

**Date:** May 2026  
**Rev:** VII  
**No. of Components:** Two  
**Mix Ratio by Weight:** 61 : 10  
**Specific Gravity:** Part A: 5.80      Part B: 5.62  
**Pot Life:** 2 Days  
**Shelf Life- Bulk:** One year at room temperature

**Recommended Cure: 150°C / 1 Hour**

**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® H81A is a two component, gold-filled, electrically and thermally conductive epoxy designed for hybrid micro-electronic and semiconductor packaging.

**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: Dark brown	Part B: Dark brown
* Consistency:	Thick paste	
* Viscosity (23°C) @ 0.5 rpm:	250,000-300,000	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:	Available for a fee
	Above Tg:	Available for a fee
Shore D Hardness:	Available for a fee	
Lap Shear @ 23°C:	Available for a fee	
Die Shear @ 23°C:	≥ 5	Kg      1,778 psi
Degradation Temp:	412	°C
Weight Loss:	@ 200°C:	< 0.05 %
	@ 250°C:	0.07 %
	@ 300°C:	0.16 %
Suggested Operating Temperature:	< 355 °C (Intermittent)	
Storage Modulus:	Available for a fee	
* Particle Size:	≤ 50 microns	

**ELECTRICAL AND THERMAL PROPERTIES:**

Thermal Conductivity:	Available for a fee	
* Volume Resistivity @ 23°C:	≤ 0.0009	Ohm-cm

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**SELLER MAKES NO OTHER WARRANTY OR GUARANTEE OF ANY KIND REGARDING FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. BUYER ASSUMES FULL RESPONSIBILITY FOR QUALITY CONTROL, TESTING AND DETERMINATION OF SUITABILITY OF PRODUCT FOR ITS INTENDED APPLICATION OR USE.**

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**EPO-TEK® H81A Advantages & Suggested Application Notes:**

- Gold filled epoxy allows for anti-oxidation of contacts and terminals in high reliability devices found in aerospace, military, and avionics industry.
  - It has also been used in medical circuits using traditional hybrid packaging technologies.
- High viscosity paste allows for precision deposition onto circuits by means of printing and delicate hand processes.
- Low temperature cure capabilities with an extended pot life.
- Suggested Applications:
  - Adhesive for joining die and SMDs onto the hybrid circuits.
  - Repairing defective Au thick-film conductor traces and contact pads.
  - Resisting oxidation and electro-migration in high-reliability micro-electronics.
  - Joining material as alternative to high temperature Au-Sn eutectic solders processes exceeding 300°C.

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