

Product Information Sheet

MATERIAL ID:

EPO-TEK® 930

Date: 08/2005

Per:

Rev: IV

Material Description:

A two-part thermally conductive epoxy for heat sinking electronics and hybrids. It can be used at the PCB level for circuit assembly.

Number of Components:

Two

Mix Ratio:

100:3.3

Cure Schedule (minimum)

150°C/10 Minutes - 100°C/4 Hours - 80°C/6 Hours

Specific Gravity:

--- Part A: 1.66 Part B: 1.02

Pot Life:

6 Hours

Shelf Life:

One year 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:			
<p>*Color (before cure): Part A: White Part B: Amber</p> <p>*Consistency: Granular paste</p> <p>*Viscosity (23°C): > 819,200 cPs</p> <p>Thixotropic Index: N/A</p> <p>*Glass Transition Temp: ≥ 90 °C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)</p> <p>Coefficient of Thermal Expansion (CTE): Below Tg: 16 x 10⁻⁶ in/in°C Above Tg: 81 x 10⁻⁶ in/in°C</p> <p>Shore D Hardness: 82</p> <p>Lap Shear @ 23°C: 658 psi</p> <p>Die Shear @ 23°C: ≥ 5 Kg / 1,700 psi</p> <p>Degradation Temp: 350 °C</p>	<p>Weight Loss:</p> <p style="padding-left: 40px;">@ 200°C: %</p> <p style="padding-left: 40px;">@ 250°C: %</p> <p style="padding-left: 40px;">@ 300°C: 0.86 %</p> <p>Operating Temp:</p> <p style="padding-left: 40px;">Continuous: - 55°C to + 150°C</p> <p style="padding-left: 40px;">Intermittent: - 55°C to + 250°C</p> <p>Storage Modulus @ 23°C: 1,313,918 psi</p> <p>Ion Content:</p> <p style="padding-left: 40px;">Cl⁻:</p> <p style="padding-left: 40px;">NH₄⁺:</p> <p style="padding-left: 40px;">Na⁺:</p> <p style="padding-left: 40px;">K⁺:</p> <p>*Particle Size: ≤ 500 microns</p>		
ELECTRICAL AND THERMAL PROPERTIES:			
<p>Thermal Conductivity: 4.57 W/mK</p> <p>Volume Resistivity @ 23°C: ≥ 2x10¹³ Ohm-cm</p>	<p>Dielectric Constant (1KHz): 3.96</p> <p>Dissipation Factor (1KHz): 0.006</p>		
OPTICAL PROPERTIES @ 23°C:			
<p>Spectral Transmission: N/A</p>	<p>Index of Refraction: N/A</p>		

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