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125-31A/B

SYRINGE DISPENSABLE THERMALLY CONDUCTIVE EPOXY ADHESIVE

**DESCRIPTION:** 125-31A/B is a 2 component, syringe dispensable, 100% solids, thermally conductive, electrically insulating, epoxy adhesive. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. Unlike conventional thermally conductive epoxy adhesives, 125-31A/B is flexible and can absorb stress when bonding mismatched CTE substrates. Applications include die attachment, printed circuit board fabrication, advanced material composites, LED attachment and heat sink bonding. This is an electrically insulating, thermally conductive version of 124-08A/B.

	<u>Part A</u>	<u>Part B</u>
Appearance:	Black	Black
Consistency:	Paste	Paste
Mix Ratio (by weight):	2	1
Pot Life:	→	<4 days

**MIXING INSTRUCTIONS:** Premix Parts A and B in original container prior to combining. Add Part B to Part A and mix until uniform.

**CURING INSTRUCTIONS:** Best results are obtained when product is cured at one of the following schedules:

- 90 min. @ 80°C or
- 15 min. @ 120°C or
- 5 min. @ 150°C or
- 45 sec. @ 175°C

**TYPICAL CURED PROPERTIES:**

Filler	Aluminum Nitride
Percent Filler	>65
Volume Resistivity, max. (Ω-cm)	1 X 10 <sup>16</sup>
Dielectric Constant (1KHz)	4.1
Dielectric Constant (1MHz)	3.9
Dissipation Factor (1KHz)	0.027
Dissipation Factor (1MHz)	0.038
Useful Temperature Range (°C)	-55 to +230
Thermal Stability (°C)	Good to +325
Lap Shear Strength (psi)	1,800
Glass Transition Temperature, Tg (°C)	120
Coefficient. Of Thermal Expansion, above Tg (in./in./°C)	44 x 10 <sup>-6</sup>
Thermal Conductivity (W/mK)	5.5

**SUGGESTED HANDLING AND CURING INSTRUCTIONS:** Material is ready to use as received. If frozen remove product from freezer and allow material to warm to room temperature before opening container. If stored at room temperature be sure to mix well to ensure fillers are not settled to the bottom of the container.

**STORAGE:** Shelf life: 12 months at 25°C, in unopened, unmixed containers.

**SAFETY & 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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