

EPO-TEK® 353ND-T4

Technical Data Sheet For Reference Only Thixotropic Epoxy

Date: February 2021

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

Specific Gravity: Part A: 1.11 Part B: 1.02

Pot Life: 3 Hours

Shelf Life- Bulk: Nine months refrigerated

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

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® 353ND-T4 is a two component, highly thixotropic epoxy with non-flowing properties and high temperature resistance. This is a higher viscosity version of EPO-TEK® 353ND-T for applications needing decreased flow.

<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: Smooth thixotropic paste * Viscosity (23°C) @ 20 rpm: 11,000-17,000 cPs Thixotropic Index: 2.3 * 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 10-6 in/in°C Above Tg: 231 x 10-6 in/in°C Shore D Hardness: 80 Lap Shear @ 23°C: > 2,000 psi Die Shear @ 23°C: ≥ 15 Kg 5,334 psi Degradation Temp: 409 °C			
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Die Shear @ 23°C: ≥ 15 Kg 5,334 psi	Shore D Hardness:	80)
	Lap Shear @ 23°C:	> 2,000	O psi
Degradation Temp: 409 °C	Die Shear @ 23°C:	≥ 1	5 Kg 5,334 psi
	Degradation Temp:	409	9 °Č
Weight Loss:	Weight Loss:		
@ 200°C: 0.53 %	@	200°C: 0.5	3 %
@ 250°C: 1.22 %	ē.) 250°C: 1.22	2 %
@ 300°C: 2.37 %	@) 300°C: 2.3°	7 %
Suggested Operating Temperature: < 325 °C (Intermittent)	Suggested Operating Temperatur	re: < 325	5 °C (Intermittent)
Storage Modulus: 559,120 psi	Storage Modulus:	559,120	O psi
* Particle Size: ≤ 20 microns	* Particle Size:	≤ 20	O microns

ELECTRICAL AND THERMAL PROPERT	TES:	
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	$\geq 4 \times 10^{12}$	Ohm-cm
Dielectric Constant (1KHz):	3.21	
Dissipation Factor (1KHz):	0.003	

Epoxies 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.



EPO-TEK® 353ND-T4

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EPO-TEK® 353ND-T4 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 the 300°C range for long periods of time.
- Used in 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 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.