

EPO-TEK® 320

Epoxy; Epoxide
Epoxy Technology Inc.

Message:
EPO-TEK ® 320 is a two component, black-colored and optically opaque epoxy designed for optical, medical, and opto-electronic packaging of semiconductor devices and components. It is a widely used fiber-optic grade epoxy.

General Information			
Features	Biocompatible		
	Good Adhesion		
	Low Viscosity		
Uses	Adhesives		
	Bonding		
	Electrical/Electronic Applications		
	Medical/Healthcare Applications		
	Optical Applications		
	Seals		
Agency Ratings	EC 1907/2006 (REACH)		
	EU 2003/11/EC		
	EU 2006/122/EC		
	USP Class VI		
RoHS Compliance	RoHS Compliant		
Forms	Paste		
Processing Method	Potting		
Physical	Nominal Value	Unit	
Particle Size	< 20.0	µm	
Degradation Temperature	384	°C	TGA
Die Shear Strength - > 15 kg (23°C)	35.2	MPa	
Operating Temperature			
Continuous	-55 to 200	°C	
Intermittent	-55 to 300	°C	
Storage Modulus (23°C)	1.80	GPa	
Thixotropic Index	5.70		
Weight Loss on Heating			
200°C	0.27	%	
250°C	0.45	%	
300°C	0.80	%	

Thermal	Nominal Value	Unit	
Glass Transition Temperature ¹	> 55.0	°C	
CLTE - Flow			
-- ²	2.9E-5	cm/cm/°C	
-- ³	1.0E-4	cm/cm/°C	
Optical	Nominal Value	Unit	
Transmittance (300 to 2500 nm)	< 1.0	%	
Thermoset	Nominal Value	Unit	Test Method
Thermoset Components			
Part A	Mix Ratio by Weight: 10		
Part B	Mix Ratio by Weight: 2.0		
Shelf Life (23°C)	52	wk	
Uncured Properties	Nominal Value	Unit	Test Method
Color			
-- ⁴	Black		
-- ⁵	Clear/Transparent		
Density			
Part B	0.868	g/cm ³	
Part A	1.10	g/cm ³	
Viscosity ⁶ (23°C)	0.70 to 1.2	Pa · s	
Curing Time (65°C)	2.0	hr	
Pot Life	60	min	
Cured Properties	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	83		
Lap Shear Strength (23°C)	> 13.8	MPa	
Volume Resistivity (23°C)	> 1.0E+6	ohms · cm	
NOTE			
1.	Dynamic Cure 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min		
2.	Below Tg		
3.	Above Tg		
4.	Part A		
5.	Part B		
6.	100 rpm		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

