

## SAFETY DATA SHEET

Version 6.5  
Revision Date 10/28/2021  
Print Date 02/05/2022

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Chloro(chloromethyl)dimethylsilane

Product Number : 226181  
Brand : Aldrich  
CAS-No. : 1719-57-9

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

Identified uses : Laboratory chemicals, Synthesis of substances

**1.3 Details of the supplier of the safety data sheet**

Company : Sigma-Aldrich Inc.  
3050 SPRUCE ST  
ST. LOUIS MO 63103  
UNITED STATES

Telephone : +1 314 771-5765  
Fax : +1 800 325-5052

**1.4 Emergency telephone**

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-  
527-3887 CHEMTREC (International) 24  
Hours/day; 7 Days/week

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Skin corrosion (Category 1A), H314  
Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

|                            |                                                                                                                                                                            |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard statement(s)        |                                                                                                                                                                            |
| H225                       | Highly flammable liquid and vapor.                                                                                                                                         |
| H302                       | Harmful if swallowed.                                                                                                                                                      |
| H314                       | Causes severe skin burns and eye damage.                                                                                                                                   |
| Precautionary statement(s) |                                                                                                                                                                            |
| P210                       | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.                                                                                                        |
| P233                       | Keep container tightly closed.                                                                                                                                             |
| P240                       | Ground/bond container and receiving equipment.                                                                                                                             |
| P241                       | Use explosion-proof electrical/ ventilating/ lighting/ equipment.                                                                                                          |
| P242                       | Use only non-sparking tools.                                                                                                                                               |
| P243                       | Take precautionary measures against static discharge.                                                                                                                      |
| P264                       | Wash skin thoroughly after handling.                                                                                                                                       |
| P270                       | Do not eat, drink or smoke when using this product.                                                                                                                        |
| P280                       | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                                                              |
| P301 + P312 + P330         | IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.                                                                                                |
| P301 + P330 + P331         | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                                                                         |
| P303 + P361 + P353         | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.                                                                       |
| P304 + P340 + P310         | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.                                                       |
| P305 + P351 + P338 + P310  | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. |
| P363                       | Wash contaminated clothing before reuse.                                                                                                                                   |
| P370 + P378                | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.                                                                                       |
| P403 + P235                | Store in a well-ventilated place. Keep cool.                                                                                                                               |
| P405                       | Store locked up.                                                                                                                                                           |
| P501                       | Dispose of contents/ container to an approved waste disposal plant.                                                                                                        |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Reacts violently with water.  
Lachrymator.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                                    |
|------------------|----------------------------------------------------|
| Synonyms         | : CMDMCS<br>(Chloromethyl)dimethylchlorosilane     |
| Formula          | : C <sub>3</sub> H <sub>8</sub> Cl <sub>2</sub> Si |
| Molecular weight | : 143.09 g/mol                                     |
| CAS-No.          | : 1719-57-9                                        |
| EC-No.           | : 217-006-6                                        |

| Component                                 | Classification              | Concentration |
|-------------------------------------------|-----------------------------|---------------|
| <b>(chloromethyl)dimethylchlorosilane</b> |                             |               |
|                                           | Flam. Liq. 2; Acute Tox. 4; | <= 100 %      |

|  |                                                   |  |
|--|---------------------------------------------------|--|
|  | Skin Corr. 1A; Eye Dam. 1; H225, H302, H314, H318 |  |
|--|---------------------------------------------------|--|

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>) Dry powder

#### Unsuitable extinguishing media

Foam Water

### 5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

May not get in touch with: Water

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Keep workplace dry. Do not allow product to come into contact with water.

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Never allow product to get in contact with water during storage.

Handle and store under inert gas.

#### Storage class

Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### **Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

##### **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.

Full contact

Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 120 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

##### **Body Protection**

Flame retardant antistatic protective clothing.

##### **Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

## Control of environmental exposure

Do not let product enter drains. Risk of explosion.

