Safety Data Sheet (SDS)

Version: V2.0 Revision Date: 2025-10-24

Section 1 - Chemical Product and Company Identification

1.1 Product Identifier

Product Name: Platinum Cured Silicone Rubber (Part A & Part B)

Synonyms: Addition Silicone Rubber

Mix Ratio: A:B = 1:1 (by weight)

Product Code: RTV-40XX Series / RTV-41XX Series / RTV-51XX Series

1.2 Application

Identified Uses: This product is primarily used for making flexible molds, special effects, and human models (depending on the product grade). This is a two-component product; Part A and Part B must be used together to achieve cure.

Uses Advised Against: Strictly prohibited for medical or human implantation applications.

1.3 Details of the Supplier

Company Name: Shenzhen MinghuiLink Silicone Co., Ltd.

Address: A22, 2nd Floor, Dongmeng Building, No. 690 Minzhi Avenue, Xinniu Community, Minzhi Sub-district, Longhua District, Shenzhen, Guangdong, China

Postal Code: 518131

Telephone: +86-15899753674

Email: info@siliconeab.com

1.4 Emergency Telephone Number

China: +86-0532-83889090 (National Registration Center for Chemicals)

Emergency Contact: +86-15899753674

EU: 112 (General Emergency Number)

Section 2 - Hazards Identification

2.1 Classification of the Substance or Mixture (GHS Classification)

This product is a two-component kit, and the hazard classifications for each component are different.

2.2 Part A

GHS Hazard Class:

- Serious Eye Irritation - Category 2A (H319)
- Skin Sensitization - Category 1 (H317)

GHS Label Elements, Including Precautionary Statements:

Pictograms: 

Signal Word: Warning

Hazard Statements:

- H319: Causes serious eye irritation.
- H317: May cause an allergic skin reaction.

Precautionary Statements:

- **Prevention:**
  - P264: Wash hands thoroughly after handling.
  - P280: Wear protective gloves/protective clothing/eye protection/face protection.
- **Response:**
  - P302+P352: IF ON SKIN: Wash with plenty of water and soap.
  - P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
  - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313: If eye irritation persists: Get medical advice/attention.
  - P362+P364: Take off contaminated clothing and wash it before reuse.
- **Disposal:**
  - P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Part B

GHS Hazard Class: According to GHS standards, this component is not classified as a substance with health hazards.

GHS Label Elements:

- **Hazard Pictograms:** N/A
- **Signal Word:** N/A
- **Hazard Statements:** N/A

2.4 Cured Silicone Rubber (Part A + Part B Mixed and Cured)

Not classified as hazardous. The cured product is a chemically stable, inert elastomer.

2.5 Hazards Not Otherwise Classified (HNOC)

Spilled liquid material poses a serious slip hazard.

Section 3-Composition/Information on Ingredients

3.1 Part A Composition Information

Chemical Composition	CAS No.	EC#	Weight (%)
Methylvinylpolysiloxane	68037-87-6	802-265-5	55-65
Silica	7631-86-9	231-545-4	15-20
Dimethyl siloxane	63148-62-9	613-156-5	15-25
Platinum	68478-92-2	270-844-4	≤0.01

3.2 Part B Composition Information

Chemical Composition	CAS No.	EC#	Weight (%)
Methylvinylpolysiloxane	68037-87-6	802-265-5	55-65
Silica	7631-86-9	231-545-4	15-20
Dimethyl siloxane	63148-62-9	613-156-5	15-25
Polymethylhydrosiloxane	63148-57-2	613-152-3	2-5

Section 4 -First Aid Measures

4.1 Description of First-Aid Measure

Inhalation: If vapors or aerosols from heating or atomizing are accidentally inhaled, move the person to fresh air immediately. Keep the airway open. If symptoms of discomfort occur, seek medical attention immediately.

Skin Contact: Does not usually cause irritation. If contact occurs, wash the affected area thoroughly with plenty of running water and soap. If irritation or discomfort persists, seek medical attention.

Eye Contact: Immediately flush with plenty of running water for at least 15 minutes, lifting the upper and lower eyelids occasionally. If contact lenses are worn and can be easily removed, remove them immediately. Continue to rinse and seek immediate medical attention.

Ingestion: Do not induce vomiting. Rinse mouth with water, seek immediate medical help, and show

this SDS to the doctor.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Acute Effects: Under normal conditions of use, no significant acute health effects are expected. Eye contact may cause minor discomfort.

Delayed Effects: Repeated or prolonged exposure to Part A may cause an allergic skin reaction (rash) in a very small number of sensitive individuals.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically. When treating cases of skin contact with Part A, the possibility of sensitization by platinum compounds should be considered.

Section 5 -Fire Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam, dry powder, carbon dioxide (CO_2), or water spray can be used.

