



## **EPO-TEK® MED-314**

Technical Data Sheet For Reference Only

Biocompatible/High Temperature, Low Index Epoxy

**ISO 10993-5 Tested/Compliant** 

Date: May 2025

Rev:

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

Shelf Life- Syringe: Six months at -40°C

Biocompatible Certified Cure: 150°C / 1 Hour

Alternative biocompatible cure schedules may be possible, but have not been certified. Contact <a href="med@epotek.com">med@epotek.com</a>

with any questions.

## 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.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.

<u>Product Description:</u> EPO-TEK® MED-314 is a biocompatible, high temperature grade, thermally and electrically insulating epoxy, designed for adhesive and sealing applications found in the medical industry. It is a low viscosity optical grade epoxy with low index of refraction (Nd).

<u>Typical Properties:</u> 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 liqu	ıid
* 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 (C1	E):	
Below	Tg: 39	x 10 <sup>-6</sup> in/in°C
Above	Tg: 134	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	83	
Lap Shear @ 23°C:	N/A	psi
Die Shear @ 23°C:	≥ 15	Kg 5,334 psi
Degradation Temp:	361	°C
Weight Loss:		
@ 20		
@ 25		%
@ 30	0°C: 1.03	%
Suggested Operating Temperature:	< 300	°C (Intermittent)
Storage Modulus:	275,210	psi
Particle Size:	N/A	

OPTICAL PROPERTIES:		
Spectral Transmission:	≥ 96% @ 440-1680	nm
Refractive Index:	1.4965 @589	nm

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