

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**1.1 Product identifier**

Product name: Octadecyltrimethoxysilane
Product Number: SS-5020
CAS No. 3069-42-9

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

Recommended use: Laboratory chemicals, synthesis of substances, laboratory reagent

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 [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]

Serious eye damage/eye irritation (Category 2)
Skin corrosion/irritation (Category 2A)

2.2 Label elements

Pictogram



Signal word

Warning

Hazard statement(s)

Causes skin irritation.
Causes serious eye irritation.

Precautionary statement(s)**Prevention**

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash thoroughly with lots of water. If skin irritation occurs seek medical advice or attention. Remove any contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation continues, seek medical advice or attention.

2.3 Other hazards:

None known

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Substance/Mixture:**

Synonyms Trimethoxy(octadecyl)silane
Percent: >80.0%
CAS RN: 3069-42-9
EC-No: 221-339-2
Formula $C_{21}H_{46}O_3Si$

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

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin contact:

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

Ingestion:

Get medical advice/attention if you feel unwell. Rinse mouth.

Protection of first-aiders:

A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention:

Not available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

Do not use a solid stream of water.

5.2 Special hazards arising from the substance or mixture:

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fumes. Carbon dioxide, Carbon monoxide, Hydrogen chloride, Silicon oxides.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

5.4 Special protective equipment for firefighters:

When extinguishing fire, be sure to wear personal protective equipment. Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive

7.3 Specific end uses

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A ventilation system in the workplace to remove potential dusts, mists, gases, fumes, and vapours is best.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8 inch minimum). 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.

Body Protection

Wear suit to completely protect against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state (20°C):	Liquid
Form:	Clear
Color:	Colorless - Very pale yellow
Odour	no data available
Odour Threshold	no data available
Melting point/freezing point	no data available
pH	no data available
Boiling point range	170°C
Flash point	140°C (284°F)
Vapour pressure	no data available
Decomposition temperature	no data available
Vapour density	no data available
Relative density	0.89 g/cm ³
Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available
Log Pow:	No data available
Evaporation rate (Butyl Acetate=1):	No data available
Autoignition temperature:	No data available
Flammability (solid, gas):	No data available
Flammability or explosive limits:	
Lower:	No data available
Upper:	No data available
Solubility(ies):	
[Water]	No data available
[Other solvents]	No data available

9.2 Other safety information

no data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under proper conditions.

10.3 Possibility of hazardous reactions

No special reactivity has been reported.

10.4 Conditions to avoid

Open flame

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Hydrogen chloride, Silicone oxides

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Exotoxicity

Fish: No data available

Crustacea: No data available

Algae: No data available

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil

Log Pow: No data available

Soil adsorption (Koc): No data available

Henry's Law (PaM3/mol): No data available

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other adverse effects No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely. Dispose of as unused product.

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: no

14.6 Special precautions for user

no data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006

Not listed

Chemical safety assessment

A chemical safety assessment has not been carried out.

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

Date Updated: 20 AUGUST 2024

Version: 1.0