

Product Information Sheet

EPO-TEK® B9144

Minimum Alternative Cure(s):

23°C / 24 Hours

May not achieve performance properties listed below

Date: July 2019 Recommended Cure: 65°C / 2 Hours

Rev: IV

No. of Components: Two

Mix Ratio by Weight: 100:20

Specific Gravity: Part A: 1.22 Part B: 0.88

Pot Life: 2 Hours

Shelf Life- Bulk: One year at room temperature

Shelf Life- Syringe: Six months at -40°C

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.

<u>Product Description:</u> A two component, optically opaque and slightly flexible epoxy designed for low stress adhesive, potting, and sealing applications found in semiconductor, electronics, medical, and fiber optic industries. It is a more flexible alternative to EPO-TEK® 320.

<u>Typical Properties:</u> Cure condition: 65°C / 2 Hours 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: Clear/colorless
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	400 - 900	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≥ 40	°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 ⁻⁶ in/in°C
Above Tg:	166	x 10 ⁻⁶ in/in°C
Shore D Hardness:	73	
Lap Shear @ 23°C:	> 2,000	psi
Die Shear @ 23°C:	≥ 20	Kg 7,112 psi
Degradation Temp:	416	°C
Weight Loss:		
@ 200°C	0.20	%
@ 250°C	-	%
@ 300°C	0.37	%
Suggested Operating Temperature:	< 300	°C (Intermittent)
Storage Modulus:	271,469	psi
* Particle Size:	≤ 20	microns

ELECTRICAL AND THERMAL PROPERTIES:				
Thermal Conductivity:	N/A			
Volume Resistivity @ 23°C:	$\geq 1 \times 10^7$	Ohm-cm		

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	< 1% @ 300-2500	nm
Refractive Index:	N/A	