# EPO-TEK® MED-301-2

**Technical Data Sheet**
**For Reference Only**
*Biocompatible/Optically Transparent Epoxy*
**ISO 10993 Tested/Fully Compliant**

| | |
|---|---|
| **Date:** | February 2018 |
| **Rev:** | II |
| **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 crystalizes 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) @ 50 rpm: | 5,700-7,200 | 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 |



**EPOXY TECHNOLOGY, INC.**
**14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782**
**www.epotek.com**