SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: Silwet™ L-7001 copolymer

Other means of identification
Synonyms: Siloxane Polyalkyleneoxide Copolymer

Recommended use and restriction on use
Recommended use: Industrial and Agricultural Use.
Restrictions on use: Not known.

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

Toxic to reproduction	Category 2
Specific Target Organ Toxicity - Single Exposure	Category 2[1.]
Specific Target Organ Toxicity - Repeated Exposure	Category 2[2.]

Target Organs
1. Respiratory system
2. Respiratory system

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: H361f; Suspected of damaging fertility.
H371; May cause damage to organs.
H373; May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention. IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

Storage: Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

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

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
butan-1-ol;ethane-1,2-diol;propane-1,2-diol, Ethylene oxide-propylene oxide copolymer monobutyl ether	9038-95-3	10 - <20%	No data available.
Octamethylcyclotetrasiloxane	556-67-2	0.1 - <1%	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

Ingestion: Do NOT induce vomiting. If conscious, drink plenty of water. Call a physician or poison control center immediately.

Inhalation: Move the exposed person to fresh air at once. Get medical attention.

Skin Contact: Wash area with soap and water. Get medical attention if symptoms persist.

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: Treatment is symptomatic and supportive. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (e.g., gastric lavage after endotracheal intubation).

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: 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 fire-fighters

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:	Caution: Contaminated surfaces may be slippery. Avoid contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment. Keep out of reach of children.
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.

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. Store in original container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source

None of the components have assigned exposure limits.

Appropriate Engineering Controls	Eye wash facilities and emergency shower should be available when handling this product. No special requirements under ordinary conditions of use and with adequate ventilation. Use only in well-ventilated areas.

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:	Use only in well-ventilated areas. 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:	Observe good industrial hygiene practices. Wash hands after handling. When using do not eat, drink or smoke. Provide adequate ventilation.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	< -29 °C
Initial boiling point and boiling range:	> 150 °C (1,013 hPa) Copolymer
Flash Point:	97 °C (ASTM D 93)
Evaporation rate:	< 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:	< 1.33 hPa (20 °C)
Vapor density:	> 1
Density:	1.03 g/cm3 (25 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.

Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	8.6 g/l ;

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:	None known.
Hazardous Decomposition Products:	In case of fire, gives off (emits): Carbon oxides Oxides of silicon. Formaldehyde. 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, males): > 5,000 mg/kg
Specified substance(s):	
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 4,800 mg/kg

Dermal

Product:	LD 50 (Rat, males): > 2,000 mg/kg
Specified substance(s):	
Octamethylcyclotetrasiloxane	LD 50 (Rat): > 2,375 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
Specified substance(s):	
Octamethylcyclotetrasiloxane	LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product:	No data available.

Skin Corrosion/Irritation

Product:	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): Not Classified

Serious Eye Damage/Eye Irritation

Product:	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): No eye irritation

Respiratory or Skin Sensitization

Product:	No data available.
Specified substance(s):	
Octamethylcyclotetrasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): Not sensitizing

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: positive Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)

In vivo

Product:	No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative

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.

Target Organs
Specific Target Organ Toxicity - Single Exposure**:** Respiratory system
Specific Target Organ Toxicity - Repeated Exposure**:** Respiratory system

Aspiration Hazard

Product:	No data available.

Other effects:	Vapor/Mist may cause:, - irritation of the eyes, nose, throat and respiratory tract, inhalation of harmful amounts of material No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	Octamethylcyclotetrasiloxane (D4) Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/kg/day,14 days), developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation), with D4. Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0.022 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0.015 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0.0044 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0.015 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0.022 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	3.7 % (29 d, 310 Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane	Bioconcentration Factor (BCF): 12,400

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

butan-1-ol;ethane-1,2-diol;propane-1,2-diol, Ethylene oxide-propylene oxide copolymer monobutyl ether	No data available.
Octamethylcyclotetrasiloxane	No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. 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.

14. Transport information

DOT
Not Regulated.

IMDG
Not Regulated.

IATA
Not Regulated.

Special precautions for user: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

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
None present or none present in regulated quantities.

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
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)

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

Chemical Identity	Threshold Planning Quantity

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting
None present or none present in regulated quantities.

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
Water
butan-1-ol;ethane-1,2-diol;propane-1,2-diol, Ethylene oxide-propylene oxide copolymer monobutyl ether
Oxirane, methyl-, polymer with oxirane, monobutyl ether
NJTS RTK 26175-2789A
NJTS RTK 26175-2789B

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

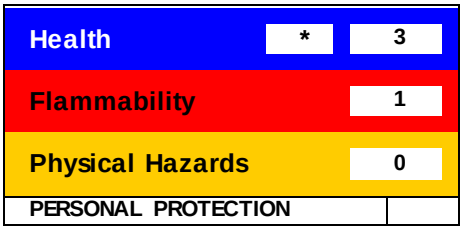
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

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

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

HMIS Hazard ID



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

Issue Date: 10/03/2023

Revision Date: No data available.

Version #: 2.1

Further Information: No data available.

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 asa guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warrantyor 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.