

## EPO-TEK® 377H

**Technical Data Sheet  
For Reference Only**

*Graphite-filled, High Temperature Epoxy*

**Date:** July 2019  
**Rev:** VI  
**No. of Components:** Two  
**Mix Ratio by Weight:** 1 : 1  
**Specific Gravity:** Part A: 1.29      Part B: 1.33  
**Pot Life:** 24 Hours  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** Six months at -40°C

**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® 377H is a two component, high Tg, graphite filled epoxy designed for ESD/EMI shielding of semiconductor devices and electronics. It can be used in many electronic industries like consumer, military, medical, and optical/OEM /fiber optics. It is an electrically conductive version of EPO-TEK® 377.

**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: Black	Part B: Black
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	500 - 1,000	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≥ 95 °C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min)	
Coefficient of Thermal Expansion (CTE):		
Below Tg:	56	x 10 <sup>-6</sup> in/in°C
Above Tg:	200	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	80	
Lap Shear @ 23°C:	> 2,000	psi
Die Shear @ 23°C:	≥ 10	Kg    3,556 psi
Degradation Temp:	345 °C	
Weight Loss:		
@ 200°C:	0.09	%
@ 250°C:	0.66	%
@ 300°C:	0.78	%
Suggested Operating Temperature:	< 275 °C (Intermittent)	
Storage Modulus:	416,850	psi
* Particle Size:	≤ 40	microns
ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	0.44	W/mK
Volume Resistivity @ 23°C:	≥ 400	Ohm-cm
Dielectric Constant (1KHz):	N/A	
Dissipation Factor (1KHz):	N/A	
OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	< 0.1% @ 400-1500	nm
Refractive Index:	N/A	

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**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.**

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**EPO-TEK® 377H****Technical Data Sheet  
For Reference Only***Graphite-filled, High Temperature Epoxy***EPO-TEK® 377H Advantages & Suggested Application Notes:**

- Low viscosity - ideal for commercial and micro-dispensing applications.
- Suggested Applications:
  - Opto-electronics: Adhering IR filter windows to cap of TO-can; opaque epoxy resin in IR and VIS range; near hermetic sealing of windows and packages.
  - Hybrid Microelectronics: adhesion to kovar, stainless steel, ceramics, glasses, lids or substrates in Rf/Microwave devices.
- Convenient 1:1 mix ratio allows for static mixing, or specialty packaging in double-barrel syringes

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