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### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

|    |                                              |                                                                     |
|----|----------------------------------------------|---------------------------------------------------------------------|
| a) | Appearance                                   | Form: clear, liquid<br>Color: light brown                           |
| b) | Odor                                         | pungent                                                             |
| c) | Odor Threshold                               | No data available                                                   |
| d) | pH                                           | No data available                                                   |
| e) | Melting point/freezing point                 | Melting point/range: < -75 °C (< -103 °F)                           |
| f) | Initial boiling point and boiling range      | 114 °C 237 °F at 1,003 hPa - lit.                                   |
| g) | Flash point                                  | 22 °C (72 °F) - closed cup                                          |
| h) | Evaporation rate                             | No data available                                                   |
| i) | Flammability (solid, gas)                    | No data available                                                   |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 51.5 %(V)<br>Lower explosion limit: 1.4 %(V) |
| k) | Vapor pressure                               | 43 hPa at 20 °C (68 °F) - Regulation (EC) No. 440/2008, Annex, A.4  |
| l) | Vapor density                                | No data available                                                   |
| m) | Density                                      | 1.086 g/cm3 at 25 °C (77 °F) - lit.                                 |
|    | Relative density                             | No data available                                                   |
| n) | Water solubility                             | No data available                                                   |
| o) | Partition coefficient: n-octanol/water       | No data available                                                   |
| p) | Autoignition temperature                     | No data available                                                   |
| q) | Decomposition temperature                    | No data available                                                   |
| r) | Viscosity                                    | No data available                                                   |
| s) | Explosive properties                         | No data available                                                   |
| t) | Oxidizing properties                         | none                                                                |

#### 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Vapors may form explosive mixture with air.  
Reacts violently with water.

### 10.2 Chemical stability

sensitive to moisture

### 10.3 Possibility of hazardous reactions

increased reactivity with:

Water  
Alcohols  
alkalines  
Oxidizing agents  
bases  
Amines  
acids

### 10.4 Conditions to avoid

Do not allow water to enter container because of violent reaction.  
Warming.  
Moisture.

### 10.5 Incompatible materials

Metals

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male and female - 200 - 2,000 mg/kg  
(OECD Test Guideline 423)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Inhalation: No data available

Dermal: No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: Causes severe burns. - 4 h

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Methylchlorosilane

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

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Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

### **Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

### **Reproductive toxicity**

No data available

### **Specific target organ toxicity - single exposure**

Corrosive to the respiratory tract.

### **Specific target organ toxicity - repeated exposure**

No data available

### **Aspiration hazard**

No data available

## **11.2 Additional Information**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Decomposition of the substance with tissue moisture.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

|                                                     |                                                                                                                                          |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)<br>Remarks: (in analogy to similar products) |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

### **12.2 Persistence and degradability**

|                  |                                                                                                                                                           |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 9 - 10 % - Not readily biodegradable.<br>(OECD Test Guideline 301F)<br>Remarks: (in analogy to similar compounds) |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

### **12.3 Bioaccumulative potential**

No data available

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#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Endocrine disrupting properties

No data available

#### 12.7 Other adverse effects

Discharge into the environment must be avoided.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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### SECTION 14: Transport information

#### DOT (US)

UN number: 2985    Class: 3 (8)    Packing group: II  
Proper shipping name: Chlorosilanes, flammable, corrosive, n.o.s.  
Reportable Quantity (RQ):  
Poison Inhalation Hazard: No

#### IMDG

UN number: 2985    Class: 3 (8)    Packing group: II    EMS-No: F-E, S-C  
Proper shipping name: CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.

#### IATA

UN number: 2985    Class: 3 (8)    Packing group: II  
Proper shipping name: Chlorosilanes, flammable, corrosive, n.o.s.  
IATA Passenger: Not permitted for transport

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### SECTION 15: Regulatory information

#### SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

#### Massachusetts Right To Know Components

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No components are subject to the Massachusetts Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

(chloromethyl)dimethylchlorosilane

CAS-No.  
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Revision Date

**New Jersey Right To Know Components**

(chloromethyl)dimethylchlorosilane

CAS-No.  
1719-57-9

Revision Date

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**SECTION 16: Other information**

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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