SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: MethylHydrogen silicone fluid

Product Number: SS-6020

CAS No: 63148-57-2 or 9004-73-3

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, Canada

240 Mary Street, Port Perry, Ontario, L9L 1B7, Canada

CHEMICAL EMERGENCY ONLY (PHONE): CANUTEC (613) 996-6666 [24 Hr.]

CHEMTREC 1-800-424-9300 [24 Hr.]

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Not applicable for GHS classification

2.2 Label elements

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

Pictogram: **None**

Signal word: None

Hazard statement(s): None

Physical hazards Chemical compound containing silicon-hydrogen bonds (SiH).

During storage this product may generate hydrogen gas.

Precautionary statement(s)

Prevention: None

Response: Not applicable

Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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

P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards – Product can release hydrogen. Risk of hydrogen gas formation with water, alcohols, acids, metallic salts, amines and alkalis. In combination with oxygen, the released hydrogen can form oxyhydrogen.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms: Poly(methylhydrosiloxane), MH fluid

Component	CAS No.	Concentration
Methylhydrogen silicone fluid	63148-57-2 or 9004-73-3	90~100%

3.2 Mixtures

Not Relevant

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice:	Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.
If inhaled:	Move to fresh air.
In case of skin contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).
In case of eye contact:	In the case of contact with eyes, rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Seek medical advice in case of continuous irritation.
If swallowed:	Clean mouth with water. Do NOT induce vomiting. Get medical attention and show attending Doctor this Safety Data Sheet.
Most important symptoms and effects, both acute and delayed:	Any relevant information can be found in other parts of this section.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Fires can be controlled with water spray, foam or carbon dioxide. Larger fires are best fought with alcohol-resistant aqueous film forming foam (AFFF-AR).

Unsuitable extinguishing media

water jet, extinguishing powder, halon.

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. With the use of water-based extinguishing agents care is required because hydrogen can be released, which accumulates after extinguishing the fire in poorly ventilated or confined areas and may re-fire or cause an explosion. Foam carpets may also include hydrogen or flammable vapors, which can lead to surface bursts. Remove sources of ignition during cleaning and absorbing.

5.3 Advice for firefighters

Use respiratory protection independent of recirculated air. Keep unprotected persons away.

5.4 Further information

Fires involving SiH polysiloxane materials can be difficult to extinguish under certain circumstances.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment (see section 8). Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. The ground may be slippery. Avoid slipping.

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/provincial/federal regulations. Do not flush away with water.

For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations.

For large amounts: Liquids may be recovered using suction devices or pumps. Use only air driven or properly rated electrical equipment. Use vented recovery containers. 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.

Further information:

Exhaust vapors. Eliminate all sources of ignition. Consider explosion protection. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Do not blend contaminated material with uncontaminated material. Do not seal collecting vessel gas-tight. Observe notes under section 7.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Open and handle container with care. Keep container closed when not in use. Keep away from incompatible substances in accordance with section 10. Where possible, inert process equipment and blanket vessels, tanks and containers with nitrogen to reduce the available oxygen level. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping. Observe information in section 8.

Advice on protection against fire and explosion:

Product can release hydrogen. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water. See Section 8 of the SDS.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Do not store in virgin glass containers with basic surface. Observe local/provincial/federal regulations.

Advice for storage of incompatible materials:

Do not store with: basic substances (e.g. alkalis, ammonia, amines), oxidizing agents, strong acids . Observe local/provincial/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.

7.3 Specific end uses

no data available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Maximum airborne concentrations at the workplace:

CAS No.	Material	Type	mg/m^3	ppm	Dust fract.	Fibre/m3
	Aerosol - respirable fraction		10.0			

The aerosol limit specified is a recommendation should aerosol be formed during processing.

8.2 Exposure controls

Appropriate engineering controls

Provide sufficient ventilation during operations which cause vapor formation. Observe standard industrial hygiene practices for the handling of chemical substances. Do not eat, drink or smoke when handling. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Protective goggles. Eye wash bottle with pure water and safety shower.

