

Product Information Sheet

MATERIAL ID:

EPO-TEK® B9021-13

Date: 10/2006

Per:

Rev: II

Material Description:

A single component, thermally conductive, electrically insulating, B-stageable epoxy paste. It was designed for heat sinking applications found at the semiconductor and PCB level electronics packaging. It may also be used for B-stage assembly of 1) window-sealing optical devices and sensors; 2) substrate attach and 3) lid-sealing hybrids.

Number of Components:

Single

Mix Ratio by weight:

N/A

Cure Schedule (minimum)

B-Stage Cure: 80°C/30 Minutes - Cure: 150°C/30 Minutes

Specific Gravity:

1.31 --- Part A: Part B:

Pot Life:

24 Hours

Shelf Life:

One year refrigerated

NOTE: Container(s) should be kept closed when not in use. Filled systems should be stirred thoroughly before mixing and prior to use

MATERIAL CHARACTERISTICS: *To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; B-stage cure condition: 80°C/30 Minutes - Cure condition: 150°C/30 Minutes * denotes test on lot acceptance basis*

PHYSICAL PROPERTIES:

*Color (before cure):	White	Die Shear @ 23°C:	≥ 5 Kg / 1,700 psi
*Consistency:	Smooth paste	Degradation Temp:	345 °C
*Viscosity (23°C):		Weight Loss:	
@ 10 rpm	15,000 - 25,000 cPs	@ 200°C:	2.48 %
Thixotropic Index:	3.44	@ 250°C:	4.01 %
Glass Transition Temp:	70 °C	@ 300°C:	6.80 %
Coefficient of Thermal Expansion (CTE):		Operating Temp:	
Below Tg:	40 x 10 ⁻⁶ in/in°C	Continuous:	- 55°C to + 175°C
Above Tg:	143 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 275°C
Shore D Hardness:	80	Storage Modulus @ 23°C:	372,476 psi
Lap Shear @ 23°C:	774 psi	*Particle Size:	≤ 20 microns

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	0.96 W/mK	Dielectric Constant (1KHz):	N/A
Volume Resistivity @ 23°C:	≥ N/A Ohm-cm	Dissipation Factor (1KHz):	N/A

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	N/A	Index of Refraction:	N/A
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