



TECHNICAL DATA SHEET

TDS# 2504

DATE: JUNE 2013

BACON INDUSTRIES

LOW EXPANSION ADHESIVE LCA-4

Adhesive LCA-4 is a highly filled gyro grade epoxy adhesive that has a low coefficient of thermal expansion, good dimensional stability, and excellent chemical resistance. It is proving useful in applications requiring bonding or hermetic sealing of metal, ceramic, glass and other substrates.

A lower viscosity of analog adhesive LCA-4LV, is described on Data Sheet No. 2505.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Adhesive	LCA-4
Activator	BA-5
Parts by weight of activator required per hundred of adhesive	4.50
Viscosity of mixed adhesive, poise	
at room temperature	5300
at 160°F	130
Work Life at room temperature, minutes	60
Pot Life (tack-free time) at room temperature, minutes	100

TYPICAL PROPERTIES OF CURED ADHESIVE:

	Cure		
	2 hr at 200°F	8 hr at 200°F	1 hr at 140°F + 16 hr at 160°F
Specific Gravity (ASTM D792-A)	1.86	1.86	1.87
Color ¹	Lt Green	Lt Green	Lt Green
Hardness (ASTM D1706), Shore D	92	92	92
Lap Shear Strength to aluminum (ASTM D1002), psi			
at -65°F	2100	2400	2300
at 77°F	2400	2400	2400
at 200°F	2400	2500	2200
Flexural Strength (ASTM D790), psi	12000	11000	11000
Young's Modulus in Flexure (ASTM D790), 10 ⁶ psi	1.6	1.5	1.6
Glass Transition temperature			
by Dif. Scanning Calorimetry, °F	186	221	203
by Thermal Mech. Anal., °F	184	205	183
Coeff. of Linear Therm. Exp. (ASTM D831-A), 10 ⁻⁶ /°F			
between -65°F and 80°F	15	15	15
between 80°F and 135°F	21	21	20
between 250°F and 300°F	62	64	64

