



HITO CHEMICAL

Material Safety Data Sheet

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: H-309
Chemical name: Silicone spray adjuvant
MANUFACTURED BY: JIANGXI HITO CHEMICAL CO.,LTD
NO 6,TIANHONG ROAD,XINGHUO INDUSTRY ZONE,
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SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS NO.	CONCENTRATION
3-(3-Hydroxypropyl) -heptamethyltrisiloxane, ethoxylated, acetate	125997-17-3	> 60.0
Polyethylene glycol monoallyl ether acetate.....	27252-87-5	15.0 - 40.0

SECTION 3 – HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause severe irritation.

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: No significant effects expected from a single short-term exposure.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: No known applicable information.

Oral: Repeated ingestion or swallowing large amounts may injure internally

Signs and Symptoms of Overexposure

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.

SECTION 4 - FIRST AID MEASURES

Eye: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 - 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.

Skin: No health effects expected. If irritation does occur flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.

Inhalation: If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.

Oral: If irritation or discomfort occur, obtain medical advice.

Notes to Physician: Treat according to person's condition and specifics of exposure.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: 212 °F / 100 °C (Pensky-Martens Closed Cup)

Autoignition Temperature: Not determined.

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. Use water spray to keep fire exposed containers cool. Determine the need to evacuate or isolate the area according to your local emergency plan.

Unusual Fire Hazards: None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Determine whether to evacuate or isolate the area according to your local emergency plan.

Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent 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 (989) 496-5900, if additional information is required.

SECTION 7 - HANDLING AND STORAGE

Use with adequate ventilation. Trace quantities of ethylene oxide (EO) may be present and could accumulate in headspace of storage and transport vessels, but are not expected to cause EO concentrations above exposure limits.

Avoid eye contact. Avoid skin contact. Do not take internally.

Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines. Do not repackage. Do not store in glass containers which may shatter due to pressure build up. Clogged container vents may increase pressure build up. Keep container closed and store away from water or moisture.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Component Exposure Limits

There are no components with workplace exposure limits.

Engineering Controls

Local Ventilation: None should be needed.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use chemical worker's goggles.

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

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select

and use gloves and/or protective clothing to further minimize the potential for skin contact.

Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

Inhalation: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use chemical worker's goggles.

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

Inhalation/Suitable No respiratory protection should be needed.

Respirator:

Precautionary Measures: Avoid eye contact. Avoid skin contact. Do not take internally. Use reasonable care.

Comments: Trace quantities of ethylene oxide (EO) may be present and could accumulate in headspace

of storage and transport vessels, but are not expected to cause EO concentrations above exposure limits.

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

added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the

use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid
Color: Colourless to light amber liquid
Odor: Characteristic odor
Specific Gravity @ 25°C: 1.031
Viscosity 30 cSt
Freezing/Melting Point: Not determined.
Boiling Point: > 65 °C
Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined.
Solubility in Water: Not determined.
PH: Not determined.
Volatile Content: Not determined.
Flash Point: 212 °F / 100 °C (Pensky-Martens Closed Cup)
Autoignition Temperature: Not determined.
Flammability Limits in Air: Not determined

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable.
Hazardous Hazardous polymerization will not occur.
Polymerization:
Conditions to Avoid: None.
Materials to Avoid: Oxidizing material can cause a reaction. Water, alcohols, acidic or basic materials, and many metals or metallic compounds, when in contact with product, liberate flammable hydrogen gas, which can form explosive mixtures in air.
Hazardous Decomposition Products
Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicology Data for Product
Species :Test Results
Dermal LD50:Rabbit > 2,000 mg/kg
Additional Toxicology Information on Product
Four groups of ten male and female rats were dosed orally, five days per week for 28 days, with SYLGARD(R) 309 at 0, 33, 300 and 1000 mg/kg/day. During the study the animals were monitored for clinical signs of toxicity and mortality, body weight gain and food consumption. After 28 days, the rats were sacrificed and subjected to urinalysis and hematological and clinical chemistry analysis, and gross and microscopic tissue examination. No significant findings of biological relevance were seen in female rats. Minor treatment related effects, primarily body weight gain and food consumption, were seen in male rats of the 1000 mg/kg/day dose group.

Results of the acute toxicology studies listed above are based on actual testing of this product and/or testing of similar products.

Component Toxicology Information

A component of this material applied to the skin of rabbits at very large doses for a 24 hour contact caused injury to the

lungs. This may be a unique response with rabbits and its significance to humans is unknown.

Special Hazard Information on Components

No known applicable information.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate and Distribution:

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

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

SECTION 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?
Yes

Characteristic Waste:

Reactive: D003

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

SECTION 14 - TRANSPORT INFORMATION

DOT Classification:

This product is not regulated by DOT.

Freight description road: OIL, O/T PETROLEUM, LUBRICATING, NOIBN

IMDG Classification: This product is not regulated by IMDG.

SECTION 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 (40 CFR 355):
None.
Section 304 CERCLA Hazardous Substances (40 CFR 302):
None.
Section 311/312 Hazard Class (40 CFR 370):

- Acute: Yes
- Chronic: No
- Fire: No
- Pressure: No
- Reactive: Yes

Section 313 Toxic Chemicals (40 CFR 372):
None present or none present in regulated quantities.
Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

Supplemental State Compliance Information
California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

No ingredient regulated by MA Right-to-Know Law present.

New Jersey

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SECTION 16 - ADDITIONAL INFORMATION

Prepared by: Jiangxi Hito Chemical 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.