



EPO-TEK® MED-320

Technical Data Sheet
For Reference Only

Biocompatible/Opaque Epoxy
ISO 10993-5 Tested/Compliant

Date: June 2018
Rev: III
No. of Components: Two
Mix Ratio by Weight: 10 : 2
Specific Gravity: Part A: 1.10 Part B: 0.87
Pot Life: 1 Hour
Shelf Life- Bulk: One year at room temperature

Biocompatible Certified Cure: 65°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-320 is a black, biocompatible, thixotropic, low temperature curing, optically opaque epoxy for fiber optics, camera and photonic packaging, often used in bonding/potting/sealing of optics used in various medical imaging electronics.

Typical Properties: Cure condition: 65°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: Black	Part B: Clear/Colorless	
* Consistency:	Slightly thixotropic paste		
* Viscosity (23°C) @ 100 rpm:	700 - 1,200	cPs	
Thixotropic Index:	5.8		
* 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:	57	x 10 ⁻⁶ in/in°C	
Above Tg:	149	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	80		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 15	Kg	5,334 psi
Degradation Temp:	339 °C		
Weight Loss:			
@ 200°C:	0.70	%	
@ 250°C:	1.27	%	
@ 300°C:	3.06	%	
Suggested Operating Temperature:	< 275 °C (Intermittent)		
Storage Modulus:	467,328	psi	
* Particle Size:	< 20 microns		

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	<1% @ 300-2500	nm
Refractive Index:	N/A	

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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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