



FIRST-SEAL



ORGANIC SILICONE MATERIAL

Thermal Grease

RTV Silicone Sealant

Potting Adhesive

PRODUCTS CATALOGUE

CONTENTS

1 Thermal Grease	P01-02
1 Thermal Grease For CPU	P03-04
1 RTV Silicone Sealant	P05-06
1 Potting Adhesive	P07-08
1 First-seal Pv 906	P09

CERTIFICATION



COMPANY PROFILE



Maruti Engineering and Tools, an entity established years ago with a customer-centric approach in Ahmedabad, Gujarat, India and got recognized as a leading manufacturer, supplier, exporter and distributor of a high-quality range of industrial tools, bearings, abrasives, and much more. Our offered range of products is manufactured by our valuable vendors using the finest quality-assured raw materials and ultra-modern technology as per industry-set standards. In addition, we strive to provide the market with only the highest quality products. For this, we have partnered with the most reliable vendors.

Our business processes are strictly controlled according to some quality control policies to ensure our customers are satisfied. We are providing high-quality Abrasive, Bearing, CNC & VMC Tooling, Drill Bits, Electrical Tools, End Mill Cutter, Hand Tool, High-Temperature Grease, Loctite, Measuring Instrument, Pneumatic Connectors, Power tools, Rubber Products, Silicon, and Swagelok Pipe fittings, which are made available in numerous sizes, grades, and specifications. Our manufactured products are available in the marketplace for their simple installation, rust-free nature, sturdiness, and high strength. Besides this, our clients can buy these premium quality products from us at affordable prices.



THERMAL GREASE



■ INTRODUCTION

Thermal grease is kind of uniform pasty substance which composes thermally conductive filler, high-temperature synthetic oil, stabilizer and additive. The color is white or grey . It is used in the place between the heating element and cooling device. The radiator needs mechanical immobilization. The major advantage is its price and easy to repair. It can fill the heat sink and the device surface, reduce the thermal resistance contacting, so it is suitable for large power cooling device.

■ TECHNICAL SPECIFICATION

Model	Color	Conductivity (W/m-k)	Density (g/ml)	Cone Penetration (1/10 mm)	Vdaf (%)	Breakdown Voltage (Kv/mm)	Operating Temperature (°C)	Limit Temperature (°C)
FS-2107	White	1.0±0.2	>1.9	360±10	<1.0	>5.0	-40~200	-50~250
FS-2108	Grey	2.0±0.2	>2.5	320±10	<1.0	>5.0	-40~200	-50~250
FS-2109	Grey	3.0±0.2	>2.4	310±10	<1.0	>5.0	-40~200	-50~250
FS-2110	Grey	4.0±0.2	>2.3	310±10	<1.0	>5.0	-40~200	-50~250

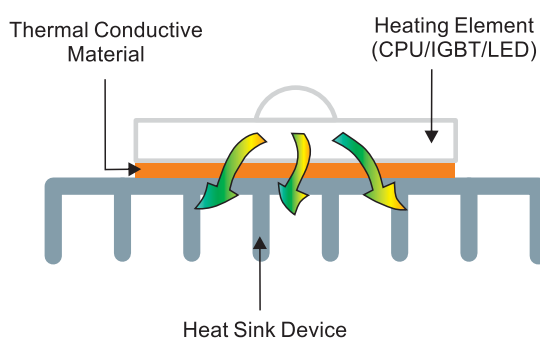
■ APPLICATION

- ◆ It is widely used in various electronic products, and the surface between the heating element and the cooling device in the electrical equipment
- ◆ It is used in the contact surface between the radiator of the LED lamp and the PCB. Suitable for SMD and COB lamp
- ◆ CPU, power amplifier, thermistor, power module, etc.

■ INSTRUCTION

- ◆ Please make sure the surface is absolutely clean before using
- ◆ The Thermal Grease could be coated on the objects directly by brush or scraper

THERMAL GREASE



■ CAUTION

- ◆ Please note that the thickness of the thermal grease will affect the efficiency of heat conduction, so please coat moderate quantity on the objects surface., and the thinner, the better
- ◆ Keep away from children
- ◆ If contact with the skin, wipe clean, and then rinse with water; if contact with eyes, immediately wash with water, and go to the hospital to check

