

# EPO-TEK® EK1000-1MP

Epoxy; Epoxide

Epoxy Technology Inc.

## Message:

A single component, electrically conductive epoxy with exceptionally high thermal conductivity making it perfect for power and thermal management. It is a longer dry-time version of EPO-TEK EK1000-MP and is designed for applications requiring long work times including hybrid die and component attach. Complies with the requirements of MIL-STD 883/Test Method 5011.

General Information		
Features	Electrically Conductive	
	Thermally Conductive	
Uses	Adhesives	
	Electrical/Electronic Applications	
Agency Ratings	EC 1907/2006 (REACH)	
	EU 2003/11/EC	
	EU 2006/122/EC	
	MIL Std. 883	
RoHS Compliance	RoHS Compliant	
Forms	Paste	
Physical	Nominal Value	Unit
Ion Type		
Cl-	< 200	ppm
K+	< 50	ppm
Na+	< 50	ppm
NH4+	> 5	ppm
Particle Size	< 45.0	µm
Dry Time	< 7.0	day
Degradation Temperature	372	°C
Die Shear Strength - > 10 kg (23°C)	23.4	MPa
Operating Temperature		
Continuous	-55 to 200	°C
Intermittent	-55 to 300	°C
Storage Modulus	4.20	GPa
Thixotropic Index	3.70	
Weight Loss on Heating		
200°C	0.040	%
250°C	0.15	%
300°C	0.50	%

Thermal	Nominal Value	Unit
Glass Transition Temperature	103	°C
CLTE - Flow		
-- <sup>1</sup>	4.1E-5	cm/cm/°C
-- <sup>2</sup>	1.6E-4	cm/cm/°C
Thermal Conductivity <sup>3</sup>	23	W/m/K
Thermoset	Nominal Value	Unit
Shelf Life (-40°C)	52	wk
Uncured Properties	Nominal Value	Unit
Color	Silver	
Density	3.75	g/cm <sup>3</sup>
Viscosity <sup>4</sup> (23°C)	17	Pa·s
Curing Time (200°C)	1.0	hr
Pot Life	20000	min
Cured Properties	Nominal Value	Unit
Shore Hardness (Shore D)	65	
Volume Resistivity (25°C)	7.0E-5	ohms·cm
NOTE		
1.	Below Tg	
2.	Above Tg	
3.	150°C/1 Hour+200°C/1 Hour Cure	
4.	10 rpm	

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#### Recommended distributors for this material

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