



EPO-TEK® MED-302-3M

Technical Data Sheet
For Reference Only

Biocompatible/Optically Transparent Epoxy
ISO 10993-5 Tested/Compliant

Date: February 2018
Rev: II
No. of Components: Two
Mix Ratio by Weight: 10 : 4.5
Specific Gravity: Part A: 1.19 Part B: 0.97
Pot Life: < 1 Hour
Shelf Life- Bulk: One year at room temperature

Biocompatible Certified Cure: 80°C / 2 Hours

*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.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**
- Contact techserv@epotek.com for alternatives designed to meet European regulatory requirements.

Product Description: EPO-TEK® MED-302-3M is a biocompatible, clear and colorless, low viscosity epoxy, with high moisture and chemical resistance and is room temperature curing. Additional characteristics are: can be used in the optical pathway with transmission in the VIS/NIR range from 350-1550nm, easily wicks into fiber bundles for endoscopes and light guides, and has excellent adhesion to SST, ceramic, titanium and most plastics.

Typical Properties: Cure condition: 80°C / 2 Hours 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: Clear/Yellow tint	
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 100 rpm:	800-1,600	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 55	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
Below Tg:	61	x 10 ⁻⁶ in/in°C	
Above Tg:	198	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	79		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 15	Kg	5,334 psi
Degradation Temp:	379	°C	
Weight Loss:			
@ 200°C:	0.48	%	
@ 250°C:	1.00	%	
@ 300°C:	1.93	%	
Suggested Operating Temperature:	< 300	°C (Intermittent)	
Storage Modulus:	452,526	psi	
* Particle Size:	N/A		

OPTICAL PROPERTIES:		
Spectral Transmission:	> 97% @ 360-1620	nm
Refractive Index:	1.5458 @589	nm

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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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