

EPO-TEK® 360ST Technical Data Sheet For Reference Only Thixotropic Optical Epoxy

Date:	October 2019	
Rev:	VI	
No. of Components:	Two	
Mix Ratio by Weight:	100 : 10	
Specific Gravity:	Part A: 1.03	Part B: 1.02
Pot Life:	3 Hours	
Shelf Life- Bulk:	One year at room temperature	

## Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s): May not achieve performance properties listed below 150°C / 1 Minute 100°C / 10 Minutes

## 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: EPO-TEK® 360ST is a two component, high temperature grade, electrically and thermally insulating epoxy. It is a less thixotropic version of EPO-TEK® 360T.

## Typical Properties: Cure condition: 150°C / 1 Hour 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: Amber	
* Consistency:	Slightly thixotro	Slightly thixotropic paste	
* Viscosity (23°C) @ 100 rpm:	1,400 - 2,400	cPs	
Thixotropic Index:	2.6		
* Glass Transition Temp:	≥ 80	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE	.):		
Below T	g: 51	x 10 <sup>-6</sup> in/in°C	
Above T	g: 215	x 10 <sup>-6</sup> in/in°C	
Shore D Hardness:	85		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 10	Kg 3,556 psi	
Degradation Temp:	344	°C	
Weight Loss:			
@ 200°	C: 0.88	%	
@ 250°	C: 1.86	%	
@ 300°	C: 4.01	%	
Suggested Operating Temperature:	< 275	°C (Intermittent)	
Storage Modulus:	256,460	psi	
* Particle Size:	≤ 20	microns	
FLECTRICAL AND THERMAL PROPE	RTIES		
Thermal Conductivity:	N/A		
Volume Resistivity @ 23°C:	$> 1.8 \times 10^{13}$	Ohm-cm	
Dielectric Constant (1KHz)	2 58		
Dissipation Factor (1KHz):	0.012		



## **EPO-TEK<sup>®</sup> 360ST Advantages & Suggested Application Notes:**

- Suitable for fiber optic and circuit assembly applications.
- Recommended for bonding metals, glass, ceramics and many types of plastic.
- High temperature adhesive for hybrids; it can withstand 275°C processing conditions.
- Circuit assembly applications; staking SMD's to PCB, bonding ferrite cores together in copper coil windings and inductor coils and power devices.
- Can be applied by screen printing, spatula, hand held or automatic dispensing equipment.
- Amber color change when properly cured for easy visual ID and inspection.