

Quantum Composites Lytex® 4149 55% Carbon Fiber Epoxy SMC

Category : Polymer , Thermoset , Carbon Fiber/Thermoset Composite , Composite SMC , Epoxy , Filled/Reinforced Thermoset

Material Notes:

Lytex 4149 is a high-performance, 3K tow carbon fiber (PAN) reinforced epoxy sheet molding compound designed for military and aerospace structural applications requiring excellent mechanical properties, retention of properties at elevated temperatures, good chemical resistance, and low density. Form and Color = Sheet, Black. Fiber Length (Std.) = 1 inch. Data provided by the manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Quantum-Composites-Lytex-4149-55-Carbon-Fiber-Epoxy-SMC.php

Physical Properties	Metric	English	Comments
Density	1.45 g/cc	0.0524 lb/in ³	ASTM D792
Spiral Flow	33.0 cm	13.0 in	Mesa
	@Pressure 27.6 MPa, Temperature 163 °C	@Pressure 4000 psi, Temperature 325 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	289 MPa	41900 psi	ASTM D638
Elongation at Break	0.487 %	0.487 %	ASTM D638
Tensile Modulus	55.1 GPa	7990 ksi	ASTM D638
Flexural Yield Strength	613 MPa	88900 psi	ASTM D790
Flexural Modulus	34.5 GPa	5000 ksi	ASTM D790
Compressive Yield Strength	275 MPa	39900 psi	ASTM D695
Compressive Modulus	31.7 GPa	4600 ksi	ASTM D695
	2.90 GPa	421 ksi	Interlaminar; ASTM D5379
Shear Strength	11.0 GPa	1600 ksi	In-Plane; ASTM D5379
	65.5 MPa	9500 psi	Interlaminar; ASTM D5379
Izod Impact, Notched	206 MPa	29900 psi	In Plane; ASTM D5379
	9.60 J/cm	18.0 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	3.60 µm/m-°C	2.00 µin/in-°F	TMA
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Thermal Conductivity Thermal Properties	0.474 W/m-K Metric	3.29 BTU-in/hr-ft ² -°F English	Comments
Maximum Service Temperature, Air	175 °C	347 °F	Continuous (1000 hrs)
	>= 300 °C	>= 572 °F	Deflection Temp; Load not reported; ASTM D648
Shrinkage	0.00 %	0.00 %	

Processing Properties	Metric	English	Comments
Processing Temperature	120 - 166 °C	248 - 331 °F	Mold temperature
Shelf Life	6.00 Month @Temperature -12.2 °C	6.00 Month @Temperature 10.0 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China