



EPO-TEK® MED-301-2

Technical Data Sheet
For Reference Only

Biocompatible/Optically Transparent Epoxy
ISO 10993 Tested/Fully Compliant

Date: March 2018
Rev: III
No. of Components: Two
Mix Ratio by Weight: 100 : 35
Specific Gravity: Part A: 1.02 Part B: 0.90
Pot Life: 8 Hours
Shelf Life- Bulk: One year at room temperature

Biocompatible Certified Cure: 45°C / 16 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.
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Please refer to Tech Tip #7 on website.

Product Description: EPO-TEK® MED-301-2 is a biocompatible, clear and colorless, low viscosity, long pot-life, room temperature curing epoxy. Additional characteristics are: ease of use in potting and casting, excellent adhesion to glass, quartz, wood and most plastics. As a compliant, low stress adhesive, it is used in bonding of optics and resistant to impact or vibrations. Used often in endoscopes and in various imaging systems.

Typical Properties: Cure condition: 45°C / 16 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/Colorless	
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 100 rpm:	225-425	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 80	°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:	151	x 10 ⁻⁶ in/in°C
Shore D Hardness:	80		
Lap Shear @ 23°C:	1,952	psi	
Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
Degradation Temp:	352 °C		
Weight Loss:			
	@ 200°C:	0.47	%
	@ 250°C:	0.62	%
	@ 300°C:	2.00	%
Suggested Operating Temperature:	< 300 °C (Intermittent)		
Storage Modulus:	323,059	psi	
* Particle Size:	N/A		

OPTICAL PROPERTIES:		
Spectral Transmission:	≥ 98% @ 320-1600	nm
Refractive Index:	1.5412 @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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