

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: SILWET L-77

Chemical name	Polyalkyleneoxide Modified Heptamethyltrisiloxane
INDEX No.	Not applicable
CAS-No.	27306-78-1
EC No.	608-078-3
REACH Registration No.	Polymer

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Industrial and Agricultural Use.

Uses advised against: Not for aerosol use

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Distributor Information : Momentive Performance Materials GmbH
Chempark Leverkusen Gebaeude V7
DE - 51368 Leverkusen
Germany

Contact person : commercial.services@momentive.com

Telephone : General information
00800.4321.1000 (Customer Service Centre)

1.4 Emergency telephone number : Europe, Israel & All other: +44 (0) 1235239670; Middle East: +44 (0) 1235239671

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Acute toxicity (Inhalation - vapor)	Category 4	H332: Harmful if inhaled.
Serious eye irritation	Category 2	H319: Causes serious eye irritation.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 2	H411: Toxic to aquatic life with long lasting effects.
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2.2 Label Elements

Contains: Polyalkyleneoxide modified Heptamethyltrisiloxane
Polyalkyleneoxide Modified Heptamethyltrisiloxane

SILWET L-77



Signal Words:

Warning

Hazard Statement(s):

H332: Harmful if inhaled.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect spillage.

Disposal:

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Unknown toxicity - Health

Acute toxicity, inhalation, vapor 0 %
Acute toxicity, inhalation, dust 0 %
or mist

Unknown toxicity - Environment

Acute hazards to the aquatic environment < 0,0001 %
Chronic hazards to the aquatic environment < 0,0001 %

Additional Information:

No data available.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

Chemical nature:

Polyalkyleneoxide Modified Heptamethyltrisiloxane

3.1 Substances

General information:

No data available.

Chemical name

Polyalkyleneoxide Modified Heptamethyltrisiloxane

INDEX No.:

Not applicable

CAS-No.:

27306-78-1

EC No.:

608-078-3

SILWET L-77

REACH Registration No.: Polymer
M-Factor: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Polyalkyleneoxide modified Heptamethyltrisiloxane	50 - <100%	27306-78-1	608-078-3	Polymer	No data available.	

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

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: After inhalation of aerosol/mist seek medical advice immediately. Move the exposed person to fresh air at once. If breathing is difficult, give oxygen. Call a physician or poison control center immediately.

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.

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.

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

4.2 Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: No data available.

SECTION 5: Firefighting measures

General Fire Hazards: Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

5.1 Extinguishing media Suitable extinguishing media:

Alcohol resistant foam. Carbon dioxide Dry chemical.

Unsuitable extinguishing media:

Avoid water in straight hose stream; will scatter and spread fire.

5.2 Special hazards arising from the substance or mixture:

In case of fire, carbon monoxide and carbon dioxide may be formed.

SILWET L-77

5.3 Advice for firefighters

Special fire fighting procedures:

All equipment used when handling the product must be grounded.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes, skin, and clothing. Avoid contact with liquid and vapors. Use personal protective equipment. Use only in well-ventilated areas.

6.2 Environmental Precautions:

Do not allow runoff to sewer, waterway or ground.

6.3 Methods and material for containment and cleaning up:

Absorb spillage with suitable absorbent material. Shovel up and place in a container for salvage or disposal.

6.4 Reference to other sections:

Remove sources of ignition. In case of spills, beware of slippery floors and surfaces. See Section 8 of the SDS for Personal Protective Equipment. Collect and dispose of spillage as indicated in section 13 of the SDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Provide adequate ventilation. Avoid inhalation of dust and vapors.

Storage conditions:

No data available.

7.2 Conditions for safe storage, including any incompatibilities:

Keep away from sources of ignition - No smoking. Use original container or packaging of similar material of construction

Storage Stability:

Material is stable under normal conditions.

7.3 Specific end use(s):

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
2-Propanol	TWA	400 ppm 999 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
	STEL	500 ppm 1.250 mg/m3	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)

Biological Limit Values

None.

