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127-31

FLEXIBLE AND ELASTOMERIC THERMALLY CONDUCTIVE EPOXY

DESCRIPTION: 127-31 is an extremely flexible one-component, syringe dispensable, 100% solids, thermally conductive, electrically insulating soft epoxy adhesive, encapsulant, and potting compound. This system features excellent thermal stability, chemical resistance and excellent high temperature properties. Unlike conventional thermally conductive epoxy adhesives, 127-31 features a low durometer and is highly flexible allowing it to absorb stress when bonding mismatched CTE substrates. 127-31 even displays some elastomeric properties. Applications include die attachment, printed circuit board fabrication, advanced material composites, LED attachment and heat sink bonding.

HANDLING AND CURING INSTRUCTIONS: If frozen remove product from freezer and allow material to warm to room temperature before opening container. Best results are obtained when curing at one of the following schedules:

100°C	1 hour
125°C	30 min

TYPICAL CURED PROPERTIES:

Filler	Aluminum Nitride
Color	Black/Dark Gray
Consistency	Thick Liquid
Percent Filler	> 60
Volume Resistivity, max. (Ω-cm)	1 X 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 (°C)	-55 to +230
Thermal Stability (°C)	Good to +325
Thermal Conductivity (W/mK)	3.0
Hardness (Shore A, 100°C cure)	< 40A
Hardness (Shore A, 175°C post cure)	< 60A

STORAGE: Shelf life: < 4 days at 25°C; 6 months at -10°C

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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