



EPO-TEK® MED-OG116-31

Technical Data Sheet
For Reference Only

Biocompatible/UV Curing Epoxy

ISO 10993 Tested/Fully Compliant

Date: August 2021
Rev: VIII
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.21
Pot Life: N/A
Shelf Life- Bulk: One year at room temperature
Shelf Life- Syringe: One year at room temperature

Biocompatible Certified Cure:

UV 100mW/cm² 320-500nm/2 Minutes + 80°C/2 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.
- Thermal post-cure beneficial – contact techserv@epotek.com for recommendations.

Product Description: EPO-TEK® MED-OG116-31 is a biocompatible, one component, thixotropic, high Tg, cationic/epoxy UV curing adhesive. With thermal post curing, this UV has very high chemical resistance and is used in many types of implantable medical devices, specialized surgical and dental tools, as well as fiber optic lasers and catheters.

Typical Properties: Cure condition: UV 100mW/cm² 320-500nm/2 Minutes + 80°C/2 Hours Data below is not guaranteed. Different batches, conditions & applications yield differing results. To be used as a guide only, not as a specification.

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

* Color (before cure):	Cloudy white		
* Consistency:	Viscous liquid		
* Viscosity (23°C) @ 10 rpm:	20,000-30,000	cPs	
Thixotropic Index:	1.3		
Glass Transition Temp:	137	°C	(Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):			
Below Tg:	59	x 10 ⁻⁶ in/in°C	
Above Tg:	149	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	85		
Lap Shear @ 23°C:	N/A		
Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
Degradation Temp:	417	°C	
Weight Loss:			
@ 200°C:	0.32	%	
@ 250°C:	0.65	%	
@ 300°C:	1.17	%	
Suggested Operating Temperature:	< 350	°C	(Intermittent)
Storage Modulus:	532,845	psi	
* Particle Size:	≤ 20	microns	

OPTICAL PROPERTIES:

Spectral Transmission:	> 95% @540-1640	nm
Refractive Index:	1.57 @589	nm

Epoxies and Adhesives for Demanding Applications™

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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