## **EPO-TEK® H20E-175**

Epoxy; Epoxide

Epoxy Technology Inc.

## Message:

EPO-TEK® H20E-175 is a two component epoxy designed for semiconductor die-attach. It is a higher Tg version of EPO-TEK® H20E. It was designed to be used in semiconductor / JEDEC packaging, microelectronic packaging of hybrids, as well as high temperature devices and assembly.

General Information				
Features	Electrically Conductive			
	Thixotropic			
Uses	Adhesives			
	Aerospace Applications			
	Electrical/Electronic Applications			
	Industrial Applications			
	Military Applications			
Agency Ratings	EC 1907/2006 (REACH)			
	EU 2003/11/EC			
	EU 2006/122/EC			
RoHS Compliance	RoHS Compliant			
Forms	Paste			
Physical	Nominal Value	Unit		
Particle Size	< 45.0	μm		
Degradation Temperature	450	°C	TGA	
Die Shear Strength - >10 kg (23°C)	23.4	MPa		
Operating Temperature				
Continuous	-55 to 250	°C		
Intermittent	-55 to 350	°C		
Storage Modulus (23°C)	4.33	GPa		
Thixotropic Index	3.10			
Weight Loss on Heating				
200°C	0.050	%		
250°C	0.11	%		
300°C	0.25	%		
Thermal	Nominal Value	Unit		
Glass Transition Temperature <sup>1</sup>	> 85.0	°C		
CLTE - Flow				
2	2.0E-5	cm/cm/°C		

3	8.8E-5	cm/cm/°C		
Thermal Conductivity	2.0	W/m/K		
Thermoset	Nominal Value	Unit	Test Method	
Thermoset Components				
Part A	Mix Ratio by Weight: 1.0			
Part B	Mix Ratio by Weight: 1.0			
Shelf Life (23°C)	52	wk		
Uncured Properties	Nominal Value	Unit	Test Method	
Color				
4	Silver			
5	Silver			
Density				
Part A	2.43	g/cm³		
Part B	3.06	g/cm³		
Viscosity <sup>6</sup> (23°C)	2.8 to 3.8	Pa·s		
Curing Time (180°C)	1.0	hr		
Pot Life	5000	min		
Cured Properties	Nominal Value	Unit	Test Method	
Shore Hardness (Shore D)	70			
Lap Shear Strength (23°C)	8.91	MPa		
Volume Resistivity (23°C)	< 4.0E-4	ohms·cm		
NOTE				
1.	Dynamic Cure 20-250°C/ISO 25 Min; Ramp -10-250°C @ 20°C/Min			
2.	Below Tg			
3.	Above Tg			
4.	Part B			
5.	Part A			
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

