



Product Information Sheet EPO-TEK® 731

Date: September 2017
Rev: III
No. of Components: Two
Mix Ratio by Weight: 1 : 1
Specific Gravity: Part A: 1.12 Part B: 0.97
Pot Life: 1.5 Hours
Shelf Life- Bulk: One year at room temperature

Recommended Cure: 80°C / 2 Hours

Minimum Alternative Cure(s):
May not achieve performance properties listed below
 100°C / 30 Minutes
 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.

Product Description: A two component, thixotropic, room temperature-curing epoxy adhesive. It is an electrically and thermally insulating epoxy designed for general applications in semiconductor packaging, electronics, medical, and optical industries. A higher viscosity version of EPO-TEK® 730.

Typical Properties: Cure condition: 80°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: Tan	Part B: Tan	
* Consistency:	Smooth paste		
* Viscosity (23°C) @ 1 rpm:	175,000-275,000	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:	74	x 10 ⁻⁶ in/in°C	
Above Tg:	168	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	66		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
Degradation Temp:	417 °C		
Weight Loss:			
@ 200°C:	0.47	%	
@ 250°C:	0.92	%	
@ 300°C:	1.62	%	
Suggested Operating Temperature:	< 300 °C (Intermittent)		
Storage Modulus:	196,634	psi	
* Particle Size:	≤ 20	microns	

ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	N/A		
Volume Resistivity @ 23°C:	≥ 2 x 10 ¹³	Ohm-cm	
Dielectric Constant (1KHz):	3.38		
Dissipation Factor (1KHz):	0.028		

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.

EPOXY TECHNOLOGY, INC.
 14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
www.epotek.com