



# TECHNICAL DATA SHEET

TDS# 2314

DATE: JUNE 2013

## BACON INDUSTRIES

### RAPID WETTING FLUID ADHESIVE FA-14

Adhesive FA-14 is a very low viscosity unfilled epoxy resin adhesive used for bonding components made from fused beryllium oxide and for other bonding and impregnating applications requiring a good wetting compound. Adhesive FA-14 is suitable for gyro use in contact with poly(bromotrifluoroethylene) oil.

### RECOMMENDED MIXING AND HANDLING PARAMETERS

Adhesive	FA-14
Activator	BA-45
Parts by weight of activator required per hundred of adhesive	24.5
Work Life at Room Temperature, hours	8
Work life at 160°F, minutes	50
Viscosity of mixed adhesive at Room Temperature, cP	230
Surface Tension at Room Temperature, dyne/cm	24.9
Recommended Cure , hr/°F	8/160°F

### TYPICAL PROPERTIES OF CURED ADHESIVE:

Specific Gravity	1.12
Hardness, Shore D	84
Lap Shear Strength to aluminum at Room Temperature, psi	2400
Lap Shear Strength to fused beryllium oxide, psi	
at 75°F	2250
at 200°F	500
Yield Strength in flexure, psi	10000
Young's Modulus in flexure, 10 <sup>6</sup> psi	0.47
Linear Shrinkage upon cure, %	0.30
Glass Transition temperature, °F	
By DSC (20°C/min)	162
By TMA (5°C/min)	123
Coefficient of Linear Thermal Expansion	
between -65°F and 80°F, 10 <sup>-6</sup> /°F	37
Dielectric Constant at 1kHz	3.7
Dissipation Factor at 1kHz	0.007
Volume Resistivity, 10 <sup>17</sup> ohm-cm	1

(over)

