SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: Silwet™ 408 Super Spreader

Other means of identification
Synonyms: Polyalkyleneoxide Modified Heptamethyltrisiloxane

Recommended use and restriction on use
Recommended use: Agricultural Use.
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

Acute toxicity (Inhalation - vapor)	Category 4
Serious Eye Damage/Eye Irritation	Category 2A

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: H332; Harmful if inhaled.
H319; Causes serious eye irritation.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. 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

Substances

Chemical Identity	CAS number	Content in percent (%)*
Polyalkyleneoxide Modified Heptamethyltrisiloxane	67674-67-3	50 - <100%

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

4. First-aid measures

Ingestion: Call a physician or poison control center immediately. Do NOT induce vomiting.

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

Skin Contact: Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

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: Wear self-contained breathing apparatus and protective clothing.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical. Carbon Dioxide. Alcohol-resistant foam Water spray, fog or mist.

Unsuitable extinguishing media: water jet

Specific hazards arising from the chemical: In case of fire, carbon monoxide and carbon dioxide may be formed. 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: No data available.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Avoid contact with skin and eyes. Consult the manufacturer before using an aerosol of the neat liquid. Keep out of reach of children. Attention: Not for injection into humans.

Methods and material for containment and cleaning up: Absorb spillage with suitable absorbent material.

Environmental Precautions: Prevent runoff from entering drains, sewers, or streams.

7. Handling and storage

Precautions for safe handling: Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Do not breathe vapor/spray.

Conditions for safe storage, including any incompatibilities: Keep container closed. Store in original container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Eye/face protection: No data available.

Skin Protection

Hand Protection: Use chemical-resistant, impervious gloves.

Other: No data available.

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: It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Polyether
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	< -20 °C (OECD Test Guideline 102)
Initial boiling point and boiling range:	> 150 °C (1,013 hPa) Copolymer
Flash Point:	118 °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:	0.000031 hPa (25 °C) (OECD Test Guideline 104)
Vapor density:	Heavier than air
Density:	1.02 g/cm3 (19.5 - 20.5 °C) (OECD Test Guideline 109)
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	< 0.115 g/l (19.5 - 20.5 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	5.88 - 6.14 (OECD 111) Using HPLC method
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	43.6 mm2/s (20 °C, OECD 114)
VOC:	12.1 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:	Keep away from heat, sparks and open flame.
Incompatible Materials:	Strong Acids, Strong Bases
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: > 2,000 mg/kg

Dermal
Product: LD50: > 4,000 mg/kg

Inhalation
Product: LC50: 0.907 - 2.644 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: OECD Test Guideline 404 Non irritating

Serious Eye Damage/Eye Irritation
Product: OECD Test Guideline 405 Irritating.

Respiratory or Skin Sensitization
Product: No data available.

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: (OECD 473)non-clastogenic to human lymphocytes

In vivo
Product: (OECD 474)negative (not mutagenic)

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.

Other effects: No adverse effects anticipated from available information. This material was not mutagenic in an Ames bacterial assay or 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: No data available.

Aquatic Invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:

Fish
Product: LC50 : 4.9 mg/l

Aquatic Invertebrates
Product: EC50 (Daphnia): 24 mg/l

Toxicity to Aquatic Plants
Product: EC50 (Algae): 8.2 mg/l

Persistence and Degradability

Biodegradation
Product: 62 % (28 d, OECD-Guideline 301 B (CO_2 Evolution Test)) 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: Log Kow: 5.88 - 6.14 (OECD 111) Using HPLC method

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
Polyalkyleneoxide Modified Heptamethyltrisiloxane: 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. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

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

Contaminated Packaging: No data available.

14. Transport information

DOT

UN number or ID number:	UN 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
Packing Group:	III
Marine Pollutant:	Yes

IMDG

UN number or ID number:	UN 3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
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 or ID number:	UN 3082
Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
Transport Hazard Class(es):	
Class:	9
Label(s):	9
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

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

Chemical Identity	OSHA hazard(s)
Polyalkyleneoxide Modified Heptamethyltrisiloxane	Moderately irritating to the eyes.
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

Acute toxicity (any route of exposure)
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

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
Polyalkyleneoxide Modified Heptamethyltrisiloxane
Polyalkylene Oxide

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

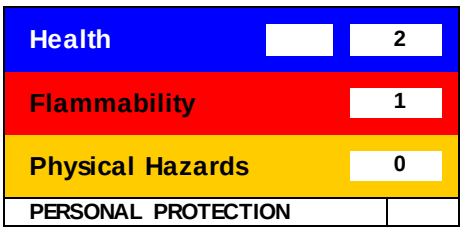
No ingredient regulated by RI Right-to-Know Law present.

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: Commercial Status: Active
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.

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: 12/04/2022

Revision Date:	No data available.
Version #:	3.4
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.