

## **Product Information Sheet**

EPO-TEK® 320-LV

Date: Rev: No. of Components:	February 2021 IV Two	
Mix Ratio by Weight: Specific Gravity:	10 : 2 Part A: 1.20	Part B: 0.87
Pot Life: Shelf Life- Bulk: Shelf Life- Syringe:	1 Hour One year at room temperature Six months at -40°C	

## 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 pourab	Smooth pourable liquid		
* Viscosity (23°C) @ 100 rpm:	350 - 650			
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):			
	ow Ta: 48	x 10 <sup>-6</sup> in/in°C		
	ve Tg: 170	x 10 <sup>-6</sup> in/in°C		
Shore D Hardness:	84			
Lap Shear @ 23°C:	1,680	psi		
Die Shear @ 23°C:		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		°C (Intermittent)		
Storage Modulus:	266,293	psi		
* Particle Size:	≤ 20	microns		
ELECTRICAL AND THERMAL PROPERTIES:				
Thermal Conductivity:	N/A ≥ 2 x 10 <sup>9</sup>	Ohm-cm		
Volume Resistivity @ 23°C:		Onm-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