



TECHNICAL DATA SHEET

TDS# 2550

DATE: JUNE 2013

BACON INDUSTRIES

THERMALLY CONDUCTIVE ADHESIVE LCA-50

Adhesive LCA-50 is a thermally conductive, electrically insulating epoxy adhesive. It exhibits excellent adhesion to aluminum and many hard to bond substrates. It also has good chemical resistance including gyro fluids.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Adhesive	LCA-50
Activator	BA-9
Parts by weight of activator required per hundred of adhesive	5.20
Consistency	Thixotropic paste (>4000 poise)
Work life at 77°F, hours	2
Recommended cure, hours/°F	2/200

TYPICAL PROPERTIES OF CURED ADHESIVE:

Color	Black
Specific Gravity	1.93
Hardness, Shore D	90
Lap Shear Strength to aluminum at 77°F, psi	3500
Coefficient of Linear Thermal Expansion (ASTM E831), $10^{-6}/^{\circ}\text{F}$	
between -65°F and 77°F	26
between 77°F and 160°F	34
Glass Transition temperature, °F	
by DSC	190
by TMA	180
Gyro Fluid Resistance ¹	Excellent
Evolution of Volatiles ²	None

NOTES:

1. The cured adhesive neither affects nor is affected by poly(chlorofluoroethylene) oil when immersed for 48 hours at 285°F.
2. The cured adhesive, when heated for ten days at 250°F in a helium atmosphere, produces no condensable volatiles.

(over)

INSTRUCTIONS FOR USE:

Stir well the contents of the container each time before removing material. If the contents are hard or lumpy, warm to 200°F and mix thoroughly before removing material. Prolonged storage at room temperature may result in the Adhesive LCA-50 resin crystallizing. Warming to 200°F will melt the resin and restore the adhesive to its original consistency. Weigh the ingredients accurately so that each amount specified does not vary more than 5%.

FOR INDUSTRIAL USE ONLY! WARNING!!

May cause injury to skin following prolonged or repeated contact. Use with adequate ventilation. Refer to Material Safety Data Sheets for detailed health and safety information.

SHELF LIFE:

The shelf life of these materials are greater than one year when stored in unopened containers at an average temperature below 85°F.

AVAILABILITY:

Adhesive LCA-50/BA-9 is available in quart, four fluid ounce kits, and in One-Shot kits (see Data Sheet 2011). Prices are listed on Data Sheet No. 2201. These systems are also available in Freeze-Paks (see Data Sheets No. 2031 and 2032).