

## Product Information Sheet

**MATERIAL ID:**

**EPO-TEK® 353ND-T1**

**Date:** 04/2006

**Per:**

**Rev:** IV

**Material Description:**

A two component, thixotropic and high temperature epoxy designed for fiber optic, electronics and medical applications. It is a more viscous alternative to EPO-TEK® 353ND-T.

**Number of Components:**

Two

**Mix Ratio by weight:**

10:1

**Cure Schedule (minimum)**

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

**Specific Gravity:**

--- Part A: 1.18 Part B: 1.02

**Pot Life:**

3 Hours

**Shelf Life:**

Six months at room temperature

*NOTE:* Container(s) should be kept closed when not in use. Filled systems should be stirred thoroughly before mixing and prior to use

**MATERIAL CHARACTERISTICS:** *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:

<b>*Color (before cure):</b>	Part A: Tan Part B: Amber	<b>Die Shear @ 23°C:</b>	≥ 15 Kg / 5,100 psi
<b>*Consistency:</b>	Smooth thixotropic paste	<b>Degradation Temp:</b>	409 °C
<b>*Viscosity (23°C):</b>		<b>Weight Loss:</b>	
@ 20 rpm	12,000 - 20,000 cPs	@ 200°C:	0.53 %
<b>Thixotropic Index:</b>	2.6	@ 250°C:	1.22 %
<b>*Glass Transition Temp:</b>	≥ 90 °C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	@ 300°C:	2.37 %
<b>Coefficient of Thermal Expansion (CTE):</b>		<b>Operating Temp:</b>	
Below Tg:	43 x 10 <sup>-6</sup> in/in°C	Continuous:	- 55°C to + 225°C
Above Tg:	231 x 10 <sup>-6</sup> in/in°C	Intermittent:	- 55°C to + 325°C
<b>Shore D Hardness:</b>	80	<b>Storage Modulus @ 23°C:</b>	559,120 psi
<b>Lap Shear @ 23°C:</b>	1,953 psi	<b>*Particle Size:</b>	≤ 20 microns

### ELECTRICAL AND THERMAL PROPERTIES:

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

### OPTICAL PROPERTIES @ 23°C:

<b>Spectral Transmission:</b>	N/A	<b>Index of Refraction:</b>	N/A
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EPOXY TECHNOLOGY, INC.  
 14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782  
 WEB SITE: [www.epotek.com](http://www.epotek.com)