Learn More

Manufacturer:
Epoxy Technology

Product Name:
EPO-TEK® 323LP High Temperature Epoxy, Heat Cure (15g)

Manufacturer Part Number:
ET323LP-15G

Click here for more details on the EPO-TEK® 323LP High Temperature Epoxy, Heat Cure (15g)

EPO-TEK® 323LP

Technical Data Sheet
For Reference Only
Optical Epoxy

Date:	February 2021		
Rev:	XI		
No. of Components:	Two		
Mix Ratio by Weight:	10 : 1		
Specific Gravity:	Part A: 1.20	Part B: 1.09	
Pot Life:	24 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.

Product Description: EPO-TEK® 323LP is a two component, high temperature epoxy designed for semiconductor, hybrid, fiber, and optical applications. It is a longer pot life alternative of EPO-TEK® 353ND.

Typical Properties: Cure condition: 150°C / 1 Hour 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 to slight yellow	Part B: Yellow	
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 50 rpm:	3,500 - 5,000	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 100	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
Below Tg:	51	x 10^{-6} in/in°C	
Above Tg:	185	x 10^{-6} in/in°C	
Shore D Hardness:	88		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 20	Kg 7,112 psi	
Degradation Temp:	413	°C	
Weight Loss:			
@ 200°C:	0.31	%	
@ 250°C:	0.46	%	
@ 300°C:	0.85	%	
Suggested Operating Temperature:	< 300	°C (Intermittent)	
Storage Modulus:	444,110	psi	
Particle Size:	N/A		

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	≥ 3 x 10^{12}	Ohm-cm
Dielectric Constant (1KHz):	2.62	
Dissipation Factor (1KHz):	0.003	

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	≥ 94% @ 820-1,620	nm
	≥ 90% @ 640-800	nm
Refractive Index:	1.5704 @ 589	nm

Epoxies and Adhesives for Demanding Applications™
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.

Contact the professionals at Fiber Optic Center for a quote or to get more details.

focenter.com • 508-992-6464 | (800) 473-4237 • sales@focenter.com
23 Centre Street • New Bedford, MA 02740 USA

Product specifications and data are subject to change without notice.

Learn More

Manufacturer:
Epoxy Technology

Product Name:
EPO-TEK® 323LP High Temperature Epoxy, Heat Cure (15g)

Manufacturer Part Number:
ET323LP-15G

Click here for more details on the EPO-TEK® 323LP High Temperature Epoxy, Heat Cure (15g)

EPO-TEK® 323LP

Technical Data Sheet
For Reference Only
Optical Epoxy

EPO-TEK® 323LP Advantages & Suggested Application Notes:

- 24 hour pot life to promote mass production usage. It has an amber color change upon cure.
- Semiconductor:
  - Wafer to wafer bonding of CSP; fabrication of MEMs devices; flip chip underfill.
- Hybrid:
  - Providing near hermetic seals and UHV seals in sensor devices, resisting high temperature packaging.
  - Down-Hole petrochemical fiber optic sensors, resisting >200°C field conditions.
- Fiber optic adhesive designed to meet Telecordia 1221:
  - Sealing fiber into ferrules, transmitting light in the optical pathway from 800-1,550 nm range.
  - Fiber component packaging; adhesive for active alignment of optics, environmental seal of opto-package, V-groove arrays.
- Electronic Assembly:
  - Used as dielectric layer in the fabrication of capacitors; laminating PZT peizoelectrics.
  - Impregnating and insulating copper coil windings in motors and inductor coils. Bonding ferrite cores and magnets.

Epoxies and Adhesives for Demanding Applications™
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.

Contact the professionals at Fiber Optic Center for a quote or to get more details.

focenter.com • 508-992-6464 | (800) 473-4237 • sales@focenter.com
23 Centre Street • New Bedford, MA 02740 USA

Product specifications and data are subject to change without notice.