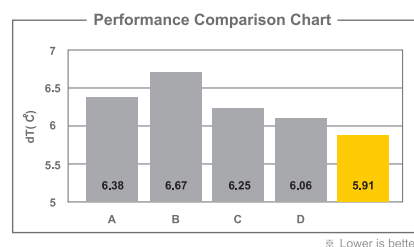
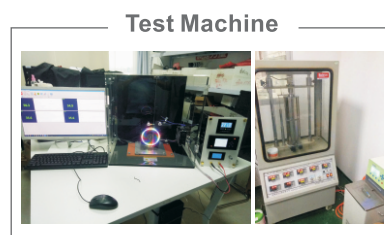
■ PACKING

- | | |
|------------------------------|-----------------------------|
| ◆ 1kg/ Can, 12can/ Box | Size of Box: 43x31.5x12cm |
| ◆ 300ml/ Tube, 25 pcs / Box | Size of Box: 25x25x23.5cm |
| ◆ 25kg/ Barrel | Size of Barrel: D30xH38.5cm |
| ◆ Customized special package | |

■ STORAGE AND TRANSPORT

- ◆ This product should be stored in a dry, cool place, avoid rain, sun exposure, storage period of 12 months (25°C) . During storage, a small amount of silicone oil may outflow, and this is a normal state, does not affect the use of results. If necessary, should be used after mixing evenly.
- ◆ Such products are non hazardous and can be transported in general chemicals

THERMAL GREASE FOR CPU



■ TECHNICAL SPECIFICATION

Model	Conductivity (W/m·k)	Color	Specific Gravity (g/ml)	Package	Scraper	Grease Rag	Glove	Operating Temperature (°C)
Customized	4.5~12.8	Grey	2.4~3.0	Customized	Customized	Customized	Customized	-40~200

■ PACKING

- ① Syringe
- ② Mini Bag
- ③ Glass bottle or Plastic bottle Customized special package



■ STORAGE AND TRANSPORT

- ① This product should be stored in a dry, cool place, avoid rain, sun exposure, storage period of 12 months(25°C). During storage, a small amount of silicone oil may outflow, and this is a normal state, does not affect the use of results. If necessary, should be used after mixing evenly.
- ② Such products are non hazardous and can be transported in general chemicals

THERMAL CONDUCTIVE SILICONE SEALANT



■ INTRODUCTION

The thermal conductive silicone sealant is mainly made of bonding agent and conductive particles. It is a pasty mixture before applying, and solidifying in certain times and conditions. The thermal conductive silicone sealant has good adhesion, no need to install screws or other extra mechanical immobilization. Cured at normal temperature. The curing condition is simple and can be repaired.

■ TECHNICAL SPECIFICATION

Model	Color	Conductivity (W/m-k)	Density (g/ml)	Vdaf (%)	Hardness (shore A)	Breakdown Voltage (Kv/mm)	Surface Dry Time (Min)	Full Cure Time (H)	Operating Temperature (°C)	Limit Temperature (°C)
FS-7576	White	1.0±0.2	1.6±0.1	<0.1	30	>10.0	5~10	12	-40~180	-50~250

■ APPLICATION

- ① It is widely used in power supply, chargers and other parts for the fixed, bonding, sealing, heat conduction
- ② LED lamp radiator and PCB for bonding and thermal conduction. Suitable for SMD Chips.
- ③ For other electronic, electrical components of the bonding, heat conduction

■ CAUTION

- ① Keep away from children
- ② After the opening of the silica gel, as far as possible to use
- ③ If contact with the skin, wipe clean, and then rinse with water; if contact with eyes, immediately wash with water, and go to the hospital to check

■ PACKING

- | | |
|------------------------------|-------------------------------|
| ① 50ml/Tube, 200tube/Box | Size of Box: 53.5x29.2x19.7cm |
| ② 100ml/Tube, 120tube/Box | Size of Box: 56x28.5x25.5cm |
| ③ 300ml/ Tube, 25tube/Box | Size of Box: 25x25x23.5cm |
| ④ 2600ml/ Tube, 4tube/Box | Size of Box: 26.5x26.5x31.5cm |
| ⑤ Customized special package | |

■ STORAGE AND TRANSPORT

- ① This product should be stored in a dry, cool place, avoid rain, sun exposure, storage period of six months (25°C) .
- ② Such products are non hazardous and can be transported in general chemicals



■ INTRODUCTION

Electronic RTV silicone sealant is a single component silicone rubber, which has good adhesion For metal, glass, plastics (PC,AS,ABS,PVC,PBT...) and other materials. The silicone gel is elastomer after cured, which has anti cold alternate and aging resistance and insulation properties. The silica gel has excellent moisture resistance, high temperature resistance, earthquake resistance, corona resistance, anti leakage performance, which comply with RoHs directive requirements

■ TECHNICAL SPECIFICATION

Model	Color	Mobility	Surface Dry Time (Min)	Full Cure Time (H)	Tensile Strength (Mpa)	Density (g/ml)	Hardness (shore A)	Volume Resistivity	Operating Temperature (°C)
FS-7910	Black,White	Non-Flowing	10~20	24	1.5	1.48±0.08	45±5	3.5*10 ¹⁴	-40~180
FS-7920	White	Non-Flowing	5~15	24	0.7	1.58±0.08	35±5	3.5*10 ¹⁴	-40~180
FS-7940	White	Non-Flowing	10~20	24	1	1.63±0.08	55±5	3.5*10 ¹⁴	-40~180
FS-7950	White	Non-Flowing	10~20	24	1	1.62±0.08	40±5	3.5*10 ¹⁴	-40~180
FS-7970	White	Non-Flowing	5~15	24	1.2	1.25±0.08	35±5	3.5*10 ¹⁴	-40~180
FS-7980	Translucent	Non-Flowing	5~10	24	1.2	1.0±0.08	30±5	3.5*10 ¹⁴	-40~150

■ APPLICATION

- ① Insulation seal for electrical switch
- ② Insulation seal for relays and other electronic components
- ③ LED lamp adhesive, waterproof, insulation, sealing
- ④ Solar Energy Industry

RTV SILICONE SEALANT



■ USING GUIDE



■ INSTRUCTION

- ① Please make sure the coated surface is absolutely clean and dry, and remove the rust, dust and oil stains on the surface before use.
- ② Cut the projecting part on the top of the tube, then squeeze out the glue on the objects and apply it evenly
- ③ If the thickness of glue applied on the objects ranges from 2mm to 4mm, it's better to place the objects under indoor temperature and with 55% relative humidity, then it'll cure naturally within 24 hours. But if the thickness of glue applied on the objects surpasses 6mm, it'll take at least 7 days to cure under the same condition.
- ④ Please store the glue sealed after used

■ CAUTION

- ① This product is non-toxic after completely cured, but should avoid contact with the eyes and children before curing
- ② Keep Ventilating the working area
- ③ If contact with the skin, wipe clean, and then rinse with water; if contact with eyes, immediately wash with water, and go to the hospital to check
- ④ Before a large amount of use, Please try a small amount of trial to confirm that it is appropriate

■ PACKING

- ① 50ml/Tube, 200tube/Box
- ② 100ml/Tube, 100tube/Box
- ③ 300ml/ Tube, 25tube/Box
- ④ 2600ml/ Tube, 4tube/Box
- ⑤ Customized special package

Size of Box: 53.5x29.2x19.7cm

Size of Box: 56x28.5x25.5cm

Size of Box: 25x25x23.5cm

Size of Box: 26.5x26.5x31.5cm

■ STORAGE AND TRANSPORT

- ① This product should be stored in a dry, cool place, avoid rain, sun exposure, storage period see the TDS.
- ② Such products are non hazardous and can be transported in general chemicals



■ INTRODUCTION

Two-component silicone is distinguished and named for the single component silica gel. This product consists of two components and cures after mixing the two components in the right proportion. Generally divided into Condensation type and Addition type, the biggest difference between the two is Condensation type will release low-molecular substance and Addition type will not, So Condensation type potting will shrink during curing and Addition type potting will not.

■ TECHNICAL SPECIFICATION

Two-component condensation type potting :

Model	Proportion (Weight)	Viscosity-BF (CP)	Color	Viscosity-AF (CP)	Density (g/ml)	Surface Dry Time (Min)	Full Cure Time (H)	Hardness (shore A)	Dielectric Strength (kV/mm)
FS-5401	10 : 1	2500/100	Black	2400	1.2	40-60	3-5	15	≥ 21
FS-5403	10 : 1	2500/100	White	2400	1.2	40-60	3-5	15	≥ 21
FS-5406	10 : 1	1800/100	Transparent	1600	1.0	40-60	6-8	15	≥ 21

* Viscosity, curing time can be adjusted according to user requirements

Two-component addition type potting :

Model	Proportion (Weight)	Viscosity-BF (CP)	Color	Viscosity-AF (CP)	Density (g/ml)	Surface Dry Time (Min)	Full Cure Time (H)	Conductivity (W/m-k)	Hardness (shore A)	Dielectric Strength (kV/mm)
FS-6401	1 : 1	A: 2000~2500 B: 2500~3200	Grey	2200-3000	1.53	10-20	2-4	1.0	50-60	≥ 21
FS-6402	1 : 1	A: 2000~2500 B: 2500~3200	Grey	2200-2800	1.4	40-60	2-4	0.9	50-60	≥ 21

* Viscosity, curing time can be adjusted according to user requirements

■ APPLICATION

Two-component condensation type potting :

It mainly used in circuit boards, LED power supply, LED outdoor lamps, automotive electronic modules, electrical appliances, light sources, lighting and ancillary devices for potting protection, and play the role of sealing, waterproof, insulation

Two-component addition type potting :

It can use in the high power electronic components, modular power supplies and circuit boards for potting protection, which has good heat conduction and temperature resistance. Such as LED driver power, automotive HID lamp module power supply, automotive ignition system module power supply, network transformers, etc.

■ INSTRUCTION

Two-component condensation type potting :

- Before use, the A component is fully stirred evenly, B components in the sealed state shake evenly, and then according to the weight ratio of A:B=10:1, into the mixing tank mixing evenly. If the weight of the B component is more, the curing time is faster
- Put the mixture into the container, If the depth is deep, suggest to vacuum deaeration, to prevent bubbles and pinholes after curing the adhesive surface

Two-component addition type potting :

- Before use, the A component and B component in their respective containers fully mixing evenly, and then according to the weight ratio of A:B=1:1, put into the mixing tank mixing evenly
- Put the mixture into the container. Curing at room temperature or heating. In the winter, it will take a long time to cure, suggested by heating curing, curing under 80°C for 15-30 minutes, and at room temperature, generally takes about 3~5 hours curing.

■ USING GUIDE



For Outdoor Lights



For Power Supply System

■ CAUTION

- ① Glue should be sealed storage. The mixture should be used once to avoid waste
- ② This product is not dangerous, but do not eat and into the eyes.
- ③ After a long period of storage, there will be precipitation in the glue. Please mix evenly to use and does not affect the performance
- ④ Glue exposure to a certain amount of the following chemical substances will make the glue does not solidify (little amount of the following substances will not affect the curing)
 - N, P, S organic compounds
 - Ionic compounds of Sn, Pb, Hg, As and other elements
 - Containing alkynes and vinyl compounds
 - In order to avoid the above phenomenon, the use of the circuit board as far as possible to wipe clean the remaining rosin, try to use low lead content of solder. It can also use three anti - paint soaked, and then use glue
- ⑤ Before a large amount of use, Please try a small amount of trial to confirm Is it appropriate

■ PACKING

Two-component condensation type potting: 11Kg/ set, 22KG/ set

Two-component addition type potting: 50Kg/ set

Customized special package

Size of 10L Barrel: D26xH28cm

Size of 20L Barrel: D30xH38.5cm

■ STORAGE AND TRANSPORT

- ① The storage period see the TDS.
- ② Such products are non hazardous and can be transported in general chemicals



FIRST-SEAL PV 906

FIRST-SEAL PV 906 has Passed ISO9001 certification

■ Product Description

FIRST-SEAL photovoltaic module sealant is one-component RTV silicone rubber, no solvent. This product has good adhesion to aluminum, glass.

■ Special Features

- strong adhesion ability
- non-corrosive to metals
- temperature range (°C) cured sealant
- aging resistance
- uv resistance
- weather resistance
- water resistance
- fast curing

flexible at low (-40 °C) and high temperatures (+260 °C)

■ Application

- • Solar panel frame, photovoltaic glass waterproof seal.
- • Bonding and sealing the junction box of solar modules.
- • Other multiple uses.

■ Attention

Application Temperature 5 °C to 40°

Temperature Resistance -45°C to +150°C

■ Storage

stored in a dry, ventilated, cool place, storage temperature should not exceed 27°C, storage period of 12 months.

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

These figures are only intended as a guide and should not be used in preparing specification



Thank
You!



Maruti Engineering And Tools

Address: Shop No 19, Sanskrut Appartment, Opp. Amrita Vidhyalay,
Ghatlodiya, 380061, Ahmedabad, India
Mail ID: info@maruti-engineering.com
Contact num: +91 6353135337, +91 9638895777