BACON INDUSTRIES

ADHESIVE LCA-9

Adhesive LCA-9 is a filled gyro grade adhesive having an exceptionally low coefficient of thermal expansion. It exhibits excellent adhesion to aluminum and beryllium and has good chemical resistance.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Adhesive	LCA-9
Activator	BA-5
Parts by weight of activator required per hundred of adhesive	4.50
Viscosity of mixed adhesive, poise	
at room temperature	paste
at 160°F	50
Work Life at room temperature, minutes	90
Pot Life (tack-free time) at room temperature, minutes	180

TYPICAL PROPERTIES OF CURED ADHESIVE:

	Cure		
	2 hr at 200°F	8 hr at 200°F	1 hr at 140°F + 24 hr at 160°F
Specific Gravity (ASTM D792-A)	1.72	1.72	1.72
Color[1]	Green-Tan	Green-Tan	Green-Tan
Hardness (ASTM D2240), Shore D	93	93	93
Lap Shear Strength to aluminum (ASTM D1002), psi			
at -65°F	2900	2700	2200
at 75°F	2200	2200	2800
at 200°F	1700	1800	2900
Bond Strength to aluminum at 77°F			
after 6 months at 300°F (ASTM D1002), psi	2200	---	---
Flexural Strength (ASTM D790), psi	16000	18000	13000
Young's Modulus in Flexure (ASTM D790), 10^6 psi	1.91	1.70	1.40
Glass Transition temperature			
by Dif. Scanning Calorimetry, °F	183	216	200
by Thermal Mech. Anal., °F	162	219	192
Loss in Weight after ageing six months at 300°F, %	0.6	---	---
Coeff. of Linear Therm. Exp. (ASTM E831), 10^{-6}/°F			
between -185°F and -65°F	11.5	9.5	10.0
between -65°F and 80°F	11.5	12.0	12.0
between 85°F and 135°F	18.0	14.5	14.5
between 250°F and 300°F	54.0	54.0	54.0

(over)