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### 124-34A/B-187

# **ELECTRICALLY CONDUCTIVE, SNAP CURE, EPOXY DIE ATTACH ADHESIVE**

#### **DESCRIPTION**

124-34A/B-187 is a two-component syringe dispensable, electrically conductive, epoxy coating and adhesive. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. Applications include, but are not limited to assembling electrical and electronic components.

#### **UNIQUE FEATURES**

- **☀ Excellent Electrical Conductivity**
- \* Excellent Adhesion
- **☀** Excellent Chemical Resistance
- \* Outstanding Dispensability
- \* Excellent High Temperature Performance
- ★ Low Ionics

#### **IONIC CONTENT**

Chloride <10ppm Sodium <10ppm Potassium <10ppm

(Typical properties are not intended to be used as specification limits)

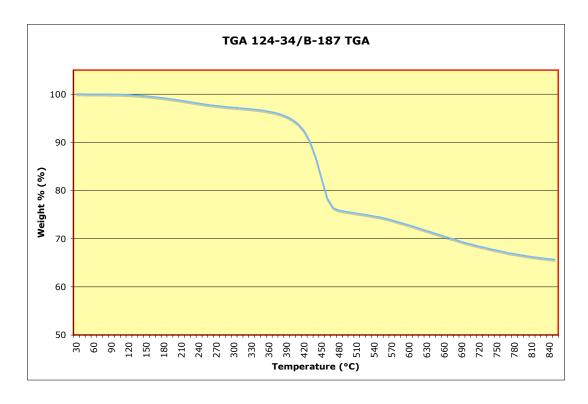
### **TYPICAL UNCURED PROPERTIES**

Property	Value	Units
Viscosity – Brookfield HAT Viscometer @ 10 rpm @ 25°C	85,000	cps
Specific Gravity	2.49	water = 1
Filler	Silver	N/A
Percent Silver (cured)	>74	%
Theoretical Coverage @ 0.001" Wet Thickness	20	in²/g
Solids	90	%
Color	Silver	N/A

### **TYPICAL CURED PROPERTIES**

Property	Value	Units
Operating Temperature	-55 to +230	°C
Peak Temperature	325	°C
Volume Resistivity	0.0002	Ω - cm
Glass transition Temperature – Tg	100	°C
Coefficient of Thermal Expansion	50	ppm/°C
T-Shear Strength	2100	Psi
Weight Loss @ 300°C, TGA	2.77	%
Differential Scanning Calorimetry (DSC) Peak Tc	168	°C
ΔHc	-33.4	J/g

### **TYPICAL CURED PROPERTIES - cont.**



#### **CURING GUIDELINES**

Temperature (°C)	Time (sec.)	These temperatures and times are presented as a guide
175	7 - 10	only. The curing times are after substrate has been
200	2 - 4	brought up to temperature. The end-user is encouraged
		to experiment to determine optimum curing schedule.

## **HANDLING AND STORAGE**

Product should be stored frozen to maintain consistent flow properties. **Allow to warm up to room temperature before opening container.** Prior to using, mix thoroughly to re-suspend fillers. If needed, 124-34/B-187 can be thinned with small amounts of Creative Materials' 102-03 thinner. Thinning should be done after mixing parts A and B to maintain proper mixing ratio.

SHELF LIFE	124-34 6 months @ -10°C	B-187 1 year @ ambient temperatures
MIX RATIO (by weight	<u>124-34</u> 100	B-187 Pot life: 4 hours

### **BONDING PROCEDURE**

To use, carefully align parts to be bonded, apply uniform pressure to maintain location. Follow curing guidelines given above. Timing should start once adhesive and substrate reach curing temperature.

### **HEALTH AND SAFETY**

Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to results or possible infringements on patents.

**REVISION DATE: 6/7/07 REVISION: A**