8.2 Exposure controls

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

SILWET L-77

General information:	Use only in well-ventilated areas. Do not eat, drink or smoke when using the product. Wash hands after handling. Practice good housekeeping.
Eye/face protection:	Safety glasses with side-shields conforming to EN166
Skin protection	
Hand Protection:	<p>Advice: Chemical resistant gloves</p> <p>Advice: This recommendation is valid only for our Product as delivered. If this product will be mixed with other substances you need to contact a supplier of CE approved protective gloves (e.g. KCL GmbH, D-36124 Eichenzell, Tel. 0049 (0) 6659 87300, Fax. 0049 (0) 6659 87155, email: vertrieb@kcl.de).</p> <p>Material: 730 Camatril</p> <p>Minimum break through time: 480 min</p> <p>Glove thickness: 0,4 mm</p> <p>Guideline: EN 374</p>
Other:	Safety shoes Wear suitable protective clothing.
Respiratory Protection:	Respiratory protection complying with EN 143. Dust filter P2 (for fine dust).
Hygiene measures:	Do not breathe vapour/aerosol. When using do not eat, drink or smoke. Use only with adequate ventilation. Wash thoroughly after handling.
Environmental exposure controls:	No release to wastewater from process as such, wastewater emissions limited to release generated from final equipment cleaning step using water

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Polyether
Odor Threshold:	No data available.
pH:	5,4
Freezing point:	-1 °C
Boiling Point:	> 150 °C (1.013 hPa) Copolymer
Flash Point:	166 °C (Closed Cup)
Evaporation Rate:	< 1 (n-Butyl acetate=1)
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	< 1,33 hPa (20 °C)
Relative vapor density:	Heavier than air
Density:	1,0070 g/cm ³ (25 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Dispersible
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	> 3,29 ; pH 5 > 3,28 ; pH 7 > 3,60 ; pH 9
Autoignition Temperature:	334 °C

SILWET L-77

Decomposition Temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	24 mPa·s
Viscosity, kinematic:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous polymerization does not occur.
10.4 Conditions to avoid:	Keep away from heat, sparks and open flame.
10.5 Incompatible Materials:	Strong oxidizing agents.
10.6 Hazardous Decomposition Products:	In case of fire, gives off (emits): Carbon oxides Oxides of silicon. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

SECTION 11: Toxicological information

General information:	Aerosols of this product have a high inhalation toxicity potential. Therefore, when spraying this product and mixtures thereof with other components, exposure must be completely avoided. The use of respiratory equipment is mandatory for all spray applications.
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Information on likely routes of exposure

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

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	LD 50 (Rat): > 2.000 mg/kg Slightly toxic
Specified substance(s)	
Polyalkyleneoxide	LD 50 (Rat): > 2.000 mg/kg
modified	
Heptamethyltrisiloxane	

Dermal

Product:	LD 50 (Rat): > 2.000 mg/kg Slightly toxic
Specified substance(s)	
Polyalkyleneoxide	LD 50 (Rat): > 2.000 mg/kg

SILWET L-77

modified
Heptamethyltrisiloxane

Inhalation

Product: LC50 (Rat, 4 h): 2 mg/l Aerosols
Aerosols: LC50 (Rat, 4 h): > 11,78 mg/l Aerosols, 5% Diluted aqueous solution
ATEmix13,08 mg/l Vapour

Specified substance(s)

Polyalkyleneoxide LC50 (Rat, 4 h): 2 mg/l
modified LC50 (Rat, 4 h): > 11,78 mg/l
Heptamethyltrisiloxane

Repeated dose toxicity

Product: NOAEL (Rat, Oral, 28 d): 150 mg/kg (OECD 422)

Specified substance(s)

Polyalkyleneoxide NOAEL (Rat, Oral): 150 mg/kg
modified
Heptamethyltrisiloxane

Skin Corrosion/Irritation:

Product: (Rabbit): No skin irritation

Specified substance(s)

Polyalkyleneoxide (Rabbit): No skin irritation
modified
Heptamethyltrisiloxane

Serious Eye Damage/Eye Irritation:

Product: (Rabbit): Strongly irritating.

