



## Product Information Sheet

### EPO-TEK® GE116

**Date:** September 2017  
**Rev:** III  
**No. of Components:** Single  
**Mix Ratio by Weight:** N/A  
**Specific Gravity:** 1.15  
**Pot Life:** 28 Days  
**Shelf Life- Bulk:** One year at -40°C / 28 days at room temperature

**Recommended Cure: 150°C / 1 Hour**

**Minimum Alternative Cure(s):**  
*May not achieve performance properties listed below*  
150°C / 5 Minutes  
120°C / 15 Minutes

#### NOTES:

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.

**Product Description:** A single component, thixotropic, electrically and thermally insulating epoxy adhesive designed for bonding SMDs to the PCB. It can be used for electronic assembly in many devices including consumer electronics, cell phone, telecommunications, automotive, and scientific/OEM. It is a red color version of EPO-TEK® 115-SMT.

**Typical Properties:** Cure condition: 150°C / 1 Hour Different batches, conditions & applications yield differing results.

Data below is not guaranteed. To be used as a guide only, not as a specification. \* denotes test on lot acceptance basis

#### PHYSICAL PROPERTIES:

* Color (before cure):	Red
* Consistency:	Smooth thixotropic paste
* Viscosity (23°C) @ 1 rpm:	200,000-300,000 cPs
Thixotropic Index:	N/A
* Glass Transition Temp:	≥ 65 °C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):	
Below Tg:	41 x 10 <sup>-6</sup> in/in°C
Above Tg:	218 x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	80
Lap Shear @ 23°C:	1,568 psi
Die Shear @ 23°C:	≥ 5 Kg 1,778 psi
Degradation Temp:	344 °C
Weight Loss:	
@ 200°C:	0.27 %
@ 250°C:	1.12 %
@ 300°C:	2.96 %
Suggested Operating Temperature:	< 275 °C (Intermittent)
Storage Modulus:	438,637 psi
* Particle Size:	≤ 20 microns

#### ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A
Volume Resistivity @ 23°C:	≥ 7 x 10 <sup>13</sup> Ohm-cm
Dielectric Constant (1KHz):	3.48
Dissipation Factor (1KHz):	0.007

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.

EPOXY TECHNOLOGY, INC.

14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782

[www.epotek.com](http://www.epotek.com)