



# SILTECH CORP.

## Safety Data Sheet

Prepared in accordance with GHS standard  
& Annex II - EC regulation 1907/2006 and amendments

Siltech CF-954  
SDS No: 0025

Last Revision Date: March 28, 2014

### SECTION 1. IDENTIFICATION

**Material Identification:** Siltech CF-954

**Chemical Name:** Octamethylcyclotetrasiloxane

**Chemical Classification:** Silicone

**CAS#:** 556-67-2

**INCI Name:** Cyclotetrasiloxane

**Company Identification:** Siltech Corp.

225 Wicksteed Avenue

Toronto, Ontario

Canada

M4H 1G5

(416) 424-4567

**Recommended Product Usage**

Cosmetic Additives, Solvent, Intermediates

**CANUTEC 24-HOUR EMERGENCY RESPONSE TELEPHONE NUMBER: (613) 996-6666**

**USE IN CASE OF A DANGEROUS GOODS EMERGENCY**

### SECTION 2. HAZARD(S) IDENTIFICATION

**HAZARD CLASSIFICATION:**

Flammable liquid: Category 3

Reproductive toxicity: Category 2

Chronic aquatic hazard: Category 4

**GHS LABEL ELEMENTS** (including precautionary statements):

Symbol :



Signal Word:

Warning

Hazard Risk Statement:

H226: Flammable liquid and vapour.

H361: Suspected of damaging fertility.

H413: May cause long lasting harmful effects to aquatic life.

Precautionary Statement:

P210: Keep container tightly closed and away from ignition sources such as heat, sparks and open flame. NO SMOKING.

Prevention:

P240: Ground all equipment and use only non-sparking tools.

P273: Avoid release to the environment.

P262: Do not get in eyes, on skin, or on clothing.

Response:

P305 + P351: IF IN EYES: Rinse with water for several minutes. Repeat if needed.

P303 + P361+P353: IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage:

P403 + P235: Store in well-ventilated place. Keep cool.

Disposal:

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

**OTHER HAZARD** (risk not included in classification):

Vapours may form explosive mixtures with air.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Common Name or Synonym</u>	<u>CAS No.</u>	<u>EINECS/ELINCS No.</u>	<u>% (w/w)</u>	<u>GHS Classification</u>	<u>Classification according to Directive 67-548/EEC</u>
Octamethylcyclotetrasiloxane	D4	556-67-2	209-136-7	100	Flammable liquid: Category 3 Reproductive toxicity (Inhalation ó vapour): Category 2 Chronic aquatic hazard: Category 4	Xn R62 R53

### SECTION 4. FIRST AID MEASURES

**Eyes** No first aid should be needed. If discomfort occurs, flush with water.

**Skin**: No first aid should be needed.

**Inhalation**: If discomfort occurs, remove to fresh air. Obtain medical attention.

**Ingestion**: If discomfort occurs, obtain medical attention.

### SECTION 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**: Carbon dioxide, foam, or water spray. Water can be used to cool fire exposed containers.

**Unsuitable Extinguishing Media**: None known.

**Specific Hazards Arising from the Chemical**: Fire burns more vigorously than would be expected. Vapours are heavier than air and can travel along ground to remote ignition sources. Vapours may form explosive mixtures with air.

**Special Protective Actions for Fire-Fighters**: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Use water spray to cool fire exposed containers.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Protective Equipment**: Avoid eye and skin contact. Use personal protective equipment. Eliminate all possible sources of ignition.

**Environmental Precautions**: Prevent from entering drains or water sources.

**Containment/Clean up**: Collect for disposal. Clean up remaining materials from spill with suitable absorbent. For large spills provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean area as appropriate since some silicone material, even in small quantities, may present a slip hazard. Final cleaning may require steam, solvents or detergents.

### SECTION 7. HANDLING AND STORAGE

**Handling Precautions**: Electrostatic charges may be generated during transfer of product from its container. Ensure that all equipment is grounded. Avoid eye and skin contact. Do not take internally. Use with adequate ventilation. Wash after handling. Exercise good industrial hygiene practice.

**Storage Conditions**: Keep container tightly closed and store in a flameproof, well ventilated area.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMIT VALUES / BIOLOGICAL LIMIT VALUES:

#### Industrial Hygiene Standards

<u>Ingredient</u>	<u>CAS No.</u>	<u>Exposure Limit</u>
None known.		

#### ENGINEERING CONTROLS:

Local Ventilation: Recommended.  
General ventilation: Recommended.

