SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Number: PROSILANE™ SC-5222
Chemical name: DIMETHYLDIETHOXYSILANE
CAS No.: 78-62-6

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

For Industrial Use
Intermediate chemical

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 GHS Classification

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

Class	Category	H-Code
Flammable liquids	2	H225

Label elements

Labeling as per (EU) 1272/2008)

GHS Label elements

Signal Word Danger

Hazard statement(s)

H-Code	Hazard statements
H225	Highly flammable liquid and vapor

Precautionary statement(s)

P-Code	Precautionary statements
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.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection.
P370+P378	In case of fire: Use extinguishing powder, alcohol-resistant foam or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to waste disposal. EC-No.214-189-4

2.2 Other hazards

Inhalation of aerosol spray may damage health.
Product hydrolyses, producing ethanol (CAS no. 64-17-5). Ethanol is highly flammable.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	CAS number	Concentration
Diethoxy dimethyl silane	78-62-6	<=100

Type: INHA: ingredient, VERU: impurity Classification codes are explained in section 16.

3.2 Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information	In case of accident or if you feel unwell seek medical advice (show label or SDS where possible).
If inhaled	Provide fresh air.
If skin contact	Wash with plenty of water or water and soap. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).
If in eyes	Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation.
If swallowed	Give several small portions of water to drink. Do not induce vomiting

Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

Indication of any immediate medical attention and special treatment needed

Further toxicology information in section 1 1 must be observed.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water mist, extinguishing powder , alcohol-resistant foam , carbon dioxide , sand

5.2 Specific hazards during fire fighting

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

5.3 Special method

Extinguishing media which must not be used for safety reasons: water jet

5.4 Special protective equipment for firemen

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapors/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

6.2 Environmental preventive measures

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 restraining and cleaning up the spills

Take up mechanically and dispose of according to local/state/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. If flammable, only air driven or properly rated electrical equipment should be used. 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.

6.4 Further information:

Exhaust vapors. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

6.5 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Must be syphoned off in situ. Spilled substance increases risk of slipping. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Observe information in section 8. Keep away from incompatible substances in accordance with section 10.

7.2 Precautions against fire and explosion

Product may release ethanol. 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.

7.3 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

7.4 Advice for storage of incompatible materials:

Observe local/state/federal regulations.

7.5 Further information for storage:

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

7.6 Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Maximum allowable concentration

Component	CAS number	Maximum allowable concentration
Methanol	67-56-1	1000 ppm

8.2 Exposure controls

Exposure in the work place limited and controlled

Avoid contact with eyes and skin. Do not inhale gases/vapor/aerosols. Do not eat, drink or smoke when handling.

Personal protection

Respiratory protection:

In case of long or strong exposure: gas mask filter ABEK.

Hand protection:

Protective gloves made of butyl rubber. Gloves suitable for up to 60 minutes' use. The selection of appropriate gloves not only depends on the material, but also on other quality characteristics, and may vary depending on the manufacturer. Please observe information from your glove supplier in terms of permeability and breakthrough time.

Eye protection:

Tight fitting protective goggles.

Skin and body protection:

Protective clothing.

Environmental protection

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

Further information for system design and engineering measures

Observe information in section 7.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state / form	liquid	
Color:	colorless	
Odor:	slight	
pH:	not applicable	
Melting point/range	< -70 ° C	
Boiling point/range	113 ° C at 1013 hPa	
Flash point:	13 ° C	
Lower explosion limit (LEL)	no data available	
Upper explosion limit (UEL)	no data available	
Vapor pressure:	60 hPa at 50 ° C	
	27 hPa at 20 ° C	
Water solubility/miscibility:	virtually insoluble	
Relative gas/vapor density	No data known.	
Relative Density	0,83 (25 ° C)	
	(Water/ 4 ° C = 1,00)	
Density	0,83 g/cm3 (25 ° C)	
Partition coefficient: n-octanol/water		No data known.
Ignition temperature	275 ° C	DIN 51794
Viscosity,(dynamic)	0,5 mPa.s at 25 ° C	

Explosion group	II B
Molecular mass	148,3
Other information	

Hydrolysis products reduce the flash point. Explosion limits for released ethanol: 3.5 - 15%(V).

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical stability:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known. Relevant information can possibly be found in other parts of this section.

10.2 Reactivity

Conditions to avoid:

moisture , Heat, open flames, and other sources of ignition.

Incompatible materials

Reacts with: water , basic substances and acids . Reaction causes the formation of: ethanol.

