



Product Information Sheet

EPO-TEK® EE165-3

Date: September 2017
Rev: III
No. of Components: Two
Mix Ratio by Weight: 100 : 2.5
Specific Gravity: Part A: 4.03 Part B: 1.06
Pot Life: 10 Hours
Shelf Life- Bulk: One year at room temperature

Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s):
May not achieve performance properties listed below
 125°C / 2 Hours

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 two component, silver-filled, electrically conductive epoxy made for bonding of SMDs, and general solder replacement at the PCB level and circuit assembly. It was designed to be low modulus and flexible in order to resist PCB drop testing.

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):	Part A: Silver	Part B: Amber	
* Consistency:	Smooth thixotropic paste		
* Viscosity (23°C) @ 20 rpm:	13,000-18,000	cPs	
Thixotropic Index:	4.8		
* Glass Transition Temp:	≥ 20	°C	(Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):			
Below Tg:	30	x 10 ⁻⁶ in/in°C	
Above Tg:	212	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	77		
Lap Shear @ 23°C:	1,392	psi	
Die Shear @ 23°C:	≥ 5	Kg	1,778 psi
Degradation Temp:	363	°C	
Weight Loss:			
@ 200°C:	0.26	%	
@ 250°C:	0.56	%	
Suggested Operating Temperature:	< 300	°C	(Intermittent)
Storage Modulus:	200,745	psi	
* Particle Size:	≤ 20	microns	

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	2.3	W/mK
* Volume Resistivity @ 23°C:	≤ 0.0002	Ohm-cm

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