## **EPO-TEK® H20S**

Epoxy; Epoxide

Epoxy Technology Inc.

## Message:

EPO-TEK® H20S is a modified version of EPO-TEK® H20E, designed primarily for die stamping and dispensing techniques for chip bonding. EPO-TEK® H20S is a highly reliable, two component, silver-filled epoxy with a smooth, thixotropic consistency. In addition to the high electrical conductivity, the short curing cycles, the proven reliability, and the convenient mix ratio, EPO-TEK® H20S is extremely simple to use.

General Information				
Filler / Reinforcement	Silver			
Features	Electrically Conductive			
	Electromagnetic Shielding (EMI)			
	Fast Cure			
	Radio Frequency Shielding (RFI)			
	Thixotropic			
Uses	Adhesives			
	Bonding			
	Electrical/Electronic Applications			
	LCD Applications			
	LEDs			
Agency Ratings	EC 1907/2006 (REACH)			
	EU 2003/11/EC			
	EU 2006/122/EC			
RoHS Compliance	RoHS Compliant			
Forms	Paste			
Physical	Nominal Value	Unit		
Ion Type				
Cl-	162	ppm		
K+	4	ppm		
Na+	0	ppm		
NH4+	282	ppm		
Particle Size	< 20.0	μm		
Degradation Temperature	414	°C	TGA	
Die Shear Strength - >5 kg (23°C)	11.7	MPa		
Operating Temperature				
Continuous	-55 to 200	°C		
Intermittent	-55 to 300	°C		
Storage Modulus (23°C)	2.34	GPa		

Weight Loss on Heating  200°C  250°C  300°C  Thermal	0.40 0.60 1.4	%	
250°C 300°C	0.60		
300°C	1.4	%	
Thermal		%	
	Nominal Value	Unit	
Glass Transition Temperature <sup>1</sup>	> 80.0	°C	
CLTE - Flow			
2	3.1E-5	cm/cm/°C	
3	1.2E-4	cm/cm/°C	
Thermal Conductivity	3.3	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	1.74	g/cm³	
Part B	3.06	g/cm³	
Viscosity <sup>6</sup> (23°C)	1.8 to 2.8	Pa·s	
Curing Time (150°C)	1.0	hr	
Pot Life	4300	min	
Cured Properties	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	64		
Lap Shear Strength (23°C)	8.55	MPa	
Volume Resistivity (23°C)	< 5.0E-4	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 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.

## 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

