Glass Fiber and mineral filler		
Features	• Weight savings vs standard composites	• Outstanding UV properties	
	• Excellent mechanical properties and outstanding toughness		
Processing Method	• This SMC 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	1.4	g/cm ³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.00020	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	0.46	%	ASTM D570
CLTE, X-Y plane	14	ppm/°C	ASTM E831
CLTE, Z plane	42	ppm/°C	ASTM E831
Poisson's Ratio	0.29		ASTM D638

MECHANICAL (As molded)	Typical	Unit	Test Method
Tensile Modulus	2.8 x 10 ⁶ (19)	psi (GPa)	ASTM D638
Tensile Strength	17,000 (120)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	2.0 x 10 ⁶ (14)	psi (GPa)	ASTM D790
Flexural Strength	39,000 (270)	psi (MPa)	ASTM D790

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IMPACT	Typical	Unit	Test Method
Izod Notched Impact Strength	26 (1400)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	36 (1900)	ft-lb/in (J/m)	ASTM D4812

For additional information, please contact:

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