Product Information Sheet

EPO-TEK® 314

Date:	July 2019		**Recommended Cure: 150°C / 1 Hour**
Rev:	V		
No. of Components:	Two		Minimum Alternative Cure(s):
Mix Ratio by Weight:	100 : 6		*May not achieve performance properties listed below*
Specific Gravity:	Part A: 1.18	Part B: 1.23	180°C / 30 Minutes
Pot Life:	4 Days		120°C / 3 Hours
Shelf Life- Bulk:	One year at room temperature		
Shelf Life- Syringe:	Six months at -40°C		

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

EPOXY TECHNOLOGY, INC.
14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
www.epotek.com