

## **EPO-TEK® 360T**

Technical Data Sheet For Reference Only

High Temperature Thixotropic Epoxy

Date: February 2021

Rev: IX
No. of Components: Two
Mix Ratio by Weight: 10 : 1

Specific Gravity: Part A: 1.16 Part B: 1.02

Pot Life: 4 Hours

Shelf Life- Bulk: Six months at room temperature

Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s):

May not achieve performance properties listed below

150°C / 1 Minute 100°C / 10 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.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.

<u>Product Description:</u> EPO-TEK® 360T is a two component, high-temperature grade, electrically and thermally insulating epoxy for semiconductor, electronics, and fiber optics applications. It is a thixotropic paste for non-flow properties.

<u>Typical Properties:</u> Cure condition: 150°C / 1 Hour 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: Tan	Part B: Amber
* Consistency:	Thixotropic pas	te
* Viscosity (23°C) @ 50 rpm:	4,000 - 6,000	cPs
Thixotropic Index:	5.1	
* Glass Transition Temp:	≥ 80	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTI	Ξ):	
Below	Γg: 53	x 10 <sup>-6</sup> in/in°C
Above <sup>1</sup>	Гg: 146	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	75	
Lap Shear @ 23°C:	1,997	psi
Die Shear @ 23°C:	≥ 10	Kg 3,556 psi
Degradation Temp:	341	°C
Weight Loss:		
@ 200	°C: 0.59	%
@ 250	°C: 1.79	%
@ 300	°C: 4.26	%
Suggested Operating Temperature:	< 275	°C (Intermittent)
Storage Modulus:	317,695	psi
* Particle Size:	≤ 20	microns

<b>ELECTRICAL AND THERMAL PROPER</b>	TIES:	
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	$\geq 2 \times 10^{13}$	Ohm-cm
Dielectric Constant (1KHz):	3.84	
Dissipation Factor (1KHz):	0.014	

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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® 360T Advantages & Suggested Application Notes:**

- Common in fiber optic, optoelectronic, and circuit assembly applications
- High strength adhesion to metals, glass, ceramic, and many engineering plastics
- High temperature compatible; suitable for use in hybrids and lead frame based devices. It can resist heat up to 300°C for extended times.
- Circuit assembly applications:
  - o staking surface mount devices
  - o bonding ferrite cores together in copper coil winding, inductor coils, and power devices
  - o chip on board glob top dam
- Can be applied by screen printing, spatula, handheld or automatic dispensing equipment
- Amber color change when properly cured for easy visual inspection