

Date: March 2022
Rev: II
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity:
Pot Life: 1-2 Hours
Shelf Life- Syringe: 4 months at -40°C

Recommended Cure: 65°C / 2 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**

Product Description: EPO-TEK® 301-104 is a single component, room temperature curing epoxy featuring very low viscosity, and excellent optical-mechanical properties.

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:				
* Color (before cure):	Clear/Colorless			
* Consistency:	Pourable liquid			
* Viscosity (23°C) @ 100 rpm:	100 - 200	cPs		
Thixotropic Index:	N/A			
* Glass Transition Temp:	≥ 65	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)		
Coefficient of Thermal Expansion (CTE):				
	Below Tg:	39	x 10 ⁻⁶ in/in°C	
	Above Tg:	98	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	85			
Lap Shear @ 23°C:	3,352	psi		
Die Shear @ 23°C:	≥ 15	Kg	5,334	psi
Degradation Temp:	341	°C		
Weight Loss:				
	@ 200°C:	0.40	%	
	@ 250°C:	0.60	%	
	@ 300°C:	1.72	%	
Suggested Operating Temperature:	< 275		°C (Intermittent)	
Storage Modulus:	327,463	psi		
* Particle Size:	N/A			

ELECTRICAL AND THERMAL PROPERTIES:	
Thermal Conductivity:	N/A

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	≥ 99% @ 382-980	nm
	≥ 97% @ 980-1,640	nm
	≥ 95% @ 1,640-2,040	nm
Refractive Index:	1.5212 @ 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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