

Product Information Sheet

MATERIAL ID:

EPO-TEK® 731

Date: 02/2007

Per:

Rev: II

Material Description:

A two component, thixotropic, room temperature-curing epoxy adhesive. It is an electrically and thermally insulating epoxy designed for general applications in semiconductor packaging, electronics, medical, and optical industries. A higher viscosity version of EPO-TEK® 730.

Number of Components:

Two

Mix Ratio by weight:

1:1

Cure Schedule (minimum)

100°C/30 Minutes - 80°C/2 Hours - 23°C/24 Hours

Specific Gravity:

--- Part A: 1.12 Part B: 0.97

Pot Life:

1.5 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: 80°C/2 hours*

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

*Color (before cure):	Part A: Tan Part B: Tan	Die Shear @ 23°C:	≥ 10 Kg / 3,400 psi
*Consistency:	Smooth paste	Degradation Temp:	417 °C
*Viscosity (23°C):		Weight Loss:	
@ 1 rpm	175,000 - 275,000 cPs	@ 200°C:	0.47 %
Thixotropic Index:	N/A	@ 250°C:	0.92 %
*Glass Transition Temp:	≥ 55 °C (Dynamic Cure	@ 300°C:	1.62 %
20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)		Operating Temp:	
Coefficient of Thermal Expansion (CTE):		Continuous:	- 55°C to + 200°C
Below Tg:	74 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 300°C
Above Tg:	168 x 10 ⁻⁶ in/in°C	Storage Modulus @ 23°C:	196,634 psi
Shore D Hardness:	66	*Particle Size:	≤ 20 microns
Lap Shear @ 23°C:	> 2,000 psi		

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	Dielectric Constant (1KHz):	3.38
Volume Resistivity @ 23°C:	≥ 2 x 10 ¹³ Ohm-cm	Dissipation Factor (1KHz):	0.028

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	N/A	Index of Refraction:	N/A
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EPOXY TECHNOLOGY, INC.
 14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
 WEB SITE: www.epotek.com