EPO-TEK® 353ND-T4

Technical Data Sheet

For Reference Only

Thixotropic Epoxy

Number 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:	Nine months refrigerated

Minimum Bond Line Cure Schedule*:

150°C	1 Minute
120°C	5 Minutes
100°C	10 Minutes
80°C	30 Minutes

*Note: Container(s) should be kept closed when not in use. For filled systems, mix contents of each container (A & B) thoroughly before mixing the two together. *Please see Applications Note available on our website.*

Product Description:

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.

EPO-TEK® 353ND-T4 Advantages & Application Notes:

- Suitable for fiber optic, medical grade, 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 temperature range for long periods of time.
- Used in circuit assembly applications; staking SMDs to PCB, bonding ferrite cores together in copper coil windings, inductor coils and power devices; also 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.

Typical Properties: ***(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: 150°C/1 Hour ; * denotes test on lot acceptance basis)***

Physical Properties:	
***Color:** **Part A:** Tan **Part B:** Amber	**Weight Loss:**
***Consistency:** Smooth thixotropic paste	**@ 200°C:** 0.53%
***Viscosity (@ 20 RPM/23°C):** 11,000 – 17,000 cPs	**@ 250°C:** 1.22%
Thixotropic Index: 2.3	**@ 300°C:** 2.37%
***Glass Transition Temp.(Tg):** ≥ 90°C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	**Operating Temp:**
Coefficient of Thermal Expansion (CTE):	**Continuous:** - 55°C to 225°C
Below Tg: 43 x 10^{-6} in/in/°C	**Intermittent:** - 55°C to 325°C
Above Tg: 231 x 10^{-6} in/in/°C	**Storage Modulus @ 23°C:** 559,120 psi
Shore D Hardness: 80	**Ions:** Cl^- < ppm
Lap Shear Strength @ 23°C: > 2,000 psi	Na^+ < ppm
Die Shear Strength @ 23°C: ≥ 15 Kg / 5,100 psi	NH_4^+ < ppm
Degradation Temp. (TGA): 409°C	K^+ < ppm
	***Particle Size:** ≤ 20 Microns
Electrical Properties:	
Volume Resistivity @ 23°C: ≥ 4 x 10^{12} Ohm-cm	**Dielectric Constant (1KHz):** 3.21
	Dissipation Factor (1KHz): 0.003
Thermal Properties:	
Thermal Conductivity: N/A	

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