

Flame Retardant Silicone Potting Adhesive

SI2230



■ Product Description

SI2230 is two-component silicone based thermal conductive potting adhesive. It has a good fluidity after mixing, can vulcanize to deep layer in room temperature. The operation time can be adjusted according to the temperature. Used to potting protection of varied heat dissipation and temperature resistance components. Fully compliant with RoHS and SVHC REACH standard.

■ Key Features

1. Two-part 1:1 mixture addition type silicone adhesive
2. Low hardening shrinkage
3. Excellent electrical insulation in high temperature and stability
4. Good waterproof and moisture resistance
5. Excellent flame resistance, UL No: E340199

■ Typical Applications

Used for encapsulation of various modules, automotive module, LED Power driver modules, Solar panel junction box, EV charging column module, Lithium battery pack, Capacitor banks, Magnetic induction coils, Power inverters, etc.

■ Technical Data Table

PROPERTY	STANDARD/UNITS	VALUE of SI2230	
		PART A	PART B
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Color	Visual inspection	white / black	white
Viscosity	25 °C, cps	3500±500	3500±500
Density	25 °C, g/cm ³	1.55±0.05	1.55±0.05
Mixture ratio	Mass ratio	A:B=100:100	
Viscosity of mixture	25 °C, cps	3500±500	
Operation time	25 °C, min	60±10	
Cure condition	RTV/HEAT	25 °C/ 4 hour; 80 °C/ 30min	
Cured appearance	----	White/ Gray-black elastomer	
Hardness	Shore A	55±5	
Thermal conductivity	W/mK	0.80	
Linear expansion	K-1, ppm	300	
Dielectric strength	kV/mm, 25 °C	≥20	

SI2230

Technical Data Sheet



Volume resistance	DC500V, ohm-cm	1.1×10^{15}
Loss factor	1 MHz	0.009
Dielectric constant	1 MHz	3.00
Application temperature	°C	-60~200
Flame resistance	UL-94	V-0

Note: Above operation time and curing time was resulted based on 100g mixture, curing in 25 °C, 55%RH for 7 days.

■ Directions for Use

1. Mixing uniformity in the packing before using, as there's part of filler sedimentation happens during storage.
2. Mix Part A and Part B by 1:1 mass ratio, after evenly mixed, pouring directly into the components or modules as per requirements. It's recommended to slowly pour along the walls of the implements, so as to reduce the bubbles happens.
3. Still the potted component to let out the bubbles. Can be cured by heat, about 30 minutes in 80 °C. If cured under room temperature, about 4 hours.
 - Vacuum defoaming can improve the performance of cured product.
 - Seal the remaining products tightly after use.
 - Low temperature will slow the curing speed, overheating will lead to curing speed too fast. Keep the constant temperature in workshop is recommended.
 - It's hard for SI2230 to cure if contact with sulfur, amine, organotin and unsaturated hydrocarbon plasticizer. Common substances like rosin, natural rubber. For these should do test before application.

■ Packing and Storage

SI2230 color White/Black Part A--10 KG/Bucket, Part B--10 KG/ Bucket.

When stored at or below 35 °C in the original unopened containers, this product has a usable life of 12 months from the date of production. Sampling test is necessary for products which exceed shelf life before taking use. During storage may have little settlement stratification, stirring evenly when use, does not affect performance.

It's non-dangerous goods, can be transported as normal chemicals, CAUTION leakage during transport.

■ Safety Operation Data

MSDS isn't included here. Please read TDS, MSDS and label carefully before operation. You can get MSDS from SEPNA or other distributors, or mail to service center sepna@sepna.cc, or call +86-400-882-1323.

■ Warranty and Liability

All product properties and application details based on information believe to be reliable and accurate. But you still need to test its property and safety before application. The advices we supply don't apply in any circumstances. SEPNA don't make assurance of any other applications outside the specification until SEPNA supply a special written guarantee. SEPNA is only responsible to replace or refund if this product is defective within the warranty period stated above. SEPNA makes it clear that will not be liable of any accidents.