

## **ERA-168LV** **LOW VISCOSITY EPOXY ADHESIVE WITH VARIABLE** **FLEXIBILITY**

**ERA-168LV** is a controlled flexibility epoxy adhesive having a viscosity considerably less than that of **ERA-168**. It is designed for use where shock and peel strength is desired. It can be cured at room temperature or more rapidly at an elevated temperature. Adhesion to metal, glass, ceramic and plastic is excellent. The flexibility of the adhesive is determined by the amount of hardener used. Apply the material using a brush, knife or roller.

<b>Rigid formulation</b>	<b>ERA-168LVA</b> <b>ERA-168LVB</b>	<b>100 grams</b> <b>50 grams</b>
<b>Semi-rigid formulation</b>	<b>ERA-168LVA</b> <b>ERA-168LVB</b>	<b>100 grams</b> <b>100 grams</b>
<b>Flexible formulation</b>	<b>ERA-168LVA</b> <b>ERA-168LVB</b>	<b>100 grams</b> <b>150 grams</b>
<b>Recommended Cure Schedule</b>		<b>24 hrs at 25°C</b>
<b>Alternate Cure Schedule</b>		<b>1 hr at 70°C or</b> <b>30 minutes at 100°C</b>

### **TYPICAL CURED PROPERTIES:** (Semi-rigid formulation)

Color	Black
Specific Gravity	1.5
Hardness, Shore D	40
Lap Shear Strength to Aluminum at 25°C, psi	3200
After 30 days in water at 25°C	2900
Flexural Strength at 25°C, psi	5500
Izod impact, ft.lb/in of notch	4
Dielectric Strength, volts/mil	410
Dielectric Constant at 1 kHz and 25°C	3.6
Dissipation Factor at 1 kHz and 25°C	0.03
Volume Resistivity at 25°C, ohm-cm	3x10 <sup>13</sup>

Outgassing per ASTM E-595 (24 hours at 125°C, in a vacuum of  $5 \times 10^{-7}$  torr) for two formulations is:

<b><u>Formulation</u></b>	<b><u>Cure</u></b>	<b><u>%TML</u></b>	<b><u>%CVCM</u></b>
Rigid	24 hrs. at 50°C	2.218	0.731
Semi-rigid	30 mins. at 104°C	1.981	0.021

### **INSTRUCTIONS FOR USE:**

Mix ERA-168LVA before each use. Weigh out the desired amount of epoxy and then add the correct amount of ERA-168LVB depending on the required flexibility. Mix thoroughly and degas if necessary. The pot life is at least 3 hrs at room temperature (25°C). The adhesive will set up after 8 hours at 25°C but it will require 24 hours to reach maximum bond strength. The material may be cured more rapidly by following the alternate cure schedule.

### **FOR INDUSTRIAL USE ONLY:**

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### **WARNING!!**

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of the work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to the Material Safety Data Sheet for additional 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 of 25°C.