EPO-TEK® 353ND-T

Technical Data Sheet

For Reference Only

High Temperature Thixotropic Epoxy

Number 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:	One year at room temperature.

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. *Please see Applications Note available on our website.*
– 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.

EPO-TEK® 353ND-T 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 within the 300°C range for long periods of time.
- Circuit assembly applications; staking SMDs to PCB, bonding ferrite cores together in copper coil windings and 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.
- EPO TEK® 353ND-T 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. Different batches, conditions & applications yield differing results.***
Cure condition: 150°C/1 hour * denotes test on lot acceptance basis Data below is not guaranteed.

Physical Properties:	
***Color:** **Part A:** Tan **Part B:** Amber	**Weight Loss:**
***Consistency:** Smooth, thixotropic paste	@ **200°C:** 0.53%
***Viscosity (@ 20 RPM/23°C):** 9,000 – 15,000 cPs	@ **250°C:** 1.22%
Thixotropic Index: 3.8	@ **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:**
	Continuous: - 55°C to 225°C
Coefficient of Thermal Expansion (CTE):	**Intermittent:** - 55°C to 325°C
Below Tg: 43 x 10^{-6} in/in/°C	**Storage Modulus @ 23°C:** 559,120 psi
Above Tg: 231 x 10^{-6} in/in/°C	**Ions:** Cl^- 471 ppm
Shore D Hardness: 80	Na^+ 143 ppm
Lap Shear Strength @ 23°C: 1,953 psi	NH_4^+ 400 ppm
Die Shear Strength @ 23°C: ≥ 15 Kg / 5,100 psi	K^+ 15 ppm
Degradation Temp. (TGA): 409°C	***Particle Size:** D99 < 20 microns
Electrical & Thermal Properties:	
Thermal Conductivity: N/A	**Volume Resistivity:** ≥ 4x10^{12} Ohm-cm
Dielectric Constant (1 KHz): 3.21	**Dissipation Factor (1 KHz):** 0.003

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