Date: September 2017  
Recommended Cure: 23°C / 2 Hours  

Rev: VI  
No. of Components: Two  
Mix Ratio by Weight: 1 : 1  
Specific Gravity: Part A: 1.20  
Part B: 0.90  
Pot Life: 10 Minutes  
Shelf Life - Bulk: 10 months at room temperature  

**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.  
● TOTAL MASS SHOULD NOT EXCEED 25 GRAMS  
● Contact techserv@epotek.com for alternatives designed to meet European regulatory requirements.  

**Product Description:** EPO-TEK® 302 is a two component, fast-gelling, room temperature curing epoxy, designed for electronic, optical, and general applications.  

**Typical Properties:** Cure condition: Varies as required  
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) @ 20 rpm: 5,000 - 10,000 cPs  
Thixotropic Index: N/A  
* Glass Transition Temp: ≥ 40 °C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)  
Coefficient of Thermal Expansion (CTE):  
Below Tg: 52 x 10⁻⁶ in/in°C  
Above Tg: 191 x 10⁻⁶ in/in°C  
Shore D Hardness: 73  
Lap Shear @ 23°C: 1.756 psi  
Die Shear @ 23°C: ≥ 5 Kg  
1,778 psi  
Degradation Temp: 261 °C  
Weight Loss:  
@ 200°C: 2.68 %  
@ 250°C: 8.39 %  
Suggested Operating Temperature: < 200 °C (Intermittent)  
Storage Modulus: 153,918 psi  
* Particle Size: N/A  

**ELECTRICAL AND THERMAL PROPERTIES:**  
Thermal Conductivity: N/A  
Volume Resistivity @ 23°C: ≥ 2 x 10¹³ Ohm-cm  
Dielectric Constant (1KHz): 2.95  
Dissipation Factor (1KHz): 0.010  

**OPTICAL PROPERTIES @ 23°C:**  
Spectral Transmission: > 75% @ 340 - 420 nm  
> 85% @ 440 - 900 nm  
> 88% @ 900 - 1600 nm  
Refractive Index: 1.5442 @ 589 nm
Advantages & Suggested Application Notes:

- Due to its versatility, it may be used to adhere, seal, pot or encapsulate.
- Allows for % transmission in VIS and NIR range. It can be used as an adhesive in the optical pathway of light.
- Convenient and easy to use 1:1 mix ratio allows for hand, meter mix, or specialty packaging.

Suggested Applications:

- Field Assembly: mix and cure in the field. Fast gelling and curing in 2-3 hours is accomplished.
- Electronics: rapid prototyping of parts with fast curing epoxy – no need for oven cycle times.
- Optics: active alignment of optics such as lenses, prisms, diodes, filters, etc. to opto-circuit.
- Fiber Optics: “field curing” or field assembly of connectors and couplers; also suggested for fiber optic splicing.
- General: arts and crafts repair, restoration, and hobbyists.