

SILWET™ OPTIM

SAFETY DATA SHEET

1. Identification

Product identifier: SILWET™ OPTIM

Other means of identification

Synonyms: Organosilicone / Organic Fluid Blend

Recommended use and restriction on use

Recommended use: For industrial use only.

Restrictions on use: Not for aerosol use

Manufacturer/Importer/Distributor Information : Momentive Performance Materials USA LLC
2750 Balltown Road,
Niskayuna, NY 12309

Contact person : commercial.services@momentive.com

Telephone : General information
+1-800-295-2392

Emergency telephone number Supplier : CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

|| **Serious Eye Damage/Eye Irritation** Category 2A

Label Elements

Hazard Symbol:



|| **Signal Word:** Warning

|| **Hazard Statement:** H319; Causes serious eye irritation.

SILWET™ OPTIM

Precautionary Statements

Prevention:	Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Polyalkyleneoxide Modified Heptamethyltrisiloxane	67674-67-3	20 - <50%	No data available.

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: No action shall be taken involving any personal risk or without suitable training. Do not give victim anything to drink if he is unconscious. Get medical attention if symptoms occur.

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water. Do not give victim anything to drink if he is unconscious. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms persist.

Inhalation: After inhalation of aerosol/mist seek medical advice immediately. Move the exposed person to fresh air at once.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms persist. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

Symptoms: There is no specific antidote.

Hazards: No data available.

SILWET™ OPTIM

Indication of immediate medical attention and special treatment needed

Treatment: There is no specific antidote. Treatment is symptomatic and supportive.

5. Fire-fighting measures

General Fire Hazards: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Do not breathe vapor/spray. Do not taste or swallow. Avoid contact with skin and eyes. Use only in well-ventilated areas. Keep out of reach of children. Attention: Not for injection into humans.

Methods and material for containment and cleaning up: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

SILWET™ OPTIM

7. Handling and storage

Precautions for safe handling:	Sensitivity to static discharge is not expected. Do not taste or swallow. Do not get in eyes, on skin, on clothing. Use personal protective equipment as required. Wash hands after handling.
Conditions for safe storage, including any incompatibilities:	Keep container closed. Keep away from sources of ignition - No smoking. Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls

Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.

Individual protection measures, such as personal protective equipment

General information:	General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.
Eye/face protection:	Safety glasses with side shields
Skin Protection	
Hand Protection:	Use chemical-resistant, impervious gloves.
Other:	Wear suitable protective clothing and eye/face protection.
Respiratory Protection:	If inhalation exposure is expected, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).
Hygiene measures:	Do not breathe vapour/aerosol. When using do not eat, drink or smoke. Use only with adequate ventilation. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless, /, Light brown
Odor:	Polyether
Odor threshold:	No data available.
pH:	5 - 9
Melting point/freezing point:	Not determined.

SILWET™ OPTIM

Initial boiling point and boiling range :	Not determined.
Flash Point:	110 °C (ASTM D 93)
Evaporation rate:	< 1 (n-Butyl acetate=1)
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Heat of combustion:	No data available.
Vapor pressure:	No data available.
Vapor density:	Heavier than air
Density:	1.007 g/cm ³ (25 °C) estimated
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Dispersible
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	; Not determined.

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	None known.
Incompatible Materials:	Normally unreactive; however avoid contact with: Materials reactive with hydroxyl compounds.

SILWET™ OPTIM

Hazardous Decomposition Products: In case of fire, gives off (emits): Carbon oxides Oxides of silicon. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. Toxicological information

Information on likely routes of exposure

Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat, female): 2,500 mg/kg

Dermal

Product: LD 50 (Rabbit, male and female): > 2,000 mg/kg

Inhalation

Product: LC50 (Rat,): > 11.78 mg/l
 LC50 (Rat,): 2 mg/l
 ATEmix : 26.19 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

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Product: OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): No skin irritation

Serious Eye Damage/Eye Irritation

Product: Causes eye irritation.

Respiratory or Skin Sensitization

Product: , OECD Guideline 429 (LLNA) (Mouse)Sensitizer

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): positive

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

SILWET™ OPTIM

Other effects:

Overexposure to vapor, aerosol or mist generated at high temperature may result in eye and respiratory tract irritation, dizziness, nausea, and the inhalation of harmful amounts of material.

