EPO-TEK® MED-OD2002

Technical Data Sheet
For Reference Only
Biocompatible/High Tg, Optical Epoxy
ISO 10993 Tested/Fully Compliant

Date:	August 2021
Rev:	VIII
No. of Components:	Two
Mix Ratio by Weight:	20 : 1
Specific Gravity:	Part A: 1.20 Part B: 1.02 Syringe: 1.18
Pot Life:	4 Hours
Shelf Life- Bulk:	One year at room temperature
Shelf Life- Syringe:	One year at -40°C

Biocompatible Certified Cure: 120°C / 1 Hour

Alternative biocompatible cure schedules may be possible, but have not been certified. Contact med@epotek.com 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.
- *TOTAL MASS SHOULD NOT EXCEED 25 GRAMS*

Product Description: EPO-TEK® MED-OD2002 is a biocompatible, high Tg, low modulus, high temperature epoxy, used primarily for fiber optics and endoscopes. It is highly autoclave resistant and when cured properly can withstand 1,000 autoclave cycles.

Typical Properties: Cure condition: 120°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: Cream	Part B: Amber
* Consistency:	Pourable paste	
* Viscosity (23°C) @ 5 rpm:	24,000-42,000	cPs
Thixotropic Index:	N/A	
Glass Transition Temp:	161	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	52	x 10^{-6} in/in°C
Above Tg:	156	x 10^{-6} in/in°C
Shore D Hardness:	85	
Lap Shear @ 23°C:	> 2,000	psi
Die Shear @ 23°C:	≥ 10	Kg 3,556 psi
Degradation Temp:	430	°C
Weight Loss:		
@ 200°C:	0.12	%
@ 250°C:	0.20	%
@ 300°C:	0.36	%
Suggested Operating Temperature:	< 375	°C (Intermittent)
Storage Modulus:	509,028	psi

OPTICAL PROPERTIES:		
Spectral Transmission:	≥ 98% @ 800-1600	nm
Refractive Index:	1.5735 @589	nm

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