

## Preliminary Product Information Sheet

### EPO-TEK® 323LP-LH Premium

*Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed.  
Different batches, conditions and applications yield differing results.*

**Date:** February 2022  
**Rev:** III  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 1  
**Specific Gravity:** Part A: 1.20      Part B: 1.09  
**Pot Life:** 32 Hours  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** One year at -40°C

**Recommended Cure: 150°C / 1 Hour**

Minimum Alternative Cure(s):  
*May not achieve performance properties listed below*  
 90°C / 30 Minutes

#### 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.
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Please refer to Tech Tip #7 on website.

**Product Description:** Longer pot life version of EPO-TEK®353ND designed for semiconductor, hybrid, fiber-optic, hard -disk drive and medical applications. This product meets halogen-free requirements.

#### MATERIAL CHARACTERISTICS\*:

<b>PHYSICAL PROPERTIES:</b>		<b>Cure condition: 150°C / 1 Hour</b>	
Color (before cure):		Part A: Clear to slight yellow	Part B: Yellow
Consistency:		Pourable liquid	
Viscosity (23°C) @ 50 rpm:		4,142	cPs
Thixotropic Index:		N/A	
Glass Transition Temp:		118	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):	Below Tg:	31	x 10 <sup>-6</sup> in/in/°C
	Above Tg:	132	x 10 <sup>-6</sup> in/in/°C
Shore D Hardness:		88	
Lap Shear @ 23°C:		> 2,000	psi
Die Shear @ 23°C:		> 20	Kg
Degradation Temp:		410	°C
Weight Loss:	@ 200°C:	0.37	%
	@ 250°C:	0.59	%
	@ 300°C:	1.10	%
Suggested Operating Temperature:		< 350	°C (Intermittent)
Storage Modulus:		387,556	psi
Ion Content:	Cl <sup>-</sup> :	174 ppm	Na <sup>+</sup> : 0 ppm
	NH <sub>4</sub> <sup>+</sup> :	533 ppm	K <sup>+</sup> : 0 ppm
Particle Size:		N/A	

<b>OPTICAL PROPERTIES @ 23°C:</b>		
Spectral Transmission:	> 90 % @ 640-800	nm
	> 94% @ 820-1620	nm
Refractive Index:	1.5703 @ 589	nm

**The data above is INITIAL only - it may be changed at any time, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.**

\* These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.

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