



## Safety Data Sheet

According to Regulation (EC) 1907/2006



2776 Chlorotrimethylsilane

# Identification of the substance/preparation and of the company or firm

## 1.1 Identification of the substance or preparation

Name:

Chlorotrimethylsilane

## 1.2 Synonym:

TMCS, Trimethylchlorosilane, Trimethylsilyl Chloride

## 1.3 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

## 1.4 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

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Emergencies:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

# Identification of dangers

Classification of the substance or the mixture.

**Classification Regulation (CE) n° 1272/2008.**

Flam. Liq. 2

Skin Corr. 1A

STOT SE 3

## Hazard Pictograms



## Signal word

Danger

## Hazard statements

H225 Highly flammable liquid and vapour.

EUH014 Reacts violently with water.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

## Precautionary statements

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.

## Classification (67/548/CEE or 1999/45/CE).

R37

**C** Corrosive R35

**F** Highly flammable R14

R11

For the full text of the R-phrases mentioned in this section, see section 16.

# Component Composition/Information

Name: Chlorotrimethylsilane

Formula: (CH<sub>3</sub>)<sub>3</sub>SiCl M.= 108,64 CAS [75-77-4]

EC number (EINECS): 200-900-5

## First aid

### 4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

### 4.2 Inhaling:

Take the person out into the fresh air.

### 4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

### 4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

### 4.5 Swallowing:

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance.

## Fire-fighting means

### 5.1 Suitable fire-extinguishing means:

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

### 5.2 Fire-fighting means which must NOT be used:

Water.

### 5.3 Special risks:

Flammable. Keep away from sources of ignition. In the event of fire, toxic fumes may form. The fumes are heavier than air, so they may spread at floor level. May form explosive mixtures with the air. Keep the workplace dry. The substance must not come into contact with water.

### 5.4 Protective equipment:

## Measures to be taken in the event of accidental spillage

### 6.1 Individual precautions:

Do not inhale the fumes. Avoid contact with the skin, eyes or clothing.

### 6.2 Precautions for care of the environment:

Avoid pollution of the soil, water supplies and drains.

### 6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

## Handling and storage

### 7.1 Handling:

Handle under an extractor fan.

### 7.2 Storage:

Well sealed containers. Dry atmosphere. In well ventilated premises. Away from sources of ignition and heat. In a cool place.

## Staff exposure/protection controls

### 8.1 Technical protective measures:

### 8.2 Exposure limit control:

### 8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection.

### 8.4 Hand protection:

Use suitable gloves

### 8.5 Eye protection:

Use suitable goggles.

### 8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done. Do not inhale the substance.

### 8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

## Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry:

Odour: Characteristic.

pH:

Melting point/freezing point: -40 °C

Initial boiling point and boiling range: 58 °C

Flash point: - 18 °C
Flammability (solid, gas):
Upper/lower flammability or explosive limits: 6 %(V) / 1,8 %(V)
Vapour pressure: 253 hPa (20 °C)
Vapour density:
Relative density: (20/4) 0,86
Solubility: Reacts violently in water. Soluble in chloroform and ether.
Partition coefficient: n-octanol/water:
Auto-ignition temperature: 417 °C
Decomposition temperature:
Viscosity:

## Stability and reactivity

### 10.1 Conditions which should be avoided:

High temperatures. Humidity.

### 10.2 Matter which should be avoided:

Water. Alcohols. Alkaline solutions. Metals. Flammable substances.

### 10.3 Hazardous decomposition products:

Hydrogen chloride. Phosgene.

### 10.4 Complementary information:

Moisture sensitive.

## Toxicological information

- **Acute toxicity:**

LC L0 inh mus : 100 mg/m<sup>3</sup>

- **Dangerous effects for health:**

The data we have are insufficient for correct toxicological assessment. Based on the physico-chemical properties, the likely dangerous characteristics are: Very corrosive substance. Causes Burns in the mucosae, skin and eyes If fumes inhaled: Burns in the mucosae. Upon contact with the skin: burns Through contact with the eyes: burns sight disorders blindness (irreversible injury of the optic nerve) If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Risk of perforation in the oesophagus and stomach. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

# Environmental information

## 12.1 Mobility:

## 12.2 Ecotoxicity:

12.1.1 - EC50 test (mg/l):

Fish test 25 mg/l

Classification:

Toxic (HCl)

Leuciscus idus (48h)(HCl 1N) 862 mg/l

Classification:

Very toxic

12.2.2 - Receptor medium:

Risk for the water environment

Medium

Risk for the land environment

Medium

12.2.3 - Observations:

Has a major acute effect on the water and land environment depending on pH.

The product reacts with water.

## 12.3 Degradability:

12.3.1 - Test:

12.3.2 - Biotic degradation classification:

BOD5/COD

Biodegradability

12.3.3 - Abiotic degradation depending on pH:

12.3.4 - Observations:

Data not available.

## 12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk

12.4.3 - Observations:

Data not available.

## 12.5 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

Following reaction, HCl can form, which is lethal for fish as from 25 mg/l.

## Considerations regarding elimination

### 13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

### 13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

## Information concerning transport

Overland (ADR):

Technical name: TRIMETHYLCHLORO-SILANE

UN 1298 Class: 3 8 Packaging group: II (D/E)

By sea (IMDG):

Technical name: TRIMETHYLCHLORO-SILANE

UN 1298 Class: 3 8 Packaging group: II

By air (ICAI-IATA):

Technical name: Trimethylchlorosilane

UN 1298 Class: 3 8 Packaging group: II

Packaging instructions: CAO 304 PAX 306

## Regulatory information

# Other information

## Other precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P321 Specific treatment (see on this label).

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use for extinction.

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.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

## Labelling (65/548/CEE or 1999/45/CE)

R-pharse(s):	<b>R37</b> Irritating to respiratory system. <b>R35</b> Causes severe burns. <b>R14</b> Reacts violently with water. <b>R11</b> Highly flammable.
S-pharse(s):	<b>S36/37/39</b> Wear suitable protective clothing, gloves and eye/face protection. <b>S29</b> Do not empty into drains. <b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. <b>S16</b> Keep away from sources of ignition - No smoking. <b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the lable where possible).



The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

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