

SI8230-3-A/B

Silicone Potting Sealant

Premium Quality & Ultimate Service

Two Component Low Stress Silicone Gel

Encapsulant SI8230-3



■ Technical Data Table

TESTING ITEM	ESTING STANDARD	Part A	Part B
Color	Visual inspection	Black viscous liquid	Off-White viscous liquid
Viscosity, cps , 25°C	GB/T 10247-2008	3500±5000	3500±5000
Density,,g/cm3, 25°C	GB/T 15223-1994	1.62±0.05	1.62±0.05
Mixture ratio	Weight Ratio	A: B = 100: 100	
Viscosity of mixture,4#rotor,cps , 25°C	GB/T 10247-2008	3500±500	
Operation time,mins , 25°C	GB/T 10247-2008	40±10	
Cure condition	GB/T 10247-2008	25°C/4 hr or 80°C/ 30mins	
Characteristics after curing			
Cured appearance	Visual inspection	Drak Gray to Black elastomer	
Hardness, Shore A	GB/T 531-2008	40±10	
Thermal conductivity, W/mK	GB/T 10297-1998	0.75	
Linear expansion, K-1, ppm	HGT 2625-1994	300	
Dielectric strength ,kV/mm, 25°C	GB/T 1695-2005	≥20	
Volume resistance,DC 500V, Ω·CM	GB/T 1692-92	1.1×10 ¹⁴	
Peel Adhesion to Aluminum,lbf/in	GB/T 1693-2007	0.6	
Dielectric constant(1 MHz)	GB/T 1693-2007	3.00	
Application temperature, °C	GBT 20028-2005	- 60 ~ 250	
Flame resistance	UL-94	0	

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■ Product Description

- ✧ SI8230-3 Low Stress Encapsulant has a very low hardness and viscosity to minimize internal stress generation, fill small gaps, and improve manufacturing speed for complex and high volume electronic devices. Excellent flame resistance and protection against water ingress that improve the safety and reliability under harsh outdoor environments.

■ Typical Applications

- Used for encapsulation of Power Conversion Devices (Inverters, Converters, Driver), Junction Boxes, Automotive Electronics Modules

■ Packing Specification

- ✧ ● SI8230-3, Dark Gray Silicone Potting Sealant
Part A 25kg/Drum

■ Transport & Storage

- 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.

Part B, 25kg/Drum

■ Key Features

- Soft, low durometer
- Low viscosity
- Room temperature or accelerated heat cure
- Good thermal conductivity
- Mix ratio 1 to 1
- Low internal stress during thermal cycling
- Highly flowable for filling small gaps and fast processing
- Good heat dissipation
- Prevents water ingress
- Electrically insulative
- Low total cost of ownership

■ 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 8 hours.
- Vacuum defoaming can improve the performance of cured product.
 - Seal the remaining products tightly after use.
 - Low temperature will slow the curing speed,

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overheating will lead to curing speed too fast. Keep the constant temperature in workshop is recommended.

- It's hard for SI8230-3 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.

■ Attention of operation

- Keep away from Children
- Avoid contact with eyes and skin. If contact with your skin, scrub first with soap water or alcohol, then rinse with water. If contact with your eyes, rinse with plenty of water, and seek medical treatment immediately.
- It is forbidden to build on the surface of the wet substrate.

■ Safety Operation Data

MSDS isn't included here. Please read TDS, MSDS and label carefully before operation. You can get MSDS from MAXTECH or other distributors, or mail to service center maxtech@shmaxtech.com

■ 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 advice we supply don't apply in any circumstances. MAXTECH don't make assurance of any other applications outside the specification until MAXTECH supply a special written guarantee. MAXTECH is only responsible to replace or refund if this product is defective within the warranty period stated above. MAXTECH makes it clear that will not be liable of any accidents.

Special Notes: All recommendations concerning our products, including transportation, storage, and handling are based on our current knowledge and experience under normal conditions. In practical application, results may differ because of materials and actual site conditions change, our company won't guarantee or bear any legal responsibility. In order to ensure the bonding effect and the compatibility of products and materials, it is recommended to do the compatibility test or consult MAXTECH Technical Services before proceeding with the full application.