

Thermal Conductive Silicone Adhesive Sealant
SI1316/1317



■ Product Description

SI13 series are neutral dealcoholized organic silicone adhesive sealant, room temperature cured by contacting with the moisture in the air. Add special thermally conductive material, after cured it becomes flexible rubber body, compliant with RoHS. The substances released during the curing process is alcohol, it's non-corrosive to materials like polycarbonate, copper. Has good adhesion to most kinds of material. Used for protection of electronic products which under the harsh conditions.

■ Key Features

1. It has a high thermal conductivity
2. Excellent comprehensive properties, elasticity, non-yellowing, no bleed oil
3. Moisture, dirt and other atmospheric composition proof
4. Relieving the mechanical stress and tension that caused by machinery, heat shock and vibrate
5. Good corona resistance and electrical insulation performance
6. Excellent outdoor aging-resistance for 20-30 years
7. Stable mechanical and electrical properties between -60-260°C

■ Typical Applications

Used for sealing LED lamps, thermal dissipation of auto electrical components, PCB and other heat dissipation components. Gap filling between power transistor, diode thyristor and substrates.

■ Technical Data Table

PROPERTY	STANDARD/UNITS	VALUE	
		SI1316	SI1317
Before curing			
Color	Visual inspection	White	
Viscosity	25°C, mPa • s	Paste	
Density	25°C, g/cm ³	1.65	2.25
Tack free time	25°C, 55%RH, min	2~5	2~5
After cured			
Hardness	Shore A	50±5	65±5
Thermal conductivity	W/m.K	0.82	1.50
Elongation at break	%	150	100
Tensile strength	MPa	≥1	≥2

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Technical Data Sheet



Shear strength	MPa, iron/iron	≥ 1	≥ 2
Dielectric strength	kV/mm, 25°C	20	20
Loss factor	1 MHz, 25°C	0.09	0.09
Dielectric constant	1 MHz, 25°C	2.9	2.9
Volume resistance	(DC500V) $\Omega \cdot \text{cm}$	2.0×10^{14}	2.0×10^{14}

Note: All data above were tested under special condition (7 days after fully cured in the environment of 25°C, 55%RH).

■ Directions for Use

1. Cleaning: cleaning the surfaces that to be glued and coated, removing the rust, dust, greasy dirt and other foreign matter and substance.
2. Gluing: cutting nozzle to the required angle (piercing the sealing cap tip for these sealing rubber hose), extruding the liquid cement to the cleaned surface and making it well-distributed, then folding and fixing the glued surfaces. Please consult the Sepna market department when come into the dispensing equipment.
3. Curing: the curing process is start from surface to internal, the cured depth is about 2~4mm in room temperature, 55%RH. It should cost more time for curing to a thicker glue layer, lower temperature also will extend the curing time. It takes more than 3 days for a 6mm thick glue layer to fully cured.
4. Attention: tightening and sealing preserve the leftover sealant after the operation. Removing the cured cement at the sealing part that might happen during the preservation, it could be normally used again.

■ Packing and Storage

SI1316. 310ml/tube, 25 tubes/carton; 100ml/tube, 100 tubes/carton.

SI1317. 310ml/tube, 25 tubes/carton

When stored at or below 25°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. It's non-dangerous goods, can be transported and stored as normal chemicals.

■ 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.