



PE-080060 Thermal Conductive Encapsulant

Description:

This product is a two-component epoxy material with low viscosity and thermal conductivity. It can be cured at room temperature or under heat. After curing, it forms a hard resin with excellent electrical insulation property and has a good protective effect on electronic devices. The curing process is mild and the heat release is small, so it is easy to operate and the shrinkage rate is very low. Special organic additives make the product leveling performance good.

Characteristic

- Good process ability and can effectively fill the gap
- Good insulation property with good reliability
- Good mechanical strength

Typical Applications

- Power battery application
- Automotive electronics
- LED display application
- Microprocessors and graphic chips



Typical Properties

Properties	Typical value		Test method
Before mix	Part A	Part B	
Color	Black	Brown	Visual
Viscosity* (mPa*s)	3,500	400	ASTM D2196
Mix Viscosity* (mPa*s)	1,210		ASTM D2196
Density (g/cc)	1.65	1.02	ASTM D792
	1.63		
Mix ratio	5:1		/
Cured properties			
Color	Black		Visual
Thermal Conductivity (W/m*K)	0.8		ASTM D5470
Durometer (Shore D)	85		ASTM D2240
Dielectric Strength (KV/mm)	>13		ASTM D149



Properties	Typical value	Test method
Volume Resistivity ($\Omega \cdot \text{cm}$)	$>10^{12}$	ASTM D257
Tack Free Time@25°C (min)	45	GT/13477.5
Cure Time@25°C (day)	7	ASTM D2240
Cure Time@80°C (h)	2	ASTM D2240
Flame Classification	V-1	UL-94
Lap Shear (MPa, Treated Steel)	10	GB/T 7124
Operating Temperature (°C)	-40~90	/

*Brookfield DV2T SC4-14, 100rpm

Application:

Part A and Part B should be thoroughly mixed 5:1 by weight and cured at room temperature or under heat after vacuum defoaming.

Storage:

- Shelf life: 6 months
- Temperature: 10°C~30°C
- Relative humidity: RH<70%

Package:

- 1.2kg/kit
- 6kg/kit
- 12kg/kit
- 30kg/kit

The technical data in this data sheet only represent typical values, not the test values of each batch of products. If you need the technical specification of the final product, please contact the relevant technical personnel.

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