

# **TECHNICAL BULLETIN**

## EB-350-3LV ONE COMPONENT, MACHINABLE, POTTING COMPOUND

**EB-350-3LV** is a single-part heat cured toughened epoxy. The epoxy combines the structural strength of conventional epoxies with unparalleled peel, impact, and cleavage resistance. It has excellent adhesion to most metal surfaces, with metal fatigue or failure resulting before the adhesive fails. The epoxy also has good adhesion to a variety of other surfaces, including most thermoset plastics and composite materials. The high bond strength of the epoxy allows it to be used in many applications in place of mechanical fastening, soldering, brazing, or welding.

#### FEATURES & BENEFITS:

- Outstanding Adhesive Strength
- Excellent Resistance to Vibration and Impacts
- Good Performance at High Temperature
- Meets UL-94-V0 Flammability Requirements

### **TYPICAL HANDLING PROPERTIES:**

Viscosity, 25°C, cps	55,000 - 65,000
(Spindle #6, 20rpm) Det life et 120°C minutes	5
Pot me at 120 C, minutes	5
Shelf life at 25°C, months	3
Recommended Cure	1 hr/100°C + 1 hr/150°C
Alternate Cure	1 hr/125°C
Or	20 min/150°C

#### **TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:**

(Tested @ 25°C unless otherwise indicated)

Color	Black	
Specific Gravity	1.56	
Hardness, Shore D	91	
Water Absorption (24 hrs at 25°C), %	0.06	
Lap Shear Strength to Aluminum, psi		
At 25°C	>3500	
At 100°C	1800	
Thermal Conductivity, W/mK	0.4	
Flexural Strength, psi	14,500	
Flexural Modulus, psi	$1 \times 10^{6}$	
Service Temperature range, °C	-55 to 220	
Glass Transition Temperature, °C	130	
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> /°C		
Below Tg	45	
Above Tg	130	
Dielectric Constant at 1 kHz	4.5	
Dissipation Factor at 1 kHz	0.008	
Arc Resistance	180	
Volume Resistivity, ohm-cm	$6.0 \times 10^{15}$	

- Durable Bond in Harsh Environments
- Adhesion to a Wide Variety of Substrates
- Resistant to Most Chemicals

#### **INSTRUCTIONS FOR USE:**

- 1. Use dispensing equipment for best results.
- 2. For small applications, apply the product using a syringe or clean spatula.
- 3. Avoid air entrapment to obtain optimum cured properties.
- 4. Proceed with the bonding application and cure as recommended.
- 5. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

### AVAILABILITY:

Packaged in Pint and quart cans as well as 30cc syringe & 10oz Semco Cartridge

#### **SHELF LIFE (STORAGE TEMPERATURE):**

Average 25°C	3 months
below 5°C	6 months
Below -40°C	12 months

#### FOR INDUSTRIAL USE ONLY:

Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

#### WARNING!

Adequate ventilation of 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 Material Safety Data Sheet (MSDS) for additional health and safety information.

**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.