

## Product Information Sheet

**MATERIAL ID:** **EPO-TEK® 730-110**

**Date:** Apr 2013

**Rev:** III

**Material Description:** A two component, room temperature-curing, thermally and electrically insulating epoxy. It can be used for adhesive, sealing, potting or encapsulation applications found in semiconductor, electronics, optical and medical devices.

**Number of Components:** Two

**Mix Ratio by Weight:** 1 : 1

**Recommended Cure:** 80°C/2 Hours

**Specific Gravity:** Part A: 1.17      Part B: 0.97

**Pot Life:** 1 Hour

**Shelf Life:** One year at room temperature

Minimum Alternative Cure(s):  
*may not achieve performance properties below:*  
 100°C / 30 Minutes  
 23°C / 24 Hours

*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: varies as required

\* denotes test on lot acceptance basis

<b>PHYSICAL PROPERTIES:</b>	
* <b>Color (before cure):</b>	Part A: Clear/Colorless    Part B: Clear Yellow
* <b>Consistency</b>	Pourable liquid
* <b>Viscosity (23°C): @ 20 rpm</b>	8,000 - 12,000 cPs
<b>Thixotropic Index:</b>	N/A
* <b>Glass Transition Temp:</b>	≥ 50 °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>	61 x 10 <sup>-6</sup> in/in°C
<b>Above Tg:</b>	192 x 10 <sup>-6</sup> in/in°C
<b>Shore D Hardness:</b>	76
<b>Lap Shear @ 23°C:</b>	> 2,000 psi
<b>Die Shear @ 23°C:</b>	≥ 10 Kg    3,400    psi
<b>Degradation Temp:</b>	343 °C
<b>Weight Loss: @ 200°C</b>	1.01 %
<b>Operating Temp:</b>	
<b>Continuous:</b>	- 55°C to 150°C
<b>Intermittent:</b>	- 55°C to 250°C
<b>Storage Modulus:</b>	129,916 psi
<b>Particle Size:</b>	N/A

<b>ELECTRICAL AND THERMAL PROPERTIES:</b>	
<b>Thermal Conductivity:</b>	N/A
<b>Volume Resistivity @ 23°C:</b>	≥ 4 x 10 <sup>12</sup> Ohm-cm
<b>Dielectric Constant (1KHz):</b>	3.10
<b>Dissipation Factor (1KHz):</b>	0.008

<b>OPTICAL PROPERTIES @ 23°C:</b>	
<b>Spectral Transmission:</b>	≥ 95% @ 480 - 1640 nm
<b>Index of Refraction:</b>	1.5275 @ 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.**