This material was not mutagenic in three mammalian test systems including the Chinese Hamster Ovary (CHO)/HGPRT gene mutation assay, a micronucleus cytogenetic assay in mice, and an in vitro mammalian cytogenetic test.

In a repeated skin application study with rats, this material caused moderate skin irritation which resolved during a post-application recovery period. There was no evidence for percutaneous cumulative or specific organ toxicity, and no effect on male or female reproductive systems.

Findings from a 14-day dietary feeding study with rats show that high dosage repeated ingestion of this material causes reversible adverse effects on the male and female reproductive tracts. Additional effects seen include increased liver weight, altered blood cytology/chemistry, and thyroid enlargement (primarily hypertrophy, with some hyperplasia). Evidence of partial or complete recovery was found over a 28-day recovery period.

Findings from a repeat 9-day aerosol inhalation toxicity study with rats show a no-observable-effect-level (NOEL) of less than 0.025 mg/l. Symptoms of toxicity included rales, gasping, ocular opacity, prostration, hypothermia, reduced body weight gain and food consumption, changes in clinical pathology, decreased thymus weight, and microscopic lesions in the nasal cavity. There was no effect on the male or female reproductive systems. It is not anticipated that the use of aqueous dilutions of this product would result in this type of aerosol exposure.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: (Oncorhynchus mykiss, 96 h): 4.5 mg/l The health hazard evaluation is based on the toxicological properties of a similar material.
NOEC (Oncorhynchus mykiss, 96 h): 3.2 mg/l The health hazard evaluation is based on the toxicological properties of a similar material.

Aquatic Invertebrates

Product: EC50 (Daphnia magna, 48 h): 24 mg/l
NOEC (Daphnia magna, 48 h): 5.6 mg/l The health hazard evaluation is based on the toxicological properties of a similar material.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

SILWET™ OPTIM

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: The product is not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Polyalkyleneoxide Modified No data available.
Heptamethyltrisiloxane

Other adverse effects: No data available.

13. Disposal considerations

General information: See Section 8 for information on appropriate personal protective equipment. The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground.

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of as unused product.

SILWET™ OPTIM

14. Transport information

DOT

UN Number:	UN 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Polyalkyleneoxide Modified Heptamethyltrisiloxane, Alcohols, C11-15-secondary, ethoxylated)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
Packing Group:	III
Marine Pollutant:	Yes

IMDG

UN Number:	UN 3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane, Alcohols, C11-15-secondary, ethoxylated)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
Packing Group:	III
Marine Pollutant:	Yes
Limited quantity	5.00L
Excepted quantity	E1

IATA

UN Number:	UN 3082
Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Polyalkyleneoxide Modified Heptamethyltrisiloxane, Alcohols, C11-15-secondary, ethoxylated)
Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
Packing Group:	III
Cargo aircraft only Packing Instructions:	964
Passenger and cargo aircraft Packing Instructions:	964
Limited quantity:	30.00L
Packing Instructions:	Y964
Excepted quantity	E1
Environmental Hazards:	Environmentally hazardous
Marine Pollutant:	Yes

SILWET™ OPTIM

Special precautions for user: This substance/preparation meets the criteria of a Marine Pollutant (see IMDG paragraph 2.9.3.3) but is not identified in the IMDG Code (Marpol list). As such, substance/preparation shall be transported as a marine pollutant in accordance with the IMDG code.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Polyalkyleneoxide Modified	Moderately irritating to the eyes.
Heptamethyltrisiloxane Alcohols, C11-15- secondary, ethoxylated	Causes mild skin irritation.; Corrosive to eyes
Oxirane, methyl-, polymer with oxirane	No OSHA Hazards
Polyalkylene Oxide	Causes mild skin irritation.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Serious eye damage or eye irritation

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

None present or none present in regulated quantities.

SILWET™ OPTIM

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Polyalkyleneoxide Modified Heptamethyltrisiloxane

Alcohols, C11-15-secondary, ethoxylated

Oxirane, methyl-, polymer with oxirane

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

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

US. Rhode Island RTK

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

SILWET™ OPTIM

Inventory Status:

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	2
Flammability	1
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date: 09/14/2020
Revision Date: No data available.
Version #: 3.0
Further Information: No data available.

SILWET™ OPTIM

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives. Keep out of the reach of children.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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