



Product Information Sheet

EPO-TEK® 320-LV

Date: September 2017
Rev: II
No. of Components: Two
Mix Ratio by Weight: 10 : 2
Specific Gravity: Part A: 1.20 Part B: 0.87
Pot Life: 1 Hour
Shelf Life- Bulk: One year at room temperature

Recommended Cure: 65°C / 2 Hours

Minimum Alternative Cure(s):
May not achieve performance properties listed below
23°C / 24 Hours

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**

Product Description: A two component, optically opaque epoxy adhesive designed for semiconductor and PCB applications in optoelectronic instrumentation and assemblies. A lower viscosity version of EPO-TEK® 320 that can be poured, potted or cast into shape.

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: Black | Part B: Clear/colorless | |
| * Consistency: | Smooth pourable liquid | | |
| * Viscosity (23°C) @ 100 rpm: | 350 - 650 | cPs | |
| Thixotropic Index: | N/A | | |
| * Glass Transition Temp: | ≥ 55 | °C | (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min) |
| Coefficient of Thermal Expansion (CTE): | | | |
| | Below Tg: | 48 | x 10 ⁻⁶ in/in°C |
| | Above Tg: | 170 | x 10 ⁻⁶ in/in°C |
| Shore D Hardness: | 84 | | |
| Lap Shear @ 23°C: | 1,680 | psi | |
| Die Shear @ 23°C: | ≥ 15 | Kg | 5,334 psi |
| Degradation Temp: | 397 | °C | |
| Weight Loss: | | | |
| | @ 200°C: | 0.26 | % |
| | @ 250°C: | 0.52 | % |
| | @ 300°C: | 1.02 | % |
| Suggested Operating Temperature: | < 300 | °C | (Intermittent) |
| Storage Modulus: | 266,293 | psi | |
| * Particle Size: | ≤ 20 | microns | |

| ELECTRICAL AND THERMAL PROPERTIES: | | | |
|------------------------------------|-----------------------|--------|--|
| Thermal Conductivity: | N/A | | |
| Volume Resistivity @ 23°C: | ≥ 2 x 10 ⁹ | Ohm-cm | |
| Dielectric Constant (1KHz): | 11.35 | | |
| Dissipation Factor (1KHz): | 0.283 | | |

| OPTICAL PROPERTIES @ 23°C: | | | |
|----------------------------|-----------------|----|--|
| Spectral Transmission: | < 1% @ 300-2500 | nm | |
| Refractive Index: | N/A | | |

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.

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