

**Product Information Sheet**

**MATERIAL ID:** EPO-TEK® T7109-19

**Date:** Jun 2011

**Rev:** IV

**Material Description:** A flexible, thermally conductive, electrically insulating epoxy paste designed for low stress and heat dissipation applications. It is an alternative to EPO-TEK® T7109-17, designed for higher strength.

**Number of Components:** Two  
**Mix Ratio by Weight:** 100:15  
**Cure Schedule (minimum):** 80°C/2 Hours - 23°C/2 days  
**Specific Gravity:** Part A: 1.36 Part B: 1.01  
**Pot Life:** 2 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; Cure condition: 80°C/2 Hours

\* denotes test on lot acceptance basis

<b>PHYSICAL PROPERTIES:</b>			
* <b>Color (before cure):</b>	Part A: Grey	Part B: Clear/Colorless	
* <b>Consistency</b>	Smooth paste		
* <b>Viscosity (23°C): @ 5 rpm</b>	40,000 - 70,000 cPs		
<b>Thixotropic Index:</b>	2.7		
* <b>Glass Transition Temp:</b>	< 40 °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>	59 x 10 <sup>-6</sup> in/in°C		
<b>Above Tg:</b>	216 x 10 <sup>-6</sup> in/in°C		
<b>Shore D Hardness:</b>	41		
<b>Lap Shear @ 23°C:</b>	1,434 psi		
<b>Die Shear @ 23°C:</b>	5 Kg		1,700 psi
<b>Degradation Temp:</b>	338 °C		
<b>Weight Loss:</b>			
@ 200°C	0.41 %		
@ 250°C	0.68 %		
@ 300°C	1.44 %		
<b>Operating Temp:</b>			
<b>Continuous:</b>	- 55°C to	150 °C	
<b>Intermittent:</b>	- 55°C to	250 °C	
<b>Storage Modulus:</b>	29,931 psi		
* <b>Particle Size:</b>	< 20 microns		

<b>ELECTRICAL AND THERMAL PROPERTIES:</b>	
<b>Thermal Conductivity:</b>	1.3 W/mK
<b>Volume Resistivity @ 23°C:</b>	> 5 x 10 <sup>12</sup> Ohm-cm
<b>Dielectric Constant (1KHz):</b>	3.42
<b>Dissipation Factor (1KHz):</b>	0.030

**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.**