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## 122-39 (SD)

### **SYRINGE DISPENSABLE, THERMALLY CONDUCTIVE, EPOXY, DIE ATTACH ADHESIVE**

**DESCRIPTION:** 122-39 (SD) is a syringe dispensable, 100 % solids, thermally conductive, electrically insulating, one component, epoxy adhesive. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. Applications include adhesives, die attachment, printed circuit board fabrication, advanced material composites, sealing and high performance coatings.

#### **PROPERTIES:**

Viscosity (cps)	100,000
Filler	Aluminum Nitride
Percent Filler, cured	60
Volume Resistivity, max. ( $\Omega$ -cm)	$1 \times 10^{16}$
Dielectric Constant (1KHz)	4.1
Dielectric Constant (1MHz)	3.9
Dissipation Factor (1KHz)	0.027
Dissipation Factor (1MHz)	0.038
Useful Temperature Range ( $^{\circ}$ C)	-55 to +230
Thermal Stability ( $^{\circ}$ C)	Good to 325
Lap Shear Strength (psi)	1800
Glass Transition Temperature, Tg ( $^{\circ}$ C)	105
Coef. Of Therm. Exp. (in./in./ $^{\circ}$ C)	$44 \times 10^{-6}$
Thermal Conductivity (W/mK)	5.5

#### **IONIC CONTENT**

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

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

**SUGGESTED HANDLING AND CURING:** Material is ready to use as received. Store frozen to maintain consistent flow properties. Allow material to warm up to room temperature before opening container. Prior to using, mix container well to re-suspend filler if packaged in containers. Cure for 30 minutes at 155 $^{\circ}$ C, or for 20 minutes at 175 $^{\circ}$ C.

**STORAGE:** Shelf Life -2 weeks at 25 $^{\circ}$ C; or 6 months at -10 $^{\circ}$ C; or 12 months at -40 $^{\circ}$ C.

**SAFETY AND HANDLING:** 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.

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