

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION
1.1 Product identifier

Product name: Polymethyldisiloxane

Product Number: SDF-600000

CAS No. 63148-62-9 / 9006-65-9 / 9016-00-6

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

Industrial

Intermediate chemical

1.3 Details of the supplier of the safety data sheet

Manufactured/Supplied by Silsource Inc.

ADDRESS: 10625 Bryant Sideroad, Port Perry, Ontario, L9L 2C6

CHEMICAL EMERGENCY ONLY (PHONE): CANUTEC (613) 996-6666 [24 Hr.]
SECTION 2: HAZARD IDENTIFICATION
2.1 Classification of the substance or mixture
Classification according to EU Directives 67/548/EEC or 1999/45/EC

This substance is not classified as dangerous

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram: None

Signal word : None

Hazard statement(s)

None

Precautionary statement(s)

None

2.3 Other hazards: None

HMIS® ratings Health: 0

Flammability: 0

Physical hazard: 0

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS
3.1 Substances

Synonyms: Dimethylpolysiloxane

Component	CAS:	Concentration
Polydimethylsiloxane	63148-62-9	100%

3.2 Mixtures

Not Relevant

SECTION 4: FIRST AID MEASURES
4.1 Description of first aid measures

General advice

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

If inhaled

Material cannot be inhaled under normal conditions. Get medical attention if symptoms occur.

In case of skin contact

After skin contact wipe off excess material with cloth or paper. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

In case of eye contact

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

Indication of any immediate medical attention and special treatment needed

Further toxicology information in section 11 must be observed.

SECTION 5: FIRE-FIGHTING MEASURES
5.1 Extinguishing media
Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Water jet

5.2 Special hazards arising from the substance or mixture

Risk of hazardous gasses or fumes in the event of fire. Exposure to combustion products may be a health hazard! Hazardous combustion products: carbon oxides, silicon oxides, incompletely burnt hydrocarbons, toxic and very toxic fumes.

5.3 Advice for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.

5.4 Further information

Use water spray to cool unopened containers and move containers from fire area if you can do so without risk.

SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material. HAZWOPER PPE Level: D

6.2 Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

6.3 Methods and materials for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water.

Large Spill(s): Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

Small Spill(s) : Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Never return spills in original containers for re-use.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Normal measures for preventive fire protection. Provide adequate ventilation. Use care in handling/storage.
Do not breathe mist or vapor. Spilled substance increases risk of slipping. Observe information in section 8.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses

no data available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when handling.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Recommended glove types: Protective gloves made of nitrile rubber

Thickness of the material: > 0, 1 mm

Breakthrough time: > 480 min

Recommended glove types: Protective gloves made of butyl rubber

Thickness of the material: > 0, 3 mm

Breakthrough time: > 480 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Note that, due to the numerous external influences (such as temperature), a chemically resistant protective glove in daily use may have a service life that is considerably shorter than the measured break through time.

Body Protection

Impervious clothing. the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

No personal respiratory protective equipment normally required.

In case of mist, spray or aerosol exposure wears suitable personal respiratory protection and protective suit. Suitable respiratory equipment: Filtering half-face mask, according to acknowledged standards such as EN 149.

Recommended Filter type: FFP1 or equivalent filter, according to acknowledged standards such as EN 149.

Observe the equipment manufacturer's information and wear time limits for respirators.

General hygiene considerations: Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above

Exposure to the environment limited and controlled

Prevent material from entering surface waters, drains or sewers and soil.

Further information for system design and engineering measures

Observe information in section 7. Observe national regulatory requirements in the presence of air.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Colourless liquid
Odour	Odourless
Odour Threshold	no data available
pH	approx. 7
Melting point/freezing Point	-50°C
Initial boiling point	not determinable
Flash point	>300°C
Evaporation rate	no data available
Upper/lower flammability or explosive limits	not applicable
Vapour pressure	not applicable
Vapour density	No data available
Relative density	0.97 g/cm ³ at 25 °C
Water solubility	virtually insoluble at 20°C
Partition coefficient:	No data available
Autoignition temperature	410°C
Decomposition temperature	Thermal Decomposition begins at > 250 °C
Viscosity	
Dynamic	600000 at 25°C
Kinematic	approx. 600000 mm ² /s at 25°C
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

None known

10.5 Materials to avoid

None known

10.6 Hazardous decomposition products

If stored and handled properly: none known. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

Further information:

Hazardous polymerization cannot occur.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Acute toxicity

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD50: > 5000 mg/kg Neither mortality nor clinical signs of toxicity were observed with the given dose.	rat	literature (Polydimethylsiloxane)
dermal	LD50: > 2008 mg/kg Neither mortality nor clinical signs of toxicity were observed with the given dose.	rat	literature (Polydimethylsiloxane)

Skin corrosion/irritation

Result/Effect	Species/Test system	Source
not irritating	rabbit	literature (Polydimethylsiloxane)

Serious eye damage/eye irritation

Result/Effect	Species/Test system	Source
not irritating	rabbit	literature (Polydimethylsiloxane)

Respiratory or skin sensitization

Route of exposure	Result/Effect	Species/Test system	Source
dermal	not sensitizing	guinea-pig; Magnusson-Kligman	literature (Polydimethylsiloxane) OECD 406

Germ cell mutagenicity

Based on known data a significant mutagenic potential may be excluded.

Product details: Result/Effect	Species/Test system	Source
negative	mutation assay (in vitro) bacterial cells	literature (Polydimethylsiloxane) OECD 471

Carcinogenicity

Animal tests have not revealed any carcinogenic effects.

Product details: Result/Effect	Species/Test system	Source
NOAEL: >= 1000 mg/kg NOAEL= NOAEL (carcinogenic effects)	carcinogenicity study rat (F344) oral(feed) 2 a	literature (Polydimethylsiloxane)

Reproductive toxicity

Animal tests have shown no indications of possibility of damage to embryo and impairment of fertility.

Result/Effect (Examinations of developmental toxicity and teratogenicity)	Species/Test system	Source
NOAEL (developmental): >= 1000 mg/kg NOAEL (maternal): >= 1000 mg/kg Symptoms/Effect: Nothing abnormal detected.	Developmental Toxicity Study rabbit oral (gavage); day 6 - 19 of gestation	literature (Polydimethylsiloxane)

Specific target organ toxicity - single exposure
Assessment:

For this endpoint no toxicological test data is available for the whole product.

Specific target organ toxicity - repeated exposure

For this endpoint no toxicological test data is available for the whole product.

Result/Effect	Species/Test system	Source
NOAEL: >= 1000 mg/kg NOAEL = NOAEL (systemic effects)	chronic study rat oral (feed) 1 a Follow-up observation period: 1 a	literature (Polydimethylsiloxane)

Potential health effects
Aspiration hazard

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Further toxicological information

Human patch test: Product displays good compatibility with the skin.

SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity
Assessment:

Based on available data no effects on aquatic organisms that are relevant for classification must be expected for the product up to its limits of water solubility. According to current knowledge adverse effects on water purification plants are not expected.

Result/Effect	Species/Test system	Source
> 1000 mg/l (nominal) effect level > maximum achievable concentration	static (water-accommodated fraction) Fish (96 h)	literature
EC50: > 0.0001 mg/l (measured) effect level > maximum achievable concentration	static (water-accommodated fraction) Daphnia magna (48 h)	literature
IC50 (growth rate): > 100000 mg/l (nominal)	static (water-accommodated fraction) Marine alga (skeleonema costatum) (72 h)	literature

NOEC: > 10000 mg/kg	feeding study rainbow trout (<i>Oncorhynchus mykiss</i>) (28 d)	literature
NOEC (mortality, growth, reproduction): > 500 mg/kg The exposure to treated sediment did not result in effects.	exposure via sediment <i>Daphnia magna</i> (21 d)	literature

12.2 Persistence and degradability

Assessment:

Silicone content: biologically not degradable. Elimination by adsorption to activated sludge. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

12.3 Bioaccumulative potential

Assessment:

Polymer component: Bioaccumulation is not expected to occur.

12.4 Mobility in soil

Assessment:

Polymer component: insoluble in water; adsorbs on soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Recommendation: Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Contaminated packaging

Recommendation: Completely discharge containers (no tear drops, no powder rest, scraped carefully).

Containers may be recycled or re-used. Observe local/state/federal regulations.

Uncleaned packaging should be treated with the same precautions as the material.

Waste Disposal Legislation Ref.No.(EC)

It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID:

Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: -

14.6 Special precautions for user

Read safety instructions, SDS and emergency procedures before handling

Transport in bulk according to This product is not intended to be transported in Bulk

Annex II of MARPOL 73/78 and the IBC Code
SECTION 15: REGULATORY INFORMATION
European Economic Area (EEA):

REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

SECTION 16: OTHER INFORMATION

This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use.

This SDS was prepared sincerely on the basis of the information we could obtain, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. Products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

This SDS is compliant with the GHS requirements outlined at
http://www.ccohs.ca/oshanswers/chemicals/whmis_ghs/sds.html

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