



TECHNICAL DATA SHEET

2550

MAY 2003

BACON INDUSTRIES INC.

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 per 100 parts by weight 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 (1):

Color	Black
Specific Gravity	1.93
Hardness, Shore D	90
Lap Shear Strength to aluminum at 77°F, psi	3500
Thermal Conductivity at 77°F (estimated), Btu-in/hr-ft ² -°F	6
Coefficient of Linear Thermal Expansion (ASTM E831), 10 ⁻⁶ /°F	
-65°F to 77°F	26
77°F to 160°F	34
Glass Transition Temperature, °F	
by DSC	190
by TMA	180
Gyro Fluid Resistance (1)	Excellent
Evolution of Volatiles (2)	None

(over)

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NOTES:

1. The cured adhesive neither affects nor is effected by poly(chlorotrifluoroethylene) 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.

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 FA-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%.

To use, mix, at Room Temperature, 100 parts by weight of Adhesive LCA-50 with 5.20 parts by weight of Activator BA-9. Mix well. Cure as indicated to achieve the desired properties.

FOR INDUSTRIAL USE ONLY! WARNING!

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

SHELF LIFE:

The SHELF LIFE of these materials is greater than two years, 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. This system is also available premixed, degassed and frozen in FREEZE-PAKS.