

Date: February 2019 **Rev:** XI
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.1
Pot Life: N/A
Shelf Life: One year refrigerated

Recommended Cure
Iron-Doped Mercury Flood Lamp > 30 sec. <i>100 mW/cm² @ 240-365 nm</i>
Alternative Cures*
Iron-Doped Mercury Spot Lamp > 2.5 min. 365nm LED Flood Lamp > 2 min. Pulsed Mercury Lamp > 90 sec.
UV Cure is complete after 24 hours from UV Exposure * Contact Technical Services for application-specific variations

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 Products 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..
- Thermal post-cure beneficial - contact techserv@epotek.com for recommendations.

Product Description: EPO-TEK[®] OG154-1 is a single compound UV curable epoxy adhesive for the semiconductor, opto-electronics, medical, and scientific OEM industry. It is a replacement for EPO-TEK[®] OG154.

Typical Properties: *Cure condition: Varies as required *denotes test on lot acceptance basis Data below is not guaranteed. To be used as a guide only, not as a specification. Different batches, conditions & applications yield differing results.*

PHYSICAL PROPERTIES:	
* Color (before cure):	Clear/Colorless
* Consistency:	Pourable liquid
* Viscosity (23°C) @ 5 rpm:	26,000 - 34,000 cPs
Thixotropic Index:	N/A
Glass Transition Temp:	128 °C (Dynamic Cure:20-200°C; Ramp -10-200°C @ 20°C/Min)
Coefficient of Thermal Expansion (CTE):	
Below Tg:	55 x 10 ⁻⁶ in/in°C
Above Tg:	238 x 10 ⁻⁶ in/in°C
Shore D Hardness:	80
Die Shear @ 23°C:	≥ 10 Kg 3,556 psi
Degradation Temp:	379 °C
Weight Loss:	
@ 200°C	0.17 %
@ 250°C	0.66 %
@ 300°C	1.54 %
Suggested Operating Temperature:	< 300 °C (Intermittent)
Storage Modulus:	265,655 psi
* Particle Size:	N/A

OPTICAL PROPERTIES @ 23°C:	
Spectral Transmission:	≥ 97% @ 500-1,660 nm
Refractive Index (uncured):	1.5561 @ 589 nm
Refractive Index (cured):	1.5692 @ 589 nm

Epoxyes and Adhesives for Demanding Applications™

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[®] OG154-1 Advantages & Suggested Application Notes:

Advantages:

- Medium viscosity liquid adhesive commonly used for encapsulation and sealing applications
- Viscosity is optimal for syringe dispensing and by hand application
- Versatile cure capable of curing under both LED and mercury lamps, through broad spectrum mercury offers fast more complete cures

Suggested Applications:

- Chip on Board glob top encapsulation with adhesion to FR4 Kapton and ceramics
- Optoelectronic packaging and optics alignment with strong adhesion to glass and many
- High Tg

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Epoxy Adhesives for Demanding Applications™

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