

**Date:** September 2017  
**Rev:** VI  
**No. of Components:** Two  
**Mix Ratio by Weight:** 100 : 6  
**Specific Gravity:** Part A: 1.45      Part B: 0.99  
**Pot Life:** 2 Days  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** One year at -40°C

**Recommended Cure: 160°C / 5 Minutes**

Minimum Alternative Cure(s):

*May not achieve performance properties listed below*

80°C / 90 Minutes  
 100°C / 60 Minutes  
 120°C / 30 Minutes

**NOTES:**

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.

**Product Description:** EPO-TEK® TV2001 is 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.

**Typical Properties:** Cure condition: varies as required      Different batches, conditions & applications yield differing results.

Data below is not guaranteed. To be used as a guide only, not as a specification. \* denotes test on lot acceptance basis

**PHYSICAL PROPERTIES:**

* Color (before cure):	Part A: White	Part B: Golden yellow
* Consistency:	Smooth paste	
* Viscosity (23°C) @ 20 rpm:	10,000-20,000	cPs
Thixotropic Index:	2.0	
* Glass Transition Temp:	≥ 15 °C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):		
Below Tg:	67	x 10 <sup>-6</sup> in/in°C
Above Tg:	189	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	50	
Lap Shear @ 23°C:	> 2,000	psi
Die Shear @ 23°C:	≥ 15	Kg    5,334 psi
Degradation Temp:	466 °C	
Weight Loss:		
@ 200°C:	0.08	%
@ 250°C:	0.17	%
@ 300°C:	0.35	%
Suggested Operating Temperature:	< 325 °C (Intermittent)	
Storage Modulus:	16,271	psi
* Particle Size:	≤ 20 microns	

**ELECTRICAL AND THERMAL PROPERTIES:**

Thermal Conductivity:	0.4	W/mK
Volume Resistivity @ 23°C:	≥ 8 x 10 <sup>12</sup>	Ohm-cm
Dielectric Constant (1KHz):	3.42	
Dissipation Factor (1KHz):	0.016	

Epoxyes and Adhesives for Demanding Applications™

This information is based on data and tests believed to be accurate. Epoxy Technology, Inc. makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with any use of this product.

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**EPO-TEK® TV2001 Advantages & Suggested Application Notes:**

- Flexible epoxy designed for low stress semiconductor and electronics packaging applications
- Long 2 day pot life and paste-like viscosity make it ideal for high volume manufacturing including dispensing, stamping, or printing
- Excellent adhesion to PCBs, ceramic, most metals, and many engineering plastics. Particularly suited to bonding ferrite cores in power devices, including plastic packaged devices
- Highly resistant to thermal cycling and excellent for low stress in large doe exceeding 500 x 500 mil
- Strong adhesion to flex circuits used as a die attach in micro LCDs on Kapton flex film
- Capable of snap curing with heat but offers a lower temp (80°C) cure alternative

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