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124-06

SCREEN-PRINTABLE, B-STAGEABLE, THERMALLY CONDUCTIVE, EPOXY DIE ATTACH ADHESIVE

DESCRIPTION: 124-06 is a screen-printable, B-Stageable, thermally conductive, one part epoxy coating and adhesive. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. Applications include die attach adhesives, printed circuit board fabrication, advanced material composites, sealing and high performance coatings.

PROPERTIES:

Viscosity (cps.)	23,000	
Thermal Conductivity (W/mk)	0.935	
T-Shear Strength (psi)	1800	
Dielectric Strength (volts/mil)	440	
Volume Resistivity (ohm-cm)	1 x 10 ¹⁶	
Dielectric Constant (1Hz)	4.1	
Dielectric Factor (60 Hz)	0.018	
Thermal Stability (°C)	Good to 325	
Useful Temperature Range (°C)	-55 to 230	
Glass Transition Temperature, Tg (°C)	100	
Coef of Thermal Expansion (in/in/°C)	Below (Tg)	46 x 10 ⁻⁶
	Above (Tg)	14 x 10 ⁻⁵

IONIC CONTENT

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

(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 fillers. As an adhesive cure for one (1) hour at 150°C, or 30 minutes at 175°C or 15 minutes at 200°C. 124-06 can be thinned with small amounts of CMI# 113-12 thinner.

STORAGE: Shelf Life - 2 months at 25°C; or 6 months at -10°C.

B-STAGE PROCEDURE: Apply adhesive to substrate. Next apply heat to advance the curing to the non-tacky stage (when cooled to room temperature). A temperature of 125°C for 2 - 3 minutes is required (B-Stage time is mass related). User is encouraged to experiment for optimum drying time at a given temperature. Store on release liner to prevent contamination.

STORAGE B-STAGED FILM: Shelf Life - 1 month @ 25°C; or 6 months @ -10°C

BONDING PROCEDURE: Refer to above for storage information. To use, carefully align parts to be bonded, apply uniform pressure to maintain location. Cure for 15 minutes at 200°C or 30 minutes at 175°C or 1 hour at 150°C. (Note cure times given are mass related. Timing should start after adhesive and substrates reach curing temperature.)

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.