Hazardous Decomposition Products:

By hydrolysis: ethanol.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity

Product details:

Route of exposure	Result/effect	Species/Test system	Source
Oral	LD50: 9280 mg/kg	Rat	RTECS
Oral	LD50: 11300 mg/kg	Rat	test report
Dermal	LD50: 13280 mg/kg	Rat	test report
By inhalation	At the technically highest possible concentration no mortality in animal test.		No data available

11.2 Skin corrosion/irritation Product details

Result/effect	Species/test system	Source
not irritating	No data available	Conclusion by analogy

11.3 Serious eye damage/eye irritation

Product details

Result/effect	Species/test system	Source
not irritating	No data available	Conclusion by analogy

11.4 Respiratory or skin sensitization

Product details

Route of exposure	Result/effect	Species/test system	Source
Dermal	Not sensitizing	guinea-pig	test report OECD 406

11.5 Germ cell mutagenicity Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.6 Carcinogenicity Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.7 Reproductive toxicity Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.8 Specific target organ toxicity (single exposure) Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.9 Specific target organ toxicity (repeated exposure) Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.10 Aspiration hazard Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.11 Further toxicological information

Hydrolysis product / impurity: Ethanol (64-17-5) is readily absorbed at all exposure routes. Ethanol may cause irritation of eyes and mucosa, trigger dysfunction of the central nervous system and cause nausea as well as dizziness. Chronic exposure to high amounts of ethanol may cause damage to liver and central nervous system.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity Assessment:

No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

Result/effect	Species/test system	Source
LC50:＞1000 mg/l	rainbow trout (Oncorhynchus mykiss)(96h)	literature
EC50: > 1000 mg/l	Daphnia magna (48 h)	literature
IC50 :> 2000 mg/l	Selenastrum capricornutum (72 h)	literature

12.2 Residual/degradability:

Contact with water liberates ethanol and silanol- and/or siloxanol-compounds.

12.3 Bioaccumulative potential:

No data known

12.4 Mobility in Soil:

No data known

12.5 Additional Environmental Information:

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Material

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Uncleaned packaging

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

Waste Disposal Legislation Ref. No.(EC)

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. Dispose of in accordance with local regulations.

13.2 Packaging disposal:

Dispose of in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

UN number; UN proper shipping name; Transport hazard class(es); Packing group

14.1 Road ADR

Valuation	Dangerous Goods
UN number	2380

14.2 UN Proper Shipping Name

Proper shipping name	Dimethyldiethoxysilan
Class	3
Packing group	II

14.3 Railway RID:

Valuation	Dangerous Goods
UN number	2380
Proper shipping name	Dimethyldiethoxysilan
Class	3
Packing group	II

14.4 Transport by sea IMDG-Code

Valuation	Dangerous Goods
UN number	2380

Proper shipping name	Dimethyldiethoxysilan
Class	3
Packing group	II

14.5 Air transport ICAO-TI/IATA-DGR:

Valuation	Dangerous Goods
UN number	2380
Proper shipping name	Dimethyldiethoxysilan
Class	3
Packing group	II

14.6 Environmental hazards:

Hazardous to the environment:	no
Marine Pollutant (IMDG):	no

14.7 Special precautions for user:

Relevant information in other sections has to be considered.

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

National and local regulations must be observed.

For information on labelling please refer to section 2 of this document.

15.2 Relevant regulations:

SI 2002/1689: CHIP Regulations 2002

SI 2002/2677: COSHH Regulations 2002

SI 1999/3242: Management of Health & Safety at Work Regulations 1999 Health & Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.

Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

15.3 Chemical safety assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product

15.4 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

South Korea (Republic of Korea):	ECL (Existing Chemicals List):
	This product is listed in, or complies with, the substance inventory.
Japan	ENCS (Handbook of Existing and New Chemical Substances):
	This product is listed in, or complies with, the substance inventory.
Australia:	AICS (Australian Inventory of Chemical Substances):
	This product is listed in, or complies with, the substance inventory.
People's Republic of China:	IECSC (Inventory of Existing Chemical Substances in China):
	This product is listed in, or complies with, the substance inventory.
Canada:	DSL (Domestic Substance List):
	This product is listed in, or complies with, the substance inventory.
Philippines:	PICCS (Philippine Inventory of Chemicals and Chemical Substances):
	This product is listed in, or complies with, the substance inventory.
United States of America (USA):	TSCA (Toxic Substance Control Act Chemical Substance Inventory):
	This product is listed in, or complies with, the substance inventory.
Taiwan (Republic of China) :	TCSI (Taiwan Chemical Substance Inventory):
	This product is listed in, or complies with, the substance inventory.
European Economic Area (EEA)	REACH (Regulation (EC) No 1907/2006)

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: 6 JUNE 2025
Version: 1.0