

## Continuous S-2 Glass/PEEK Composite Typical Material Properties

Material Properties	
Color	Tan / Gold
Density	0.072 lb/in <sup>3</sup>
Specific Gravity (liquid)	1.994
Fiber Weight Percentage	75%
Fiber Volume Percentage	61%
Glass Transition Temperature (T <sub>g</sub> )	289°F
Crystallization Temperature (T <sub>c</sub> )	552°F
Melting Temperature (T <sub>m</sub> )	653°F
Dielectric Constant @ 1 MHz, 73°F	4.60
Loss Tangent	<0.001

Mechanical Properties						
Temp.	0° Tensile Strength	0° Tensile Modulus	0° Comp. Strength	0° Comp. Modulus	90° Tensile Strength	90° Tensile Modulus
73°F	170 ksi	8.0 Msi	160 ksi	8.0 Msi	-	-
180°F	168 ksi	8.0 Msi	150 ksi	-	-	-
250°F	165 ksi	8.0 Msi	150 ksi	-	-	-
Inter-laminar Shear Strength (Unidirectional Sample, 73°F)					7.0 ksi	
In-Plane Shear Strength (+/- 45° Sample, 73°F)					14.8 ksi	
In-Plane Shear Modulus (+/- 45° Sample, 73°F)					0.95 Msi	

Coefficient of Thermal Expansion (CTE, α)		
	Longitudinal (0°)	Transverse (90°)
-67°F	1.78 x 10 <sup>-6</sup> in/in/°F	8.44 x 10 <sup>-6</sup> in/in/°F
73°F	2.3 x 10 <sup>-6</sup> in/in/°F	10.8 x 10 <sup>-6</sup> in/in/°F
250°F	2.67 x 10 <sup>-6</sup> in/in/°F	13.9 x 10 <sup>-6</sup> in/in/°F

407 Front Street, Schenectady, New York, 12305 · Phone: (518)377-6471 Fax: (518)377-5628