

EPO-TEK® H74-110

Epoxy; Epoxide
Epoxy Technology Inc.

Message:

A two component, electrically and thermally insulating epoxy adhesive designed for semiconductor, electronics, medical, and optical applications. It is an IR transparent version of EPO-TEK H74 which enables fiber optic and photonic packaging. Due to its low viscosity, it is useful for sealing, potting and encapsulation projects.

General Information		
Features	Electrically Insulating	
	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	
Processing Method	Encapsulating	
	Potting	
Physical	Nominal Value	Unit
Ion Type		
Cl-	329	ppm
K+	5	ppm
NH4+	409	ppm
Degradation Temperature	494	°C
Die Shear Strength - > 15 kg (23°C)	35.2	MPa
Operating Temperature		
Continuous	-55 to 250	°C
Intermittent	-55 to 350	°C
Storage Modulus	3.86	GPa
Weight Loss on Heating		
200°C	0.050	%

250°C	0.030	%
300°C	0.070	%
Thermal	Nominal Value	Unit
Glass Transition Temperature ¹	> 90.0	°C
CLTE - Flow		
-- ²	4.2E-5	cm/cm/°C
-- ³	1.8E-4	cm/cm/°C
Optical	Nominal Value	Unit
Refractive Index ⁴	1.569	
Transmittance		
550 nm	> 50.0	%
700 to 1000 nm	> 98.0	%
1100 to 1600 nm	> 95.0	%
Thermoset	Nominal Value	Unit
Thermoset Components		
Part A	Mix Ratio by Weight: 10	
Part B	Mix Ratio by Weight: 1.0	
Shelf Life (23°C)	52	wk
Uncured Properties	Nominal Value	Unit
Color		
-- ⁵	Amber	
-- ⁶	Clear/Transparent	
Density		
Part B	1.02	g/cm ³
Part A	1.20	g/cm ³
Viscosity ⁷ (23°C)	3.0 to 5.0	Pa · s
Curing Time (150°C)	1.0	hr
Pot Life	120	min
Cured Properties	Nominal Value	Unit
Shore Hardness (Shore D)	85	
Lap Shear Strength (23°C)	> 13.8	MPa
Relative Permittivity (1 kHz)	3.17	
Volume Resistivity (23°C)	> 2.0E+13	ohms · cm
Dissipation Factor (1 kHz)	5.0E-3	
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	

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

