



1. Identification of the substance

Chemical Name : Trimethyl Chlorosilane – TMCS

Synonyms : Trichloromethyl silane, Chlorotrimethylsilane, Methyltrichlorosilane,

Chloromethyltrimethylsilane, Trimethylmonochlorosilane

Chemical Formula : C₃H₉ClSi

CAS No. : 75-77-4

2. Composition/Information on Ingredients

Hazardous components

Chemical Name CAS N° Symbol(s) R-phrase(s)

Trimethylmonochlorosilane 75-77-4 C, F R11,R14,R35,R37

Concentration 98- 100%

3. Hazards Identification

Risk advice to man and the environment : Highly flammable

Reacts violently with water Causes burns Irritating to respiratory system

4. First –aid measures

General advice : Take care of self protection and call immediately for a doctor.

Move out Of dangerous area. Take off all contaminated clothing Immediately.

Inhalation : Move person into the fresh air, keep warm, keep rest. If breathing

stops, initiate artificial resuscitation immediately. If heart stops, initiate heart

massage immediately.

Skin contact : Wash off immediately with plenty of water.

Eye contact : Immediately flush eye(s) with plenty of water.

Ingestion : Rinse mouth. Do not induce vomiting.

5. Fire – fighting measures

Suitable extinguishing media : dry powder alcohol – resistant foam

Carbon

dioxide (CO₂)

Extinguishing media : Water, which must not be used ,Reacts violently with water

Specific hazards during fire fighting : In case of fire, formation of hydrochloric acid, Highly dispersed silicic acid.

Special protective Equipment for fire fighters : Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Personnal precautions : Use personal protective equipment.

Methods for cleaning up : Take up with absorbent for chemicals or, if necessary with dry sand

Page 2 of 4

7. Handling and storage

Handling

Advice on safe handling: Open container under local exhaust. Handle and open container with care. Take measures to prevent the build up of electrostatics charge.

Explosion protection necessary

Storage

Requirement for storage Area and containers : Keep containers tightly closed in a cool, well ventilated place.

8. Procedures controls for workers exposure and characteristics regarding equipment for personal protection

Personal protective equipment

Respiratory protection : Respirator with type ABEK filter if product vapour is formed.

Hand protection : Gloves made of Viton

Eye protection : Tightly fitting safety goggles

Protective measures : Avoid inhaling vapours.

Avoid contact with skin and eyes. If not feeling well, consult a physician (When possible show MSDS)

9. Physical and chemical properties

Appearance

Form Colour Odour

Liquid brown stringing

Safety relevant data

Melting point/range : -58, 7° C (Method : No information available)

Boiling point /range : 58° C (Method : No information available)

Flash point : -18°C (Method: DIN 51755)

Ignition temperature : 460°C (Method : DIN 51794)

Lower explosion limit : 1,2% (V) (Method : No information available)

Upper explosion limit : 39% (V) (Method : No information available)

Vapour pressure : 247 hPa at 50°C (Method : EU A4)

Vapour pressure : 921 hPa at 55°C (Method : No information available)

Density : 0,87 g/cm³ at 20°C (Method DIN 51757)

Density : 0,865 g/cm³ at 15°C (Method DIN 51757)

Density : 0,823 g/cm³ at