

Date: November 2025
Rev: V
No. of Components: Two
Mix Ratio by Weight: 10 : 1
Specific Gravity: Part A: 1.20 Part B: 1.12
Pot Life: 2 Days
Shelf Life- Bulk: One year at room temperature

Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s):

May not achieve performance properties listed below
 120°C / 90 Minutes
 80°C / 3 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.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Please refer to Tech Tip #7 on website

Product Description: A two component epoxy designed for capillary underfill of semiconductor chips and SMDs. Long pot-life, high Tg, and optical clarity are a few of its traits. NASA approved low outgassing epoxy (<http://outgassing.nasa.gov>) suitable for electronic applications such as smart cards, RFIDs, and wafer level camera optics. This is a Replacement for EPO-TEK® U300-2.

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/colorless	Part B: Amber	
*Consistency:	Pourable Liquid		
*Viscosity (23°C) @ 10 rpm:	5,882	cPs	
Thixotropic Index:	N/A		
*Glass Transition Temp:	125	°C	(Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):			
Below Tg:	71	x 10 ⁻⁶ in/in°C	
Above Tg:	378	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	80		
Lap Shear @ 23°C:	1380	psi	
Die Shear @ 23°C:	≥15	Kg	5334 psi
Degradation Temp:	423	°C	
Weight Loss:			
@ 200°C:	0.13	%	
@ 250°C:	0.17	%	
@ 300°C:	0.28	%	
Suggested Operating Temperature:	< 325	°C (Intermittent)	
Storage Modulus:	308,060	psi (2124 MPa)	
Particle Size:	N/A		

ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	N/A		
Volume Resistivity @ 23°C:	≥1 x 10 ¹⁶	Ohm-cm	
Dielectric Constant (1KHz):	2.28		
Dissipation Factor (1KHz):	0.003		

OPTICAL PROPERTIES @ 23°C:			
Spectral Transmission:	>95% @ 600-2000	nm	
Refractive Index (uncured):	1.5764 @ 589	nm	

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