Skin protection/ Body Protection

Hand protection

Use of protective gloves is recommended when handling the material.

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.

Wear suitable protective clothing.

Respiratory protection

No personal respiratory protective equipment normally required.

In case of mist, spray or aerosol exposure wear 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.

Exposure to the environment limited and controlled

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Colorless
Odor:	Characteristic odor
Odor threshold:	No data available.
pH:	Not applicable.
Melting point /Freezing Point:	No data available
Initial Boiling point and boiling range	No data available
Flash point:	121°C [closed cup]
Evaporation rate:	Not available

Flammability(solid, gas):	Not available
Upper/Lower Flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	0.99
Solubility:	Not available
Partition coefficient of n-octanol/water:	Not available
Autoignition temperature:	270°C
Decomposition temperature:	Not available
Viscosity	20 mm^2/s at 25°C.
Explosive properties:	Not available
Oxidising properties:	Not available

9.2 Other safety information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

In contact with incompatible substances this material may quickly generate a large volume of flammable hydrogen gas.

10.3 Possibility of hazardous reactions

During Storage, This product may generate hydrogen gas. Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid

moisture. Heat, open flames, and other sources of ignition. Contact with contaminated piping or vessels or with corroded and rusty containers can increase the rate of hydrogen formation. Observe information in section 7.

10.5 Incompatible materials

Reacts violently with: acids , basic substances (e.g. alkalis, ammonia, amines) . Reacts with: alcohols , water , moisture , oxidizing agents , catalyst . Reaction causes the formation of: hydrogen.

10.6 Hazardous decomposition products

hydrogen. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150°C (302°F) through oxidation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product details:

Route of exposure	Result/Effect	Species
Oral	LD50 > 100,000 mg/kg	Rat
Dermal	Not available	

Skin corrosion/irritation:

Not available

Serious eye damage/ eye irritation:

Not available

Respiratory or skin sensitization:

Not available

Mutagenicity:

Not available

Carcinogenicity

Not available

Reproductive toxicity

Not available

Specific target organ toxicity - single exposure

Not available

Specific target organ toxicity - repeated exposure

Not available

Aspiration hazard

Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Fish

Not available

Invertebrate

Not available

Algae

Not available

Persistence

[Siloxanes and Silicones, Me hydrogen] : log Kow = 3.74 (Estimates)

Degradability

Not available

Bio-accumulative potential

Not available

Mobility in soil

Not available

Results of PBT and vPvB assessment

Not available

Other adverse effects

no data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods

General information: The user's attention is drawn to the possible existence of local regulations before disposal.

Disposal methods: Risk of oxyhydrogen formation upon contact with the substances mentioned in 10. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Wastes of this material should not be mixed with other wastes. Provide measures such as vented bungs to ensure pressure relief in the waste containers. Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, Provincial, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Packaging: Containers may contain hazardous quantities of hydrogen gas. Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials. Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/provincial/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.
Disposal needing attention: 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. International Regulation

Road and Rail Transport (ADR/RID):	Not regulated.
Sea Transport (IMDG):	Not regulated.
Air Transport (IATA):	Not regulated.
Environmental hazards:	Hazardous to the environment: no
Special precautions for user:	Air transport: Due to safety reasons no air transport of inner packagings > 1kg! Relevant information in other sections has to be considered.
Transport in bulk according to Annex II of MARPOL and the IBC Code	Bulk transport in tankers is not intended.

SECTION 15: REGULATORY INFORMATION

15.1.1. Europe regulatory

REACH Restricted substance under REACH
Not applicable
REACH Substances subject to authorization under REACH
Not applicable
REACH SVHC
Not applicable
Europe PBT
Not applicable
European Union (EU) Transport of Dangerous Goods by Road - Dangerous Goods List
Not applicable

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