



Product Information Sheet

EPO-TEK® 314

Date: September 2017
Rev: IV
No. of Components: Two
Mix Ratio by Weight: 100 : 6
Specific Gravity: Part A: 1.18 Part B: 1.23
Pot Life: 4 Days
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
180°C / 30 Minutes
120°C / 3 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, high temperature grade, thermally and electrically insulating epoxy, designed for adhesive and sealing applications found in semiconductor, electro-optics, fiber optics, medical, and scientific/OEM industries. It is a low viscosity, optical grade epoxy with low index of refraction (Nd).

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: Clear/colorless	Part B: Amber
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	300 - 600	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≥ 75	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	39	x 10 ⁻⁶ in/in°C
Above Tg:	134	x 10 ⁻⁶ in/in°C
Shore D Hardness:	83	
Lap Shear @ 23°C:	N/A	
Die Shear @ 23°C:	≥ 15	Kg 5,334 psi
Degradation Temp:	361	°C
Weight Loss:		
@ 200°C:	0.18	%
@ 250°C:	0.43	%
@ 300°C:	1.03	%
Suggested Operating Temperature:	< 300	°C (Intermittent)
Storage Modulus:	275,210	psi
* Particle Size:	N/A	

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	≥ 1 x 10 ¹³	Ohm-cm
Dielectric Constant (1KHz):	3.25	
Dissipation Factor (1KHz):	0.013	

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	> 96% @ 440-1680	nm
Refractive Index (uncured):	1.4965 @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.

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