



EPO-TEK® MED-353ND
Technical Data Sheet
For Reference Only
Biocompatible/High Temperature Epoxy
ISO 10993 Tested/Fully Compliant

Date: June 2018
Rev: III
No. of Components: Two
Mix Ratio by Weight: 10 : 1
Specific Gravity: Part A: 1.20 Part B: 1.02 Syringe: 1.19
Pot Life: ≤ 3 Hours
Shelf Life- Bulk: One year at room temperature
Shelf Life- Syringe: 6 months at -40°C

Biocompatible Certified Cure: 150°C / 1.5 Hours

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.
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Please refer to Tech Tip #7 on website.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**

Product Description: EPO-TEK® MED-353ND is a biocompatible, high temperature, high Tg, and high strength epoxy. It has decades of use and reliability in medical device designs worldwide. Medical applications span from fiber optics and endoscopes, to implants, to diagnostic equipment, to imaging modalities, to surgical tooling. It has high adhesion to SST, titanium, ceramics, glass and most plastic, as well as high chemical and moisture resistance.

Typical Properties: Cure condition: 150°C / 1.5 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	Part B: Amber	
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 50 rpm:	3,000-5,000	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 90	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
	Below Tg:	51	x 10 ⁻⁶ in/in°C
	Above Tg:	178	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:	413	°C	
Weight Loss:			
	@ 200°C:	0.48	%
	@ 250°C:	0.74	%
	@ 300°C:	1.27	%
Suggested Operating Temperature:	< 350	°C (Intermittent)	
Storage Modulus:	464,126	psi	
* Particle Size:	N/A		

OPTICAL PROPERTIES:			
Spectral Transmission:	> 89% @ 860-1600	nm	
Refractive Index:	1.5701 @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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