



## **EPO-TEK® MED-375**

Technical Data Sheet For Reference Only

Biocompatible/High Temperature, Optical Epoxy

**ISO 10993-5 Tested/Compliant** 

Date: February 2018

Rev: II
No. of Components: Two
Mix Ratio by Weight: 10 : 1

Specific Gravity: Part A: 1.21 Part B: 1.01

Pot Life: 4 Hours

**Shelf Life- Bulk:** One year at room temperature

Biocompatible Certified Cure: 150°C / 1 Hour

Alternative cures are possible, but no certification or testing has been done to support them. Contact techserv @epotek.com with 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-375 is a biocompatibile, high Tg, high temperature epoxy. It has a color change upon cure and can provide near hermetic sealing. Additionally, it has excellent adhesion to many surfaces including: SST, titanium, ceramic, glass and most plastics. In designs, often used in potting fibers and active alignment of optics, as well as laminating PZT ferroelectrics in ultrasound applications.

<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/Co	olorless Part B: Amber	
* Consistency:		Pourable liquid		
* Viscosity (23°C) @ 50 rpm:		3,000-5,000	cPs	
Thixotropic Index:		N/A		
* Glass Transition Temp:		≥ 100	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):				
E	Below Tg:	58	x 10 <sup>-6</sup> in/in°C	
A	Above Tg:	162	x 10 <sup>-6</sup> in/in°C	
Shore D Hardness:		85		
Lap Shear @ 23°C:		> 2,000	psi	
Die Shear @ 23°C:		≥ 15	Kg 5,334 psi	
Degradation Temp:		427	$^{\circ}\mathrm{C}$	
Weight Loss:				
	@ 200°C:	0.42	%	
	@ 250°C:	0.58	%	
	@ 300°C:	0.93	%	
Suggested Operating Temperature:		< 375	°C (Intermittent)	
Storage Modulus:		343,872	psi	
* Particle Size:		N/A		

OPTICAL PROPERTIES:		
Spectral Transmission:	≥ 97% @ 800-1620	nm
Refractive Index:	1.5636 @589	nm