

Product Information Sheet

EPO-TEK® EK1000-1

Date:	March 2021	Recommended Cure: 150°C/1 Hour plus 200°C/1 Hour (post-cure)
Rev:	VII	
No. of Components:	Single	Minimum Alternative Cure(s):
Mix Ratio by Weight:	N/A	<i>May not achieve performance properties listed below</i>
Specific Gravity:	3.76	200°C / 30 Minutes
Pot Life:	2 Weeks	Dry Time: < 7 Days
Shelf Life- Bulk:	One year at -40°C	150°C / 1 Hour

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.

Product Description: EPO-TEK® EK1000-1 is a single component, longer dry time version of EPO-TEK® EK1000 designed for applications requiring longer working time.

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):	Silver		
* Consistency:	Smooth thixotropic paste		
* Viscosity (23°C) @ 10 rpm:	13,000-21,000	cPs	
Thixotropic Index:	3.7		
* Glass Transition Temp:	≥ 80	°C	(Dynamic Cure: 20-300°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):			
Below Tg:	41	x 10 ⁻⁶ in/in°C	
Above Tg:	162	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	65		
Lap Shear @ 23°C:		psi	
Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
Degradation Temp:	375	°C	
Weight Loss:			
	@ 200°C:	0.04	%
	@ 250°C:	0.15	%
	@ 300°C:	0.50	%
Suggested Operating Temperature:	< 300	°C	(Intermittent)
Storage Modulus:	609,195	psi	
Ion Content:	Cl ⁻ : < 200 ppm	Na ⁺ : < 50 ppm	
	NH ₄ ⁺ : > 5 ppm	K ⁺ : < 50 ppm	
* Particle Size:	≤ 45	microns	

ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity (150°C/1 Hour):	12.1	W/mK	
Thermal Conductivity(150°C/1 Hour + 200°C/1 Hour):	22.7	W/mK	
* Volume Resistivity @ 23°C:	≤ 0.0007	Ohm-cm	

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