

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

Guangzhou Baiyun Chemical Industry Co., Ltd.
Guangzhou Civilian Scien-tech Park, Baiyun District, Guangzhou, P.R. China 510540
EMERGENCY PHONE: (8620)37312999
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Generic Description: Silicone
Physical Form: Paste
Color: White or black
Odor: Alcoholic odor
NFPA Profile: Health 1 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS**INGREDIENT:**

<u>CAS NO.</u>	<u>% WT</u>	<u>COMPONENT NAME</u>
Trade Secret 1185-55-3	40.0 - 70.0 <=5.0	Polysiloxane methyltrimethoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200.

3. EFFECTS OF OVEREXPOSURE**Acute Effects**

Eye: Direct contact may cause mild irritation.
Skin: No significant irritation expected from a single short-term exposure.
Inhalation: Irritates respiratory passages very slightly. Vapor overexposure may cause drowsiness.
Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: No known applicable information.
Inhalation: No known applicable information.
Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure



No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes.
Skin: No first aid should be needed.
Inhalation: Remove to fresh air. Get medical attention if ill effects persist.
Oral: Get medical attention.
Comments: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable.
Autoignition Not determined.
Temperature:
Flammability Limits in Air: Not determined.
Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards: None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen oxides. Metal oxides. Quartz. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and



regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call Guangzhou Baiyun Chemical Industry Co., Ltd., (8620)37312999, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves t-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure guidelines or use air-supplied or self-contained breathing apparatus. Avoid eye contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
1185-55-3	Methyltrimethoxysilane	TWA 50 ppm. See methylalcohol comments.

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within

guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

Engineering Controls

Local Ventilation: Recommended.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Washing at mealtime and end of shift is adequate.

Suitable Gloves: No special protection needed.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial Hygiene Personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: Organic Vapor Type.]

Personal Protective Equipment for Spills

Eyes: Use full face respirator.



Skin: Washing at mealtime and end of shift is adequate.

Inhalation/Suitable: Use self-contained breathing apparatus (SCBA) or other supplied-air respirator.

Respirator:

Precautionary Measures: Avoid eye contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

Comments: Product evolves t-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure guidelines or use air-supplied or self-contained breathing apparatus.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste
Color: White or black
Odor: Alcoholic odor
Specific Gravity @ 25°C: 1.34
Viscosity: Not determined.
Freezing/Melting Point: Not determined.
Boiling Point: Not determined.
Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined.
Solubility in Water: Not determined.
pH: Not determined.
Volatile Content: Not determined.

Note: The above information is not intended for use in preparing product specifications. Contact Guangzhou Baiyun Chemical Industry Co., Ltd. before writing specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Hazardous Polymerization: Hazardous polymerization will not occur.
Conditions to Avoid: None.
Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Air: This product is a solid consisting of a high molecular weight silicone polymer and other solid materials. Unless milled to produce a dust or particles, it is unlikely to give rise to atmospheric contamination.

Water: This product is a solid which is completely insoluble in water. As the specific



- Soil:** gravity is >1, it will sink to the bottom of the water course.
This product will enter the terrestrial environment if, as a component of municipal or industrial solid waste the product is landfilled. It is unlikely that further significant transformation of the product will occur.
- Degradation:** High molecular weight polymer which is amenable to recycling. The product is not biodegradable. The product is removed >80% during the sewage treatment process.

Environmental Effects

- Toxicity to Water Organisms:** This product has low water solubility and should not present a risk to aquatic organisms.
- Toxicity to Soil Organisms:** This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.
- Bioaccumulation:** This product is a solid which is not soluble in water and if ingested will not be absorbed.

Fate and Effects in Waste Water Treatment Plants

This product is a solid rubber type material which is unlikely to have any adverse effect on bacteria.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No
State or local laws may impose additional regulatory requirements regarding disposal.

Call Guangzhou Baiyun Chemical Industry Co., Ltd., (8620)37312999, if additional information is required.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

Call Guangzhou Baiyun Chemical Industry Co., Ltd., (8620)37312999, if additional information is required.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing



on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None.

Section 304 CERCLA Hazardous Substances:

None.

Section 312 Hazard Class:

Acute: Yes

Chronic: No

Fire: No

Pressure: No

Reactive: No

Section 313 Toxic Chemicals:

None present or none present in regulated quantities.

16. OTHER INFORMATION

Prepared by: Guangzhou Baiyun Chemical Industry Co., Ltd.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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