

**Product Information Sheet**

**MATERIAL ID:** EPO-TEK® 323LP  
**Date:** Jan 2010  
**Rev:** IV  
**Material Description:** Longer pot life version of EPO-TEK® 353ND designed for semiconductor, hybrid, fiber-optic, hard-disk drive and medical applications.  
**Number of Components:** Two  
**Mix Ratio by Weight:** 10:1  
**Cure Schedule (minimum):** 90°C/30 Minutes  
**Specific Gravity:** Part A: 1.20 Part B: 1.09  
**Pot Life:** 24 Hours  
**Shelf Life:** One year 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; -TOTAL MASS SHOULD NOT EXCEED 25g-  
 Cure condition: 150°C/1 hour \* denotes test on lot acceptance basis

<b>PHYSICAL PROPERTIES:</b>			
<b>Color (before cure):</b>	Part A: Clear to Slight Yellow Part B: Yellow		
<b>Consistency</b>	Pourable liquid		
<b>Viscosity (23°C): @ 50 rpm</b>	3,500 - 5,000 cPs		
<b>Thixotropic Index:</b>	N/A		
<b>Glass Transition Temp:</b>	>100 °C (Dynamic Cure: 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)		
<b>Coefficient of Thermal Expansion (CTE):</b>			
<b>Below Tg:</b>	31 x 10 <sup>-6</sup> in/in°C		
<b>Above Tg:</b>	132 x 10 <sup>-6</sup> in/in°C		
<b>Shore D Hardness:</b>	88		
<b>Lap Shear @ 23°C:</b>	> 2,000 psi		
<b>Die Shear @ 23°C:</b>	>20 Kg		6,800 psi
<b>Degradation Temp:</b>	413 °C		
<b>Weight Loss:</b>			
<b>@ 200°C</b>	0.31 %		
<b>@ 250°C</b>	0.46 %		
<b>@ 300°C</b>	0.85 %		
<b>Operating Temp:</b>			
<b>Continuous:</b>	- 55°C to	250 °C	
<b>Intermittent:</b>	- 55°C to	350 °C	
<b>Storage Modulus:</b>	387,556 psi		
<b>Ion Content:</b>			
<b>Cl:</b>	ppm	<b>NA<sup>+</sup>:</b>	ppm
<b>NH<sub>4</sub><sup>+</sup>:</b>	ppm	<b>K<sup>+</sup>:</b>	ppm
<b>Particle Size:</b>	N/A		

<b>ELECTRICAL AND THERMAL PROPERTIES:</b>	
<b>Thermal Conductivity:</b>	N/A
<b>Volume Resistivity @ 23°C:</b>	> 3 x 10 <sup>12</sup> Ohm-cm
<b>Dielectric Constant (1KHz):</b>	2.62
<b>Dissipation Factor (1KHz):</b>	0.0032

<b>OPTICAL PROPERTIES @ 23°C:</b>		
<b>Spectral Transmission:</b>	>94% @ 820-1620 nm	>90% @ 640-800 nm
<b>Index of Refraction:</b>	1.5703 @ 589 nm	

**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.**