Unsuitable Extinguishing Media: High-pressure water stream.

5.2 Special Hazards Arising from the Substance or Mixture

This product is not flammable, but it will burn under fire conditions. Combustion may produce carbon monoxide (CO), carbon dioxide (CO2), silicon oxide fumes, and trace amounts of formaldehyde.

5.3 Advice for Firefighters

Protective Equipment: Firefighters must wear a positive-pressure self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing.

Fire-Fighting Procedures: Use water spray to cool unopened containers. Prevent fire-fighting water from entering drains or watercourses.

Section 6-Accidental Release Measures

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

For Non-Emergency Personnel: Evacuate non-essential personnel to a safe area. Avoid contact with spilled material. Ensure the spill area is well-ventilated.

For Emergency Responders: Wear appropriate Personal Protective Equipment, including chemical-resistant gloves, safety goggles, and respiratory protection when necessary.

6.2 Environmental Precautions

Prevent spillage from entering sewers, surface water, or groundwater systems. If a large spill occurs, notify local environmental authorities immediately.

6.3 Methods and Material for Containment and Cleaning Up

Small Spills: Use inert absorbent material (e.g., sand, diatomaceous earth, sawdust) to absorb the spill and collect it into a labeled container for disposal.

Large Spills: Construct a dike or trench for containment. Transfer the liquid into a dedicated container using a pump. For the remaining residue, follow the same procedure as for small spills.

After Cleanup: Wash the spill area thoroughly with water and detergent to eliminate the slip risk.

Section 7 -Handling and Storage

7.1 Precautions for Safe Handling

Technical Measures: Handle in a well-ventilated area. Wear personal protective equipment as described in Section 8 to avoid contact with skin and eyes.

Handling Precautions: Avoid contact with skin and eyes. Wear appropriate personal protective equipment during handling. Keep containers sealed.

Hygiene Measures: Do not eat, drink, or smoke in the work area. Wash hands thoroughly with soap and water after handling.

Cure Inhibition Note: Contact with sulfur, tin, and amine-containing compounds must be avoided as these substances will inhibit the activity of the platinum catalyst.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a cool, dry, well-ventilated warehouse, away from heat sources, sparks, and open flames. Keep containers tightly closed. Recommended storage temperature is between 10-30°C.

Incompatible Materials: Strong oxidizing agents, water, alcohols, acids, bases, amines, tin compounds, sulfur compounds, metal powders.

Section 8-Exposure Controls/Personal Protection

8.1 Control Parameters

Chemical Composition	CAS No.	ACGIH	NIOSH	OSHA
Methylvinylpolysiloxane	68037-87-6	N/A	N/A	N/A
Silica	7631-86-9	N/A	N/A	N/A
Dimethyl siloxane	63148-62-9	N/A	N/A	N/A

Platinum	68478-92-2	N/A	N/A	N/A
Polymethylhydrosiloxane	63148-57-2	N/A	N/A	N/A

8.2 Exposure Controls

Engineering Controls: Prioritize the use of engineering controls. For liquid handling, good general ventilation is usually sufficient.

Personal Protective Equipment (PPE):

- **Respiratory Protection:** Not required during normal handling of liquids with good ventilation.
- **Hand Protection:** It is recommended to wear protective gloves made of chemical-resistant materials such as nitrile or butyl rubber to prevent skin irritation and sensitization.
- **Eye Protection:** Wear safety glasses with side shields. If there is a risk of splashing, chemical safety goggles should be worn.
- **Skin and Body Protection:** Wear standard work clothing to minimize skin exposure.

Section 9 -Physical and Chemical Properties

Property	Part A	Part B
Appearance & State	Viscous liquid, translucent or transparent	Viscous liquid, translucent or transparent
Odor	Odorless	Odorless
Flash Point	>100.0℃ (Closed Cup)	>100.0℃ (Closed Cup)
Viscosity (@25℃)	1,000-30,000 mPa·s	1,000-30,000 mPa·s
Specific Gravity	Approx.1.05–1.30g/cm^3	Approx.1.05–1.30g/cm^3
Solubility	Insoluble in water	Insoluble in water

Section 10-Stability and Reactivity

10.1 Reactivity

Not reactive under normal conditions.

10.2 Chemical Stability

The product is chemically stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

No hazardous polymerization or other hazardous reactions will occur under normal use and storage conditions.

10.4 Conditions to Avoid

Avoid extreme high temperatures, sources of ignition, and contact with all incompatible materials.

10.5 Incompatible Materials

Strong oxidizing agents, water, alcohols, acids, bases, amines, tin-containing compounds, sulfur-containing compounds, and metal powders.