Specified substance(s)

Polyalkyleneoxide (Rabbit): Strongly irritating.
modified
Heptamethyltrisiloxane

Respiratory or Skin

Sensitization:

Product: (Guinea Pig) Did not cause sensitization on laboratory animals.

Specified substance(s)

Polyalkyleneoxide (Guinea Pig) negative
modified
Heptamethyltrisiloxane

Germ Cell Mutagenicity

In vitro

Product: Ames-Test: negative (not mutagenic)
Chromosomal aberration: negative (not mutagenic)
Mammalian cytogenicity test: negative (not mutagenic)

Specified substance(s)

Polyalkyleneoxide Ames-Test: negative
modified Chinese Hamster Ovary (CHO): negative
Heptamethyltrisiloxane Mammalian cytogenicity test: negative

In vivo

Product: No data available.

Specified substance(s)

SILWET L-77

Polyalkyleneoxide modified
Heptamethyltrisiloxane
Micronucleus test (Mouse): negative

Carcinogenicity

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Other effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: LC50 (Zebra Fish, 96 h): 6,8 mg/l

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
LC50 (Zebra Fish, 96 h): 6,8 mg/l

Aquatic Invertebrates

SILWET L-77

Product: EC50 (Daphnia magna, 48 h): 25 mg/l

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
EC50 (Daphnia similis, 48 h): 25 mg/l

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

Toxicity to Aquatic Plants

Product: EC50 (Algae (Pseudokirchneriella subcapitata), 96 h): 32 mg/l

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
EC50 (Algae, 96 h): 32 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: The product is not readily biodegradable.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
The product is not readily biodegradable.

BOD/COD Ratio

Product No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

Polyalkyleneoxide modified
Heptamethyltrisiloxane
No data available.

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

SILWET L-77

Polyalkyleneoxide modified
Heptamethyltrisiloxane No data available.

12.5 Results of PBT and vPvB assessment: No data available.

Polyalkyleneoxide modified
Heptamethyltrisiloxane No data available.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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 methods: Can be incinerated when in compliance with local regulations.

SECTION 14: Transport information

ADR

14.1 UN Number: UN 3082
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
Hazard No. (ADR): 90
Tunnel restriction code: (-)
14.4 Packing Group: III
14.5 Environmental Hazards: Environmentally hazardous
Marine Pollutant Yes

ADN

14.1 UN Number: UN 3082
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
14.4 Packing Group: III
14.5 Environmental Hazards: Environmentally hazardous
Marine Pollutant Yes

RID

14.1 UN Number: UN 3082
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
14.4 Packing Group: III
14.5 Environmental Hazards: Environmentally hazardous
Marine Pollutant Yes

SILWET L-77

IMDG

14.1 UN Number: UN 3082
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyalkyleneoxide Modified Heptamethyltrisiloxane)
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
EmS No.: F-A, S-F
14.4 Packing Group: III
14.5 Environmental Hazards: Environmentally hazardous
Marine Pollutant: Yes

IATA

14.1 UN Number: UN 3082
14.2 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Polyalkyleneoxide Modified Heptamethyltrisiloxane)
14.3 Transport Hazard Class(es):
Class: 9
Label(s): 9MI
14.4 Packing Group: III
14.5 Environmental Hazards: Environmentally hazardous
Marine Pollutant: Yes

14.6 Special precautions for user: Keep away from food, drink and animal feeding stuffs.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable

SECTION 15: Regulatory information

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

EU Regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Concentration
2-Propanol	67-63-0	0,1 - 1,0%

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens

SILWET L-77

and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 2012/18/EU (Seveso III): on the control of major accident hazards involving dangerous substances: none

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
2-Propanol	67-63-0	0,1 - 1,0%

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

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:	Not 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.
Korea Existing Chemicals Inv. (KECI):	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.
REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.

SECTION 16: Other information

SILWET L-77

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Wording of the H-statements in section 2 and 3

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Training information: No data available.

Classification according to Regulation (EC) No 1272/2008 as amended.

Acute Tox. 4, H332
Eye Dam. 2, H319
Aquatic Chronic 2, H411

Issue Date: 09.12.2020

Disclaimer:

Notice to reader

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.

They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives.

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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