Technical Data Sheet PremierUV VSH-25S

Engineered Composites



Product Description

Glass Fiber reinforced Polyester SMC suitable for applications requiring excellent weathering/UV resistance, including those that require electrical performance and flame retardance.

General			
Material Status	 Commercial: Active 		
Availability	North America	South America	
Filler / Reinforcement	 Glass Fiber and Mineral Filler 		
Features	UL Recognized – File E69414UL94-V0/8V @ 2.3 mm	 (f1) – Suitable for outdoor use Excellent resistance to UV exposure/outdoor weathering 	Superior resistance to color fade, chalking and fiber blooms
Processing Method	 This SMC 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	1.73 – 1.79	g/cm³	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.00175 – 0.0025	in/in	ASTM D955
Mechanical (As Molded)	Typical	Unit	Test Method
Tensile Modulus	1.7 E+6 (12)	psi (GPa)	ASTM D638
Tensile Strength	10,000 (70)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.6 E+6 (11)	psi (GPa)	ASTM D790
Flexural Strength	30,000 (212)	psi (MPa)	ASTM D790
Impact	Typical	Unit	Test Method
Izod Notched Impact Strength	18 (900)	ft-lb/in (J/m)	ASTM D256
Unnotched Impact Strength	21 (1100)	ft-lb/in (J/m)	ASTM D4812
Thermal	Typical	Unit	Test Method
UL RTI, Electrical	266 (130)	°F(°C)	UL 746B
UL RTI, Mechanical with Impact	266 (130)	°F(°C)	UL 746B
UL RTI, Mechanical without Impact	266 (130)	°F(°C)	UL 746B
Flammability	Typical	Unit	Test Method
Flammability	Pass 0.091 (2.3)	in (mm)	UL94 V-0/5VA
Electrical	Typical	Unit	Test Method
Dielectric Strength	260 (10.2)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	190+	seconds	ASTM D495

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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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