

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Number: SC-9100
Chemical name: Octamethylcyclotetrasiloxane
CAS No.: 556-67-2

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

For industrial use, dispersant, paint additive

1.3 Details of the supplier of the safety data sheet

Manufactured/Supplied by Silsource Inc.
ADDRESS: 240 Mary Street, Port Perry, ON L9L 1B7

CHEMICAL EMERGENCY ONLY (PHONE): CANUTEC [24 Hr.] CANADA 888-226-8832 or 613-996-6666
CHEMTREC [24 Hr.] USA 1-800-262-8200

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable Liquids Category 3

2.2 Label elements



Signal word

Warning

Hazard statement

H226 Flammable liquid and vapour.
H302 Harmful if swallowed
H312 Harmful in contact with skin
H361 Suspected of damaging fertility or the unborn child
H413 Harmful to aquatic life with long lasting effects

Precautionary statements

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion proof electrical /ventilating/ equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response
P303+P361+P353 If on skin (or hair): IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312 Call a POISON CENTER/doctor, if you feel unwell.

Storage

P330 Rinse mouth.

P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor, if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P403+P235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

2.3 Other hazards not contributing to the classification

None known

Supplemental information

None

HMIS® ratings

Health: 1

Flammability: 3

Physical Hazard: 0

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

EC No.	CAS No.	Material	Content %
209-136-7	556-67-2	Octamethylcyclotetrasiloxane	≥ 99

Not a hazardous substance or mixture

3.2 Mixtures

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled: Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing consult a physician immediately.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.

If swallowed: Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

4.2 Most important symptoms and effects, both acute and delayed: Direct contact with eyes may cause temporary irritation.

4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Symptoms may be delayed.

General Information

If exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Flammable. Vapors are heavier than air and may travel to a source of ignition and flash back. Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. By heating and fire, harmful vapours/gases may be formed

5.4 Advice for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots and wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. On large fires use dry chemical, foam or water spray. On small fires use CO₂, dry chemical or water spray. Water can be used to cool fire exposed containers. Fight fire from a safe distance, with adequate cover. Prevent fire extinguishing water from contaminating surface water or the ground water system.

5.5 Additional advice

In case of fire: do not breathe fumes. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Use spark proof tools and explosion proof equipment.

6.4 Reference to other sections

Wear personal protective equipment; see section 8.

Disposal considerations; see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures: Handling is performed in a well ventilated place. Wear suitable protective equipment.
Avoid contact with skin and eyes.

Measures to prevent fire Keep away from heat/sparks/open flames/ hot surfaces.

Measures to prevent aerosol and dust generation: Avoid formation of dust and aerosols.

Advice on general occupational hygiene: Wash hands and face after using of the substances. Replace the contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Keep containers tightly closed. Keep containers in a dry, cool and well ventilated place. Keep away from heat/sparks/open flames/hot surfaces. Store away from incompatible materials and foodstuff containers.

7.3 Specific end uses

no data available

Applications; see Section 1.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Maximum allowable concentration

Occupational Exposure limit values: No information available

Biological limit values: No information available

Monitoring methods

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air

(Series standard)

Derived No effect level(DNEL):

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Octamethylcyclotetrasiloxane	Inhalation	No data	No data	73mg/m ³	73mg/m ³
	Oral	No data	No data	No data	No data
	Dermal	No data	No data	No data	No data

Predicted No effect Concentration (PNEC): No data available.

8.2 Engineering controls:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion proof electrical/ventilating/lighting/equipment. Set up emergency exit and necessary risk elimination area.

8.3 Personal protection equipment

General requirement: General Ventilation is recommended, appropriate respiration. Protection should be worn.

Eye protection: Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).

Hand protection: Wear protective gloves (such as butyl rubber, passing the test s according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

Respiratory protection: If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full face respirator with multi purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

Skin and body protection: Wear fire/flame resistant/retardant clothing and antistatic boots.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance:	Transparent
Molecular mass :	296.6158 g/mol
Color:	Colorless
Odor :	No data available
Odor Threshold:	No data available
Refractive index:	1.3815
pH:	No data available
Relative evaporation rate (butyl acetate=1):	~ 1
Melting point:	17.5°C

Freezing point :	No data available
Boiling point :	175°C
Flash point :	56°C
Decomposition temperature:	313°C
Vapor pressure:	133.3Pa
Relative vapor density at 20°C:	> 1
Relative density:	0.96
Solubility:	Insoluble in water.
Log Pow:	No data available
Log Kow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosion limits:	No data available

9.2 Other information:

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Contact with incompatible substances can cause decomposition or other chemical reactions.

10.2 Chemical stability

Stable under proper operation and storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Incompatible materials, heat, flame and spark.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal breakdown during fire or very high heat conditions may evolve the following hazardous decomposition product: Silicon dioxide, carbon oxide and traces of incompletely burned carbon compounds, and formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Component	CAS NO.	LD50 (Oral)	LD50 (dermal)	LD50 (inhalation, 4h)
Octamethylcyclotetrasiloxane	556-67-2	1540mg/kg(Rat)	1770mg/kg(Rat)	36mg/L(Rat)

11.2 Carcinogenicity

CAS No.	Component	IARC	NTP
556-67-2	Octamethylcyclotetrasiloxane	Not Listed	Not Listed

SECTION 12: ECOLOGICAL INFORMATION

12.1 Acute aquatic toxicity

No data available

12.2 Chronic aquatic toxicity

No data available

12.3 Persistence and degradability

CAS No.	Component	Persistence (water/soil)	Persistence (air)
556-67-2	Octamethylcyclotetrasiloxane	High	High

12.4 Bioaccumulative potential

CAS No.	Component	Bioaccumulative potential	Comments
556-67-2	Octamethylcyclotetrasiloxane	High	BCF=12400

12.5 Mobility in soil

CAS No.	Component	Mobility in soil	Soil organic carbon water partitioning coefficient (KOC)
556-67-2	Octamethylcyclotetrasiloxane	Low	17960

12.6 Results of PBT and vPvB assessment

CAS No.	Component	Results of PBT and vPvB assessment (according to EC NO.2015/830)
556-67-2	Octamethylcyclotetrasiloxane	not PBT/vPvB

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Before disposal should refer to the relevant national and local laws and regulation.
Recommend the use of incineration disposal.

Uncleaned packaging: Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

SECTION 14: TRANSPORT INFORMATION

14.1 Land transport ADR and RID

Class: 3
Packaging group: III
UN No: 1993
Proper shipping name: Combustible liquid, n.o.s. (Octamethylcyclotetrasiloxane)

14.2 Transport by sea IMDG Code:

Class: 3
Packaging group: III
UN No: 1993
Proper shipping name: Combustible liquid, n.o.s. (Octamethylcyclotetrasiloxane)
Marine pollutant: No

14.3 Air transport ICAO TI/IATA DGR:

Class: 3
Packaging group: III
UN No: 1993
Proper shipping name: Combustible liquid, n.o.s. (Octamethylcyclotetrasiloxane)

14.4 Environmental hazards

No hazardous.

SECTION 15: REGULATORY INFORMATION

15.1 International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Octamethylcyclotetrasiloxane	✓	✓	✓	✓	✓	✓	✓	✓	✓

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

- 【DSL】 Canadian Domestic Substances List
- 【IECSC】 China Inventory of Existing Chemical Substances
- 【NZIoC】 New Zealand Inventory of Chemicals
- 【PICCS】 Philippines Inventory of Chemicals and Chemical Substances
- 【KECI】 Existing and Evaluated Chemical Substances
- 【AICS】 Australia Inventory of Chemical Substances
- 【ENCS】 Existing And New Chemical Substances

15.2 European chemical inventory

Component	A	B	C	D	E	F	G
Octamethylcyclotetrasiloxane	✓	X	X	✓	✓	X	X

- 【A】 Candidate list of Substances of Very High Concern for authorization under EU REACH regulation
- 【B】 Substances requiring authorisation under EU REACH regulation
- 【C】 Substances restricted under EU REACH
- 【D】 Pre registered substances under EU REACH
- 【E】 Registered substances under EU REACH
- 【F】 Substance Evaluation CoRAP under EU REACH
- 【G】 List of priority substances under EU water policy Directive 2455 /2001/EC

Note

“✓” Indicates that the substance included in the regulations

“X” That no data or included in the regulations

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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