

Technical Data Sheet

Typical Application — Low Density / Structural / Semi-Structural

PremierUV™ VQH-55S is a fiberglass reinforced thermoset sheet molding compound for structural and semi-structural applications where, high strength, UV resistance and durability are required in a low density composite.

Key Features and Benefits:

- Specific gravity of 1.4 for weight savings vs standard composites.
- Excellent mechanical properties and outstanding toughness.
- Outstanding UV properties

Typical Values. Mechanical values are for Individually Compression Molded Specimens .			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	39,000 psi	270 MPa
Flexural Modulus	ASTM D-790	2.0 X 10 ⁶ psi	14 GPa
Tensile Strength	ASTM D-638	17,000 psi	120 MPa
Tensile Modulus	ASTM D-638	2.8 X 10 ⁶ psi	19 GPa
Notched Impact	ASTM D 256	26 ft*lb/in	1,400 Joules/m
Unnotched Impact	ASTM D 256	36 ft*lb/in	1,900 Joules/m
Specific gravity	ASTM D-792	1.4	1.4
Moisture Absorption	ASTM D2584	0.46 %	0.46 %

This SMC product is generally intended to be compression molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Polymerization shrinkage is approximately 0.00020 in/in. Glass fiber content nominal - 55% w/w Contact your Premix sales representative for specific design recommendations.

Following physical characteristics are typical of this product:

CLTE, XY direction:	14 ppm / °C
CLTE, Z direction:	42 ppm / °C
Thermal Conductivity:	0.22 W / mK
Poisson's Ratio:	0.29

The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, expressed or implied.

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