

**Date:** July 2019  
**Rev:** VIII  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 1  
**Specific Gravity:** Part A: 1.12      Part B: 1.02  
**Pot Life:** 3 Hours  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** Six months at -40°C

**Recommended Cure: 150°C / 1 Hour**

Minimum Alternative Cure(s):

*May not achieve performance properties listed below*  
 150°C / 1 Minute  
 120°C / 5 Minutes  
 100°C / 10 Minutes  
 80°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.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**

**Product Description:** EPO-TEK® 353ND-T is a two component, highly thixotropic epoxy with non-flowing properties and high temperature resistance.

**Typical Properties:** 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:	Smooth thixotropic paste			
* Viscosity (23°C) @ 20 rpm:	9,000 - 15,000	cPs		
Thixotropic Index:	3.8			
* Glass Transition Temp:	≥ 90	°C	(Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):				
	Below Tg:	43	x 10 <sup>-6</sup>	in/in°C
	Above Tg:	231	x 10 <sup>-6</sup>	in/in°C
Shore D Hardness:	80			
Lap Shear @ 23°C:	1,953	psi		
Die Shear @ 23°C:	≥ 15	Kg	5,334	psi
Degradation Temp:	409	°C		
Weight Loss:				
	@ 200°C:	0.53	%	
	@ 250°C:	1.22	%	
	@ 300°C:	2.37	%	
Suggested Operating Temperature:	< 325	°C	(Intermittent)	
Storage Modulus:	559,120	psi		
Ion Content:	Cl <sup>-</sup> :	471 ppm	Na <sup>+</sup> :	143 ppm
	NH <sub>4</sub> <sup>+</sup> :	400 ppm	K <sup>+</sup> :	15 ppm
* Particle Size:	99% ≤ 20	microns		

**ELECTRICAL AND THERMAL PROPERTIES:**

Thermal Conductivity:	N/A		
Volume Resistivity @ 23°C:	≥ 4 x 10 <sup>12</sup>	Ohm-cm	
Dielectric Constant (1KHz):	3.21		
Dissipation Factor (1KHz):	0.003		

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® 353ND-T Advantages & Suggested Application Notes:**

- Suitable for fiber optic and circuit assembly applications.
- Recommended for bonding metals, glass, ceramics and many types of plastic.
- High temperature adhesive for hybrids and medical devices; it can resist within the 300°C range for long periods of time.
- Circuit assembly applications; staking SMD's to PCB, bonding ferrite cores together in copper coil windings, inductor coils and power devices; suitable for COB glob top DAM material.
- Alternative product versions available with distinct viscosity ranges - contact Technical Services at [techserv@epotek.com](mailto:techserv@epotek.com) for best recommendation.
- Can be applied by screen printing, spatula, hand held or automatic dispensing equipment.
- Amber color change when properly cured for easy visual ID and inspection.

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