

Product Information Sheet

MATERIAL ID:
EPO-TEK® TV2001 (formerly 300-180-1-4)
Date: 07/2009

Per:
Rev: III

Material Description:

A two component, thermally conductive, electrically insulating epoxy designed for low stress semiconductor and electronics packaging. Low Tg, moderate pot-life, snap-curing and very low modulus are a few of its traits. It is particularly suitable for bonding ferrite cores in power device plastic packaging. Excellent adhesion to PCBs, ceramics, most metals and lead-frames. Also available in a frozen syringe.

Number of Components:

Two

Mix Ratio by weight:

100:6

Cure Schedule (minimum)

160°C/5 Minutes - 120°C/30 Minutes - 100°C/60 Minutes - 80°C/90 Minutes

Specific Gravity:

--- Part A: 1.45 Part B: 0.99

Pot Life:

2 Days

Shelf Life:

 One year at room temperature
 PMF Syringe: 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.

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: varies as required*
 * denotes test on lot acceptance basis

PHYSICAL PROPERTIES:			
*Color (before cure): *Consistency: *Viscosity (23°C): @ 20 rpm Thixotropic Index: *Glass Transition Temp: 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min Coefficient of Thermal Expansion (CTE): Below Tg: Above Tg: Shore D Hardness: Lap Shear @ 23°C:	Part A: White Part B: Golden Yellow Smooth paste 10,000 - 20,000 cPs 1.95 ≥ 35 °C (Dynamic Cure)	Die Shear @ 23°C: Degradation Temp: Weight Loss: @ 200°C: @ 250°C: @ 300°C: Operating Temp: Continuous: Intermittent: Storage Modulus @ 23°C: *Particle Size:	≥ 15 Kg / 5,100 psi 466 °C 0.08 % 0.17 % 0.35 % - 55°C to + 225°C - 55°C to + 325°C 16,271 psi ≤ 20 microns

ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity: Volume Resistivity @ 23°C:	0.40 W/mK ≥ 8 x 10 ¹² Ohm-cm	Dielectric Constant (1KHz): Dissipation Factor (1KHz):	3.42 0.016

OPTICAL PROPERTIES @ 23°C:			
Spectral Transmission:	N/A	Index of Refraction:	N/A

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