SILISIL Silicone Oil 10 cSt

Safety Data Sheet

SILITECH AG encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name
SILISIL Silicone Oil 10 cSt

Other names / Synonyms
Polydimethylsiloxane CAS No. 63148-62-9

Other means of identification
EC No.: 613-156-5
CAS No.: 63148-62-9

Relevant identified uses of the substance or mixture
Industrial Purposes
Restricted to professional users

Uses advised against
None known

Company Identification
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Emergency Telephone Number
Tox Info Suisse (24/7): +41 44 251 51 51 or 145 (Switzerland and Liechtenstein).

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Not classified according to Regulation (EC) No. 1272/2008 (CLP).

Other hazards
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. Mixture not classified for the aquatic environment per CLP Annex I 4.1.3; rationale in Section 12. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Product/ Substance	Identifiers	% w/w	Classification	Note
Polydimethylsiloxane	CAS No.: 63148-62-9 EC No.: 613-156-5 REACH: Index No.:	95-100%	-	-
Dodecamethylcyclohe-xasiloxane	CAS No.: 540-97-6 EC No.: 208-762-8 REACH: 01-2119517435-42-XXXX Index No.:	<1.5%	-	[3], [5], [6], [7]
Octamethylcyclotetrasi-loxane; [D4]	CAS No.: 556-67-2 EC No.: 209-136-7 REACH: 01-2119529238-36-XXXX Index No.: 014-018-00-1	<0.1%	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 (M=10)	[3], [5], [6], [7]

Constituents

Product/ Substance	Identifiers	% w/w	Classification	Note
Octamethylcyclotetrasi-loxane; [D4]	CAS No.: 556-67-2 EC No.: 209-136-7 REACH: 01-2119529238-36-XXXX Index No.: 014-018-00-1	<0.1%	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 (M=10)	[3], [5], [6], [7]

Mixtures

Not applicable. This product is a substance. See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[3] According to REACH, Annex XVII, the substance is subject to restrictions.
[5] Substance is included in the Candidate List of substances of very high concern (SVHC).
[6] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[7] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

4. FIRST AID MEASURES

Description of first aid measures

General Information
In the case of accident, contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drinks.

Inhalation
Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact
Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact
If in eyes, flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion
If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns
Not applicable.

Most important symptoms and effects, both acute and delayed
None known.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

Information to medics
Bring this safety data sheet or the label of this product.

5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

Special hazards arising from the substance or mixture
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

Advice for firefighters
No specific requirements

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Contaminated areas may be slippery.

Environmental precautions
Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized people away from the spill

Methods and materials for containment and cleaning up
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

7. HANDLING AND STORAGE

Precautions for safe handling
Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

Conditions for safe storage, including any incompatibilities
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage material
Keep only in original packaging.

Storage conditions
5 – 30 °C

Incompatible material
Strong acids, bases, strong oxidizing agents.

Specific end use(s)
This product should only be used for applications quoted in section 1.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Octamethylcyclotetrasiloxane; [D4]
No substances are listed in the national list of substances with an occupational exposure limit.

Octamethylcyclotetrasiloxane; [D4] is included in the national list of substances suspected of causing cancer.

SZW list of carcinogenic substances and processes, mutagenic or toxic for reproduction.

DNEL
Octamethylcyclotetrasiloxane; [D4]

Duration	Route of exposure	DNEL
Long term – Local effects - General population	Inhalation	13 mg/m³
Long term – Local effects - Workers	Inhalation	73 mg/m³
Long term – Local effects - General population	Inhalation	13 mg/m³
Long term – Local effects - Workers	Inhalation	73 mg/m³
Long term – Local effects - General population	Oral	3.7 mg/kg bw/day

PNEC
Octamethylcyclotetrasiloxane; [D4]

Route of exposure	Duration of exposure	DNEL
Freshwater	-	1.5 µg/L
Freshwater sediment	-	3 mg/kg
Marine water	-	150 ng/L
Marine water sediment	-	300 µg/kg
Predators	-	41 mg/kg
Sewage treatment plant	-	10mg/L
Soil	-	840 µg/kg

Exposure controls
Apply general control to prevent unnecessary exposure.

General recommendations
Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios
There are no exposure scenarios implemented for this product.

Exposure limits
Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures
Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures
In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measure to avoid environmental exposure
No specific requirements.

Individual protection measures, such as personal protective equipment
Generally
Use only CE marked protective equipment.

Respiratory equipment
No specific requirements.

Skin protection
No specific requirements.

Hand protection
No specific requirements.

Eye protection

Type	**Standards**
Safety glasses with side shields	EN166

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Colorless
Odor / Odor Threshold	Characteristic
pH	No data available
Density (g/cm³)	0.97
Kinematic viscosity	5 – 100000 centistokes
Dynamic viscosity	3 mm^2/s
Particle characteristics	Not applicable – product is a liquid
Melting/Freezing point (°C)	No data available
Softening Point/Range	Does not apply to liquids
Boiling point (°C)	No data available
Vapor Pressure	No data available
Relative vapor density	No data available
Decomposition temperature (°C)	No data available
Flash point (°C)	150 °C
Flammability (°C)	No data available
Auto-ignition temperature (°C)	No data available
Lower/upper explosion limit (% v/v)	No data available
Solubility in water	Insoluble
N-octanol/water coefficient (LogKow)	No data available
Solubility in fat (g/L)	No data available
Other physical and chemical parameters	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

Possibility of hazardous reactions
None known.

Conditions to avoid
None known.

Incompatible materials
Strong acids, bases, strong oxidizing agents.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity
Based on available data for the mixture, the classification criteria are not met.

Skin corrosion/irritation
Based on available data for the mixture, the classification criteria are not met.

Serious eye damage/irritation
Based on available data for the mixture, the classification criteria are not met.

Respiratory sensitisation
Based on available data for the mixture, the classification criteria are not met.

Skin sensitisation
Based on available data for the mixture, the classification criteria are not met.

Germ cell mutagenicity
Based on available data for the mixture, the classification criteria are not met.

Carcinogenicity
Based on available data for the mixture, the classification criteria are not met.

Reproductive toxicity
Based on available data for the mixture, the classification criteria are not met.

STOT-single exposure
Based on available data for the mixture, the classification criteria are not met.

STOT-repeated exposure
Based on available data for the mixture, the classification criteria are not met.

Aspiration hazard
Based on available data for the mixture, the classification criteria are not met.

Long term effects
None known.

Endocrine disrupting properties
This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

12. ECOLOGICAL INFORMATION

Toxicity
Based on available data for the mixture, the classification criteria are not met. Analogue/tested-mixture evidence (OECD GD-23 WAF/WSF): PDMS silicone fluids of comparable viscosity to this product produce water-accommodated/soluble fractions at ng/L levels with no acute effects in Daphnia (48 h). A 21-day Daphnia life-cycle study with PDMS-amended sediment reported no adverse effects and no PDMS detected in overlying water. Considering this product is a PDMS silicone oil containing trace octamethylcyclotetrasiloxane (D4), the maximum dissolved D4 released from the product as supplied is expected to remain below chronic effect thresholds (Daphnia NOEC 0.0079 mg/L; rainbow trout early-life NOEC ≥0.0044 mg/L). On this basis — and per CLP Annex I 4.1.3 (precedence of tested/analogue data over summation) — the mixture is not classified for the aquatic environment. [References: see Section 16].

Persistence and degradability
Octamethylcyclotetrasiloxane; [D4]

Compartment	Water
Duration	28 days
Result	3.7 %
Conclusion	Not biodegradable
Test	OECD 310
Stability in water (1/2 life)	Hydrolysis, DT50 half-life: 3.9 days pH 7, 25 °C OECD 111

Bioaccumulative potential
Octamethylcyclotetrasiloxane; [D4]

BCF	>3000
LogKow	6.49
Conclusion	High potential for bioaccumulation

Mobility in soil
No data available.

Results of PBT and vPvB assessment
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

Endocrine disrupting properties
This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

Other adverse effects
None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC Code
Not applicable.

Contaminated packing
Packaging containing residues of the product must be disposed of similarly to the product.

14. TRANSPORT INFORMATION

	UN/ID	UN proper shipping name	Hazard classes	PG*	Env**	Other Information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group
** Environmental hazards

Additional information
Not dangerous goods according to ADR, IATA and IMDG.

Special precautions for users
Not applicable.

Maritime transport in bulk according to IMO instruments
No data available.

15. REGULATORY INFORMATION

Restrictions for application
Restricted to professional users.

Demands for specific education
No specific requirements.

SEVESO-Categories/Dangerous substances
Not applicable.

Additional information
Not applicable.

Sources
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Chemical safety assessment
No.

16. OTHER INFORMATION

Abbreviations and acronyms
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of
1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information
Classification rationale – Aquatic environment:
Mixture classification for the aquatic environment has been set using the tested/analogue route in accordance with CLP Annex I, 4.1.3 (precedence of tested mixture/bridging/analogue data over the summation method). Water-accommodated/soluble fractions (WAF/WSF) from PDMS silicone oils of comparable viscosity show ng/L aqueous concentrations with no acute effects in Daphnia and no adverse effects in a 21-day Daphnia life-cycle (sediment) study; the maximum dissolved D4 expected from the product as supplied is below chronic effect thresholds (Daphnia NOEC 0.0079 mg/L; fish early-life NOEC ≥0.0044 mg/L). See Section 12 for details.

The safety data sheet is validated by
Regulatory

Other
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: CH-en