

Product Information Sheet

EPO-TEK® U300-22

Date: June 2025 Recommended Cure: 150°C / 1 Hour

Rev: III
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

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.

<u>Typical Properties:</u> 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.

PHYSICAL PROPERTIES:		
	Dant A. Class/aslands	Dout D. Arehon
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	
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:	Pending	Ohm-cm
Dielectric Constant (1KHz):	Pending	
Dissipation Factor (1KHz):	Pending	

OPTICAL PROPERTIES @ 23	°C:	
Spectral Transmission:	>95% @ 600-2000) nm
Refractive Index (uncured):	1.5764 @ 589	9 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.