10.6 Hazardous Decomposition Products

Does not decompose under normal conditions. Under high-temperature conditions such as a fire, thermal decomposition will occur, producing hazardous substances such as carbon monoxide, carbon dioxide, silica fumes, and trace amounts of formaldehyde.

Section 11-Toxicological Information

11.1Acute Toxicity

Chemical Composition	CAS No.	LC50/LD50
Methylvinylpolysiloxane	68037-87-6	LD50 Rat (oral): > 5000 mg/kg
Silica	7631-86-9	LD50 Rat (oral): > 5000 mg/kg
Dimethyl siloxane	63148-62-9	LD50 Rat (oral): > 5000 mg/kg
Platinum	68478-92-2	No data available.
Polymethylhydrosiloxane	63148-57-2	LD50 Rat (oral): > 2000 mg/kg

11.2 Skin Corrosion/Irritation

Not expected to cause significant skin irritation.

11.3 Serious Eye Damage/Irritation

Not expected to cause serious eye irritation, but direct contact may cause temporary discomfort.

11.4 Respiratory or Skin Sensitization

Part A: Contains a platinum complex catalyst (≤0.01%), which may cause an allergic skin reaction in a very small number of sensitive individuals.

Part B: No known sensitizing properties.

11.5 Germ Cell Mutagenicity

Based on available component data, there is no evidence of mutagenicity.

11.6 Carcinogenicity

Not classified as a carcinogen. In the viscous liquid form supplied, quartz particles are completely encapsulated by the polymer matrix, preventing the formation of airborne particles and thus blocking the inhalation exposure route.

11.7 Reproductive Toxicity

No data available.

11.8 Specific Target Organ Toxicity

Single Exposure: No data available.

Repeated Exposure: No data available.

Section 12-Ecological Information

12.1 Toxicity

Not expected to be acutely toxic to aquatic organisms. However, direct release into the environment should be avoided.

12.2 Persistence and Degradability

The organosilicon polymer components in the product are not readily biodegradable in the environment. It is very persistent in soil and water.

12.3 Bioaccumulative Potential

Certain low molecular weight cyclic siloxane impurities may have bioaccumulative potential.

12.4 Mobility in Soil

The product is insoluble in water and is expected to have very low mobility in soil.

Section 13-Disposal Considerations

Uncured Product: Should be disposed of as chemical waste. All applicable local, state, and federal regulations must be observed. Direct discharge of the product into sewers is prohibited.

Cured Product: Fully cured silicone rubber is an inert, non-hazardous solid waste and can be disposed of as general industrial or commercial trash in accordance with local regulations.

Contaminated Packaging: Empty containers contaminated by the product should be handled with the same requirements as the product itself.

Section 14-Transport Information

According to international and domestic transport regulations (DOT, IATA, IMDG), both Part A and Part B of this product are not classified as dangerous goods for transport.

Transport Classification Table

Regulation	UN Number	UN Proper Shipping	Transport Hazard Class(es)	Packing Group
DOT (USA)	N/A	Not Regulated	N/A	N/A
IATA (Air)	N/A	Not Regulated	N/A	N/A
IMDG (Sea)	N/A	Not Regulated	N/A	N/A

Environmental Hazards: No.

Transport Precautions: Ensure containers are sealed and free of leaks during transport.

Section 15-Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Composition	CAS No.	TSCA	IECSC	DSL/NDSL	EINECS/ ELINCS/ NLP
Methylvinylpolysiloxane	68037-87-6	Listed	Listed	Listed DSL	Listed
Silica	7631-86-9	Listed	Listed	Listed DSL	Listed
Dimethyl siloxane	63148-62-9	Listed	Listed	Listed DSL	Listed
Platinum	68478-92-2	Listed	Listed	Listed DSL	Listed
Polymethylhydrosiloxane	63148-57-2	Listed	Listed	Listed DSL	Listed

Section 16 - Other Information

Date of Preparation or Last Revision: 2025-10-24

Explanation of Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service

EC#: European Chemical Inventory Number

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HNOC: Hazard Not Otherwise Classified

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

NIOSH: National Institute for Occupational Safety and Health

OEL: Occupational Exposure Limit

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

PG: Packing Group

PPE: Personal Protective Equipment

PVC: Polyvinyl Chloride

REL: Recommended Exposure Limit

RTV: Room Temperature Vulcanizing

SCBA: Self-Contained Breathing Apparatus

SDS: Safety Data Sheet

TLV: Threshold Limit Value

TSCA: Toxic Substances Control Act

TWA: Time-Weighted Average

UN: United Nations

Disclaimer: The information in this Safety Data Sheet is, to the best of our knowledge and belief, accurate as of the date of its publication. The information provided is intended only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and should not be considered a warranty or quality specification. It is the user's own responsibility to determine whether this information is suitable for the user's particular purpose.