EPO-TEK® MED-302-3M-R

Technical Data Sheet
For Reference Only
Biocompatible/High Temperature, Optical Epoxy
ISO 10993-5 Tested/Compliant

Date:	April 2018	
Rev:	I	
No. of Components:	Two	
Mix Ratio by Weight:	100 : 33	
Specific Gravity:	Part A: 1.21	Part B: 0.98
Pot Life:	2.5 Hours	
Shelf Life- Bulk:	One year at room temperature	

Recommended Cure: 80°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.
- *TOTAL MASS SHOULD NOT EXCEED 25 GRAMS*

Product Description: EPO-TEK® MED-302-3M-R is a biocompatible, clear and colorless, low viscosity epoxy designed to meet European Regulatory Requirements. It has 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 350-1550bnm 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/ 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/Slight yellow	Part B: Clear/Yellow/Orange	
* Consistency:	Pourable liquid		
Viscosity (23°C) @ 100 rpm:	550	cPs	
Thixotropic Index:	N/A		
Glass Transition Temp:	61	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
Below Tg:	62	x 10^{-6} in/in°C	
Above Tg:	213	x 10^{-6} in/in°C	
Shore D Hardness:	82		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 20	Kg	7,112 psi
Degradation Temp:	376	°C	
Weight Loss:			
@ 200°C:	0.09	%	
@ 250°C:	0.41	%	
@ 300°C:	1.07	%	
Suggested Operating Temperature:	< 300	°C (Intermittent)	
Storage Modulus:	385,257	psi	
* Particle Size:	N/A		

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	≥ 94% @ 800-1400	nm
	≥ 80% @ 400-700	nm

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