

**Product Information Sheet**

**MATERIAL ID:** EPO-TEK® OD1001

**Date:** Apr 2011

**Rev:** VI

**Material Description:** A single component, thermally and electrically insulating epoxy designed for low stress semiconductor and electronics packaging. Low Tg, several weeks of pot life and low modulus are a few of its traits. It is particularly suitable for bonding, sealing and potting ferrite cores in power device plastic packaging.

**Number of Components:** Single

**Mix Ratio by Weight:** N/A

**Cure Schedule (minimum):** 125°C/1 Hour

**Specific Gravity:** 1.13

**Pot Life:** 28 Days

**Shelf Life:** One year at -40°C

*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: 125°C/1 Hour

\* denotes test on lot acceptance basis

**PHYSICAL PROPERTIES:**

* <b>Color (before cure):</b>	Cream	
* <b>Consistency</b>	Smooth thin paste	
* <b>Viscosity (23°C): @ 100 rpm</b>	1,000 - 1,500 cPs	
<b>Thixotropic Index:</b>	1.2	
* <b>Glass Transition Temp:</b>	> 35 °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>	66 x 10 <sup>-6</sup> in/in°C	
<b>Above Tg:</b>	211 x 10 <sup>-6</sup> in/in°C	
<b>Shore D Hardness:</b>	70	
<b>Lap Shear @ 23°C:</b>	> 1,800 psi	
<b>Die Shear @ 23°C:</b>	>15 Kg	5,100 psi
<b>Degradation Temp:</b>	355 °C	
<b>Weight Loss:</b>		
<b>@ 200°C</b>	0.27 %	
<b>@ 250°C</b>	0.64 %	
<b>@ 300°C</b>	1.50 %	
<b>Operating Temp:</b>		
<b>Continuous:</b>	- 55°C to	175 °C
<b>Intermittent:</b>	- 55°C to	275 °C
<b>Storage Modulus:</b>	168,765 psi	
* <b>Particle Size:</b>	< 10 microns	

**ELECTRICAL AND THERMAL PROPERTIES:**

<b>Thermal Conductivity:</b>	N/A
<b>Volume Resistivity @ 23°C:</b>	> 2 x 10 <sup>13</sup> Ohm-cm
<b>Dielectric Constant (1KHz):</b>	3.05
<b>Dissipation Factor (1KHz):</b>	0.011

**OPTICAL PROPERTIES @ 23°C:**

<b>Spectral Transmission:</b>	< 50% @300 -1,200 nm
<b>Index of Refraction:</b>	1.5413 @ 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.**