

Product Information Sheet

EPO-TEK® OG142-95

Date: September 2019

Rev: V

Material Description:

EPO-TEK® OG142-95 is a single component, low viscosity, UV curable epoxy for adhesive sealing and encapsulating fiber optic and optoelectronic packaging applications. It is a replacement version of EPO-TEK® OG142-17 with better bonding strength and moisture resistance.

Number of Components: Single

Mix Ratio by Weight: N/A

Specific Gravity: 1.17

Pot Life: N/A

Shelf Life: One year at room temperature

Shelf Life- Syringe: Six months refrigerated

Recommended Cure	
Iron-Doped Mercury Flood Lamp 100 mW/cm ² @ 240-365 nm	> 30 sec.
Alternative Cures*	
Iron-Doped Mercury Spot Lamp	> 90 sec.
365nm LED Flood Lamp	> 90 sec.
Pulsed Mercury Lamp	> 60 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.

MATERIAL CHARACTERISTICS: *Cure condition: Varies as required *Testing on lot acceptance basis Data below is not guaranteed. To be used as a guide only, not as a specification. Different batches, conditions and applications yield differing results.*

PHYSICAL PROPERTIES:

* Color (before cure):	Clear/Colorless
* Consistency:	Viscous liquid
* Viscosity (23°C) @ 100 rpm:	300 - 700 cPs
Thixotropic Index:	N/A
* Glass Transition Temp:	≥ 100 °C (Dynamic Cure:20-200°C; Ramp -10-200°C @ 20°C/Min)
Coefficient of Thermal Expansion (CTE):	
Below Tg:	50 x 10 ⁻⁶ in/in°C
Above Tg:	162 x 10 ⁻⁶ in/in°C
Shore D Hardness:	82
Die Shear:	≥ 15 Kg / 5,334 psi
Degradation Temp:	357 °C
Weight Loss:	
@ 200°C	0.39 %
@ 250°C	1.18 %
@ 300°C	3.09 %
Suggested Operating Temperature:	< 300 °C (Intermittent)
Storage Modulus:	520,650 psi

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	≥ 97% @ 580-1,660 nm
Refractive Index (uncured):	1.4924 @ 589 nm
Refractive Index (cured):	1.5123 @ 589 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.