

Silicone Rubber

INTRODUCTION

Two-component silicone, platinum-curing, flowable, vulcanizes at room temperature. Can be used for a long time in the temperature range of -65°C - 200°C and keep its soft and elastic properties

FEATURES

- High transparency
- Low viscosity
- Food grade, FDA certificate
- Better anti-corrosion
- Better weather aging resistance
- Better insulation
- Fire proof, flame retardant
- Waterproof, moisture proof
- Anti-fouling
- Quake-proof/ withstand vibration
- Thermal conductive
- Ozone resistance
- Low shrinkage
- Can be operated in all kinds of harsh environments (Moisture, salt fog, dust, vibration, heat, deep sea, cold, etc.).

APPLICATION

Used for potting, encapsulating, sealing and bonding, widely used in electronic products, electricity, power supply, automotive etc. For example, used for potting electronic components, power module and control module and controllers, junction box, solar cell assembly etc.. Can reduce stress and withstand high and low temperature impact.

For the high power control module, thermal conductive silicone is used to achieve the function of heat dissipation, or outdoor protection for electronics such as LED screen. Improve the insulation level of electronics, improve heat dissipation, and avoid the risk of electronics overheating and burning in a short time.

COMPARISON WITH EPOXY & PU

1. Silicone rubber has the ability of thermal expansion and contraction than them.
2. Silicone rubber won't release any heat during curing/ solidication process, but epoxy and urethane will, which will damage electronic components.
3. Silicone rubber has lower shrinkage, so will protect and keep the electronics in shape better without damage.
4. Silicone rubber is more environmental protection than them.

PACKAGE

- 5KG/drum part A + 5KG/drum part B
- 20KG/drum part A + 20KG/drum part B

TYPICAL PROPERTIES

	Properties Index	Test Report
Before Curing	Appearance	Transparent fluid
	Viscosity (cps)	700±200
Operating	Operating Mixing Ratio (By weight)	1 : 1
	Operating Time (25°C /min)	30~60 (Adjustable)
	Curing time (hr, basically cured)	6 (Adjustable)
	Curing time (hr, perfectly cured)	12
After Curing	Hardness (shore A)	20±3
	Thermal conductivity [W/(m·K)]	≥0.2
	Liner Conductivity [m/(m·K)]	≤2.2×10 ⁻⁴
	Dielectric strength (kV/mm)	≥25
	Dielectric permittivity (1.2MHz)	3.0~3.3
	Volume resistivity (Ω·cm)	≥1.0×10 ¹⁶
	Fire resistance	UL94-V0
	Density (g/cm)	1.08
	Refractive index	97%

OPERATION INSTRUCTIONS

1. Before use, first mix component A well, which can make the colloid fluidity better than that when it is used directly after it has been standing still for a long time. Then shake component B well to make the bonding component in component B more uniform.
2. When mixing, observe the weight ratio of component A: component B = 1:1.
3. It is a product cured at room temperature after pouring. After basic curing, it will enter the next process. It will take 12 hours for deep curing

SHELF LIFE

Twelve (24) months when stored under dry and cool place by original package under 25°C

HANDING AND STORAGE

1. Precautions for safe handling: Protective measures: Training should be provided to anyone working with or near this material. Training should cover potential health effects and proper handling techniques. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Measures to prevent aerosol and dust generation: Ensure good local exhaust ventilation. Measure to protect the environment: Do not allow this products to be released to the environment without proper treatment. Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
2. Conditions for safe storage, including any incompatibilities: Technical measures and storage conditions: Store in a cool, dry, well-ventilated area away from incompatible substances, feedstuffs, beverages and foods.