Technical Data Sheet

Quantum *HTC* 9510

Engineered Composites

Product Description			
Glass Fiber reinforced Bismaleimide molding compound.			
General			
Material Status	• Commercial: Active		
Availability	• North America	• Europe	• Asia
Filler / Reinforcement	• E-glass Fiber	• Nominal 52% w/w	• Nominal 1” (25 mm) Length
Features	• High Stiffness • High Strength	• Natural Color • Shelf Life 6 months @ 10°F	
Processing Method	• ***HTC* 9510** can be molded at temperatures in the range of 260-350°F, with 300°F suggested as a starting point. Cure times will be dependent on molding temperature and part thickness and will typically be 25+ minutes. Detailed molding suggestions are available on request. Cool molded parts at ambient temperature. A cooling fixture may be needed depending on part thickness and geometry. Matched metal molds. Post cure at 500F is recommended for best results.		
Resin	• BMI		

Physical	Typical	Unit	Test Method
Density	1.82	g/cm^3	ASTM D792
Shrinkage	<0.002	in/in	ASTM D955
CLTE, X – Y plane		ppm/°C	ASTM E831
CLTE, Z plane		ppm/°C	ASTM E831
Poisson’s Ratio	0.33		ASTM D638
Mechanical (Machined)	**Typical**	**Unit**	**Test Method**
Tensile Modulus	2.5 E+6 (17,236)	psi (MPa)	ASTM D3039
Tensile Strength	24,000 (165)	psi (MPa)	ASTM D3039
Compressive Strength (RT)	36,000 (248)	psi (MPa)	ASTM D3410
Compressive Strength (300)	34,000 (248)	psi (MPa)	ASTM D3410
Compressive Strength (350)	32,000 (248)	psi (MPa)	ASTM D3410
Mechanical (As Molded)	**Typical**	**Unit**	**Test Method**
Tensile Modulus (RT)	4.0 E+6 (27,600)	psi (MPa)	ASTM D638
Tensile Strength (RT)	28,500 (196)	psi (MPa)	ASTM D638
Tensile Strength (350°F)	28,500 (196)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	4.0 E+6 (27,600)	psi (MPa)	ASTM D790
Flexural Strength (RT)	94,0000 (848)	psi (MPa)	ASTM D790
Flexural Strength (350°F)	70,000 (483)	psi (MPa)	ASTM D790
Impact	**Typical**	**Unit**	**Test Method**
Izod Notched Impact Strength	30 (1600)	ft-lb/in (J/m)	ASTM D256
Thermal	**Typical**	**Unit**	**Test Method**
Glass Transition $T_{t,}$ Tan Delta	714 (379)	°F (°C)	ASTM D7028
Glass Transition $T_{g,}$ Storage Modulus	617 (325)	°F (°C)	ASTM D7028

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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