

# 4121

## CARBON FIBER EPOXY

### CHARACTERISTICS

The gel and cure times are affected by ambient temperature and epoxy mass, or glue line thickness. Curing data is based on 72° F (22° C) ambient temperature. Warmer temperatures and a larger mass will increase cure speed, reducing cure time. Cure time is reduced by approximately one half with every 18° F (10° C) increase in temperature. A smaller mass or cooler temperature will reduce the cure speed. Always dispense adhesive at 70° F or above to assure the proper mix ratio.

### HANDLING CHARACTERISTICS

Mix ratio (Resin:Hardener by volume)	1:1
Mixed Density (lb/gal)	9.3
Pot life of 70ml @ 72° F ASTM C-881	10 MIN
Working time (1/2" bead)	20 MIN
Clamps off cure time (1/16" bond line) @ 75° F	2 hr
Minimum cure temperature	45° F

### CURED CHARACTERISTIC

	<u>ATSM</u>	
Tensile Strength (psi)	ASTM D-638	7100
Tensile Elongation (%)	ASTM D-638	4.0 min.
Tensile Modulus (x 103 psi)	ASTM D-638	3.80
Flexural Strength (psi)	ASTM D-790	12,500
Flexural Modulus (x 105 psi)	ASTM D-790	3.75
Hardness (Shore D) 1 day	ASTM D-2240	78
2 weeks	ASTM D-2240	85
Compression Yield (psi) 2 weeks	ASTM D-695	10,720
Onset of Tg by DSC		125° F
Heat Deflection Temperature	ASTM D-648	130° F

### WARRANTY

Recommendations concerning the performance or use of this product are based upon independent test reports believed to be reliable. If the product is proven to be defective, at the option of the Manufacturer, it will be either replaced or the purchase price refunded. The Manufacturer will not be liable in excess of the purchase price. The user will be responsible for deciding if the product is suitable for his application and will assume all risk associated with the use of the product. This warranty is in lieu of any other warranty expressed or implied, including but not limited to an implied warranty of merchantability or an implied warranty of fitness for a particular use.