



**EPO-TEK® MED-301-2**  
**Technical Data Sheet**  
**For Reference Only**  
*Biocompatible/Optically Transparent Epoxy*  
**ISO 10993 Tested/Fully Compliant**

**Date:** June 2018  
**Rev:** IV  
**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 biocompatible cure schedules may be possible, but have not been certified. Contact [med@epotek.com](mailto: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.

**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 <sup>-6</sup> in/in°C |
|   | Above Tg:               | 151  | x 10 <sup>-6</sup> 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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