

# EPO-TEK® 314

Epoxy; Epoxide

Epoxy Technology Inc.

## Message:

A two component, high temperature grade, thermally and electrically insulating epoxy, designed for adhesive and sealing applications found in semiconductor, electro-optics, fiber optics, medical, and scientific/OEM industries. It is a low viscosity, optical grade epoxy with low index of refraction (Nd).

General Information		
Features	Electrically Insulating	
	High Heat Resistance	
	Low Viscosity	
	Thermally Insulating	
Uses	Adhesives	
	Electrical/Electronic Applications	
	Medical/Healthcare Applications	
	Optical Applications	
	Seals	
Agency Ratings	EC 1907/2006 (REACH)	
	EU 2003/11/EC	
	EU 2006/122/EC	
RoHS Compliance	RoHS Compliant	
Forms	Liquid	
Thermal	Nominal Value	Unit
Glass Transition Temperature <sup>1</sup>	> 75.0	°C
CLTE - Flow		
-- <sup>2</sup>	3.9E-5	cm/cm/°C
-- <sup>3</sup>	1.3E-4	cm/cm/°C
Optical	Nominal Value	Unit
Refractive Index <sup>4</sup>	1.497	
Transmittance (440 to 1680 nm)	> 96.0	%
Thermoset	Nominal Value	Unit
Thermoset Components		
Part A	Mix Ratio by Weight: 100	
Part B	Mix Ratio by Weight: 6.0	
Shelf Life (23°C)	52	wk
Additional Information	Nominal Value	Unit
Degradation Temperature	361	°C

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)	1.90	GPa
Weight Loss on Heating		
200°C	0.18	%
250°C	0.43	%
300°C	1.0	%
Uncured Properties	Nominal Value	Unit
Color		
-- 5	Amber	
-- 6	Clear/Transparent	
Density		
Part A	1.18	g/cm <sup>3</sup>
Part B	1.23	g/cm <sup>3</sup>
Viscosity <sup>7</sup> (23°C)	0.30 to 0.60	Pa·s
Curing Time (150°C)	1.0	hr
Pot Life	5800	min
Cured Properties	Nominal Value	Unit
Shore Hardness (Shore D)	83	
Relative Permittivity (1 kHz)	3.25	
Volume Resistivity (23°C)	> 1.0E+13	ohms·cm
Dissipation Factor (1 kHz)	0.013	
NOTE		
1.	Dynamic Cure 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min	
2.	Below Tg	
3.	Above Tg	
4.	589 nm	
5.	Part B	
6.	Part A	
7.	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

