Cosmic Epoxy E484

Epoxy; Epoxide

Cosmic Plastics, Inc.

Message:

DESCRIPTION

Cosmic E484 is a mineral filled, glass reinforced, electrical grade epoxy molding compound which is supplied in a granular form.

FEATURES

It has excellent mechanical strength and electrical properties, especially at high temperatures. It has passed NASA out-gassing tests.

APPLICATIONS

Used in electrical hardware applications such as underwater connectors and other insulation applications.

General Information		
Filler / Reinforcement	Glass Fiber	
	Mineral	
Features	Good Electrical Properties	
	High Strength	
Uses	Connectors	
	Electrical Parts	
	Insulation	
Agency Ratings	ASTM D 5948, Type GEI-5	
	MIL M-14, Type GEI-5	
Forms	Granules	
Physical	Nominal Value	Unit
Specific Gravity	1.95	g/cm³
Bulk Factor	2.0 to 5.0	
Molding Shrinkage - Flow	0.20 to 0.40	%
Water Absorption ¹ (Equilibrium, 50°C)	0.25	%
Hardness	Nominal Value	Unit
Barcol Hardness	65 to 75	
Mechanical	Nominal Value	Unit
Tensile Strength	96.5	MPa
Flexural Modulus	17900	MPa
Flexural Strength	131	MPa
Compressive Strength	207	MPa
Impact	Nominal Value	Unit
Notched Izod Impact	32	J/m
Thermal	Nominal Value	Unit
Glass Transition Temperature	165	°C

CLTE - Flow			
2	2.9E-5	cm/cm/°C	
3	9.2E-5	cm/cm/°C	
Thermal Conductivity	0.42	W/m/K	
Heat Distortion	260	°C	
Dielectric Breakdown - Wet	60000	V	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	
Dielectric Strength ⁴ (Wet)	14	kV/mm	
Dielectric Constant ⁵			
1 kHz	5.40		
1 MHz	4.70		
Dissipation Factor ⁶			
1 kHz	0.011		
1 MHz	8.0E-3		
Arc Resistance	186	sec	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.59 mm)	V-0		UL 94
Injection	Nominal Value	Unit	
Processing (Melt) Temp	150 to 180	°C	
Injection Pressure	3.45 to 55.2	MPa	
NOTE			
1.	48 hrs		
2.	Alpha 1		
3.	Alpha 2		
4.	Method B (Step-by-Step)		
5.	Wet		
6.	Wet		

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

