

Preliminary Product Information Sheet

(Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.)

MATERIAL ID:
EPO-TEK® H67MP-GB
Date: 05/2009

Per:
Rev: II

Material Description:

A single component, thermally conductive, electrically insulating epoxy designed to meet the requirements of MIL-STD-883/Test Method 5011 for hybrid microelectronic packaging and assemblies. It may be used for bonding SMDs, die-attach, substrate-attach or general heat sinking. It is a version of EPO-TEK® H67MP which contains 2 mil glass beads.

Number of Components:

Single

Mix Ratio by weight:

N/A

Cure Schedule (minimum):

150°C/1 Hour

Specific Gravity:

2.0

Part A:

Part B:

Pot Life*:

28 Days

Shelf Life:

One year at -40°C

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

*Complies with MIL-STD-883, Method 5011 Section 3.4.3

MATERIAL CHARACTERISTICS:

PHYSICAL PROPERTIES:			
Color (before cure):	White	Weight Loss:	
Consistency:	Highly viscous paste	@ 200°C:	0.29 %
Viscosity (23°C):		@ 250°C:	0.79 %
@ 1 rpm	334,200 cPs	@ 300°C:	1.62 %
Thixotropic Index:	N/A	Operating Temp:	
Glass Transition Temp:	93 °C	Continuous:	- 55°C to + 200°C
		Intermittent:	- 55°C to + 300°C
Coefficient of Thermal Expansion (CTE):		Storage Modulus @ 23°C:	852,310 psi
Below Tg:	17 x 10 ⁻⁶ in/in°C	Ion Content:	
Above Tg:	75 x 10 ⁻⁶ in/in°C	Cl ⁻ :	< 200 ppm
Shore D Hardness:	86	NH ₄ ⁺ :	44 ppm
Lap Shear @ 23°C:	> 2,000 psi	Na ⁺ :	< 50 ppm
Die Shear @ 23°C:	34 Kg	K ⁺ :	< 50 ppm
Degradation Temp:	360 °C	Particle Size:	< 55 microns
ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	0.43 W/mK	Dielectric Constant (1KHz):	5.01
Volume Resistivity @ 23°C:	2 x 10 ¹³ Ohm-cm	Dissipation Factor (1KHz):	0.0045
OPTICAL PROPERTIES @ 23°C:			
Spectral Transmission:	N/A	Index of Refraction:	N/A

The data above is INITIAL only - it may be changed at anytime, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

*These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.