#### PERSONAL PROTECTIVE EQUIPMENT:

Respiratory protection: In the case of vapour formation use a respirator with an approved filter.  
Hand protection: Gloves are not normally required.  
Eye protection: Safety glasses should be worn.  
Skin protection: Protective equipment is not normally required.  
Hygiene measures: Observe good industrial hygiene practices. Wash after handling.

**Note:** These precautions are for room temperature handling. Use at elevated temperatures or aerosol spray applications may require added precautions.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Clear Liquid	<u>Viscosity@25°C:</u>	2 cps
<u>Colour:</u>	Colourless to Yellow	<u>Melting/Freezing Point:</u>	17.5°C
<u>Odour:</u>	Odourless	<u>Initial Boiling Point:</u>	175°C @ 760 mmHg
<u>Odour Threshold:</u>	Not determined	<u>Boiling Range:</u>	Not determined
<u>Flash Point:</u>	57°C (Pensky-Martens closed cup)	<u>Explosive Properties:</u>	No
<u>Flammability:</u>	Not determined	<u>Vapour Pressure @20°C:</u>	0.12 kPa
<u>Flammability Limits:</u>	Lower = 0.75% / Upper = 7.4%	<u>Vapour Density</u>	Not determined
<u>Auto-ignition Temperature:</u>	400°C	<u>Partition Coefficient</u>	5.1
<u>Decomposition Temperature:</u>	Not determined	<u>pH:</u>	Not determined
<u>Specific Gravity @25°C:</u>	0.95	<u>Oxidising Properties:</u>	No
<u>Solubility in Water:</u>	Insoluble	<u>Evaporation Rate:</u>	< 1

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Eliminate all possible sources of ignition.

**Incompatible Materials:** Strong oxidizing material can cause a reaction.

**Hazardous Decomposition Products:** The following decomposition products may form during fire or at very high temperatures: Carbon Oxides, Silicon dioxide, Formaldehyde, and traces of incompletely burned carbon compounds.

## SECTION 11. TOXICOLOGICAL INFORMATION

### LIKELY ROUTES OF EXPOSURE:

<b>Respiratory:</b>	Exposure is expected.
<b>Oral:</b>	Exposure is expected.
<b>Eye, Skin:</b>	Exposure is expected.

### INFORMATION ON THE HEALTH HAZARDS:

<b>Acute Toxicity:</b>	Inhalation LC50 (Rat) : 36mg/l ó 4hr vapour
<b>Eyes:</b>	Direct contact may cause temporary redness and discomfort.
<b>Skin:</b>	No significant irritation expected from a single short-term exposure.
<b>Inhalation:</b>	No significant irritation expected from a single short-term exposure.
<b>Ingestion:</b>	Low ingestion hazard in normal use.
<b>Chronic Toxicity:</b>	
<b>Skin:</b>	No known applicable information.
<b>Inhalation:</b>	Suspected of damaging fertility.
<b>Ingestion:</b>	Repeated ingestion or swallowing large amounts may injure internally. Recent results from a 2 year repeated vapour inhalation exposure study to rats of D4 indicate effects (benign uterine adenomas) in the uterus of female animals. These effects, which have been shown to be rat-specific, occur at the highest exposure does (700 ppm) only, a level that greatly exceeds typical workplace or consumer exposures. Industrial, commercial, or consumer uses of products containing D4 do not represent a risk to humans.
<b>Other Health Hazard</b>	
<b>Skin Corrosion/Irritation:</b>	No known applicable information.
<b>Serious Eye Damage/Irritation:</b>	No known applicable information.
<b>Respiratory Sensitization:</b>	No known applicable information.
<b>Skin Sensitization:</b>	No known applicable information.
<b>Carcinogenicity:</b>	No known applicable information.
<b>Germ Cell Mutagenicity:</b>	No known applicable information.
<b>Reproductive Toxicity:</b>	No known applicable information.
<b>Specific Target Organ:</b> (Systemic Toxicity ó Single exposure)	No known applicable information.
<b>Specific Target Organ:</b> (Systemic Toxicity ó Repeated exposure)	No known applicable information.
<b>Aspiration Hazard:</b>	No known applicable information.

## SECTION 12. ECOLOGICAL INFORMATION

### **ECOTOXICITY:**

#### **Environmental Effects**

##### **Acute:**

No adverse effects on aquatic organisms.

##### **Chronic:**

May cause long-term adverse effects in the aquatic environment.

Adverse effects have only been observed in closed test systems.

### **PERSISTENCE AND DEGRADABILITY:**

#### **Degradation:**

Low molecular weight siloxanes have a very low water solubility and evaporate to air where they are degraded. In soil, siloxanes are also degraded.

#### **Environmental Fate and Distribution:**

Siloxanes are removed from water by sedimentation sewage or binding to sludge.

### **BIOACCUMULATIVE POTENTIAL:**

#### **Bioaccumulation:**

Low molecular weight volatile siloxanes bioconcentrate in fish exposed under controlled laboratory conditions that are not representative of conditions found in the environment.

### **MOBILITY IN SOIL:**

None known.

### **OTHER ADVERSE EFFECTS:**

None known.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Product Disposal:** Do not dispose of waste into sewer. Dispose of in accordance with local regulations.

**Packaging Disposal:** Dispose of in accordance with local regulations.

## SECTION 14. TRANSPORTATION INFORMATION

### AIR TRANSPORT (IATA):

**UN No.:** 1993  
**Proper Shipping Name:** Flammable liquid, n.o.s. (Cyclopolydimethylsiloxane)  
**Class:** 3  
**Packing group:** III  
**Labels:** Flammable Liquid

### SEA TRANSPORT (IMDG):

**UN No.:** 1993  
**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (Cyclopolydimethylsiloxane)  
**Class:** 3  
**Packing group:** III  
**Emergency Schedule:** F-E  
**(EmS):** S-E  
**Labels:** Flammable liquid

### ROAD / RAIL:

**ADR/RID**  
**UN No.:** 1993  
**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S. (Cyclopolydimethylsiloxane)  
**Class:** 3  
**Packing group:** III  
**Labels:** 3

### **CANADA TDG REGULATION**

**Shipping Name:** Flammable liquid, N.O.S. (Octamethylcyclotetrasiloxane)  
**Technical Name:** Cyclopolydimethylsiloxane  
**Primary Class:** 3  
**Subsidiary Risk:** Not assessed  
**Product Identification Number:** UN 1993  
**Packing Group:** III

### **US DOT (49 CFR 172.101)**

**Shipping Name:** Combustible liquid, N.O.S. (Octamethylcyclotetrasiloxane)  
**Technical Name:** Contains Cyclopolydimethylsiloxane  
**Primary Class:** 3  
**Subsidiary Risk:** Not assessed  
**Product Identification Number:** UN 1993  
**Packing Group:** III

## SECTION 15. REGULATORY INFORMATION

### CHEMICAL INVENTORIES:

**TSCA:** All ingredients are on the inventory.  
**DSL:** All ingredients are on the inventory.  
**EINECS:** All ingredients are on the inventory.  
**AICS:** All ingredients are on the inventory.  
**IECSC:** All ingredients are on the inventory.  
**MITI:** All ingredients are on the inventory.  
**KECL:** All ingredients are on the inventory.  
**NZIoC:** All ingredients are on the inventory.  
**PICCS:** All ingredients are on the inventory.

### CANADA

This product has been classified in accordance with the hazard criteria of the CPR, and this MSDS contains all the information required by the CPR.

**WHMIS Classification: CLASS B - Division 3**  
**CLASS D- Division 2A**

### USA

#### **EPA SARA Title III Chemical Listings:**

Section 302 Extremely Hazardous Substances (40 CFR 355): **None**  
Section 304 CERCLA Hazardous Substances (40 CFR 302): **None**  
Section 311/312 Hazard Class (40 CFR 370): **Acute: No; Chronic: No; Fire: Yes; Pressure: No; Reactive: No**  
Section 313 Toxic Chemicals (40 CFR 372): **None**

### Supplemental State Compliance Information

#### **California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm: **None known.**

#### **Massachusetts / New Jersey / Pennsylvania Right-to-know Laws**

No ingredients regulated by MA/NJ/PA Right-to-know Laws present.

HMIS	
<b>H</b>	1
<b>F</b>	2
<b>R</b>	0



### KOREA

**Classification and labelling in accordance with Industrial Safety and Health Law:** No subject chemicals.

**Chemicals controlled in accordance with Toxic Chemicals Control Act:** No subject chemicals.

**Hazardous Material Safety Management Act:** **Classification:** Class 4 2<sup>nd</sup> type petroleum's ó non water soluble liquids  
**Hazardous ranking:** Hazardous rank III  
**Signal Word:** Keep away from fire

**Wastes Management Act:** Product should be disposed of in accordance with Waste Management Law Article 13.

### EEC

#### **Labelling according to EEC Directive**

S-phrases: **S51** (Use only in well-ventilated areas)

R-phrases: **R53** May cause long-term adverse effects in the aquatic environment / **R62** Possible risk of impaired fertility.

### GERMANY

**Wassergefährdungsklasse** (water hazard class) : WGK 2

## SECTION 16. OTHER INFORMATION

The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This data is offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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