



**Manufacturer:**  
Epoxy Technology

**Product Name:**  
EPO-TEK® 302-3M Transparent Epoxy, Room Temperature Cure (2.5g)

**Manufacturer Part Number:**  
ET302-3M-2.5G

▶ [Click here for more details on the EPO-TEK® 302-3M Transparent Epoxy, Room Temperature Cure \(2.5g\)](#)



## EPO-TEK® 302-3M

Technical Data Sheet  
For Reference Only  
Optically Transparent Epoxy

**Date:** August 2024  
**Rev:** XIV  
**No. of Components:** Two  
**Mix Ratio by Weight:** 100 : 45  
**Specific Gravity:** Part A: 1.20      Part B: 0.96  
**Pot Life:** 1 Hour  
**Shelf Life- Bulk:** One year at room temperature

**Recommended Cure: 65°C / 3 Hours**

Minimum Alternative Cure(s):  
*May not achieve performance properties listed below*  
 23°C / 24 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.
  - Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.
  - **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:** EPO-TEK® 302-3M is a two component epoxy used for optical, fiber optic, and semiconductor applications. The epoxy is good for adhesive joining, sealing, potting, or as a coating.

**Typical Properties:** Cure condition: Varies as required      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:			
	Part A: Clear/Colorless	Part B: Clear/Colorless	
* Color (before cure):	Pourable liquid		
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 100 rpm:	800 - 1,600	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 55 °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:	193	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:	351 °C		
Weight Loss:			
@ 250°C:	0.77	%	
@ 300°C:	1.22	%	
Suggested Operating Temperature:	< 250 °C (Intermittent)		
Storage Modulus @ 23°C	456,443	psi	
Ion Content:	Cl:	42 ppm	Na*: 10 ppm
	NH <sub>4</sub> *:	1 ppm	K*: 4 ppm
ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	N/A		
Volume Resistivity @ 23°C:	≥ 1 x 10 <sup>13</sup> Ohm-cm		
Dielectric Constant (1KHz):	3.39		
Dissipation Factor (1KHz):	0.006		
OPTICAL PROPERTIES @ 23°C:			
Spectral Transmission:	> 95% @ 460-1620 nm		
Refractive Index (uncured):	1.5446 @589 nm		

Epoxyes and Adhesives for Demanding Applications™

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

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Product specifications and data are subject to change without notice. FOC last update 1/16/2026.



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*Optically Transparent Epoxy*

#### EPO-TEK® 302-3M Advantages & Suggested Application Notes:

- Low viscosity, clear and colorless epoxy is well suited for potting applications, and for transmitting VIS or NIR light in opto-circuits
- Excellent water, chemical, and solvent resistant properties including 10% nitric acid, acetone, hexane, and dichloromethane.
- Suggested Applications:
  - Fiber Optic/Optical:
    - Potting and encapsulation; lens and prism bonding for Scientific / OEM instruments; LED encapsulant.
    - Transmission in the VIS/NIR range from 350 – 1550 nm. Can be used in the optical pathway
    - Potting or sealing the fiber into the snout of the opto-package.
    - Adhesive for V-groove, fiber arrays or lens arrays.
    - Bonding optical fibers into ferrules. Fibers of glass or plastic. Ferrules of glass, quartz, stainless steel, kovar, or ceramic.
  - Semiconductor:
    - Recommended for underfilling of flip chips or SMDs on PCB; can also be used for COB glob top process using a DAM/FILL method; can resist 85/85 moisture soaks, as well as Tcycles and Tshocks
- Passes NASA low outgassing standard ASTM E595 with proper cure - <http://outgassing.nasa.gov/>

Epoxy Technology, Inc. Epoxies and Adhesives for Demanding Applications™

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