

Product Information Sheet

MATERIAL ID:
EPO-TEK® H55
Date: 04/2006

Per:
Rev: VIII

Material Description:

A two component, thixotropic and high temperature epoxy designed to be used for hybrids and PCB applications.

Number of Components:

Two

Mix Ratio by weight:

20:1

Cure Schedule (minimum)

100°C/20 Minutes - 80°C/45 Minutes

Specific Gravity:

--- Part A: 1.69 Part B: 1.06

Pot Life:

3 Hours

Shelf Life:

Six months at room temperature

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; Cure condition: 150°C/1 hour*

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

*Color (before cure):	Part A: White Part B: Amber	Die Shear @ 23°C:	≥ 5 Kg / 1,700 psi
*Consistency:	Thixotropic paste	Degradation Temp:	465 °C
*Viscosity (23°C):		Weight Loss:	
@ 1 rpm	250,000 - 400,000 cPs	@ 200°C:	0.88 %
Thixotropic Index:	N/A	@ 250°C:	1.14 %
*Glass Transition Temp:	≥ 100 °C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	@ 300°C:	1.52 %
Coefficient of Thermal Expansion (CTE):		Operating Temp:	
Below Tg:	22 x 10 ⁻⁶ in/in°C	Continuous:	- 55°C to + 250°C
Above Tg:	79 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 350°C
Shore D Hardness:	68	Storage Modulus @ 23°C:	546,694 psi
Lap Shear @ 23°C:	1,672 psi	*Particle Size:	≤ 10 microns

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	0.4 W/mK	Dielectric Constant (1KHz):	6.32
*Volume Resistivity @ 23°C:	≥ 1.16 x 10 ¹⁴ Ohm-cm	Dissipation Factor (1KHz):	0.008

OPTICAL PROPERTIES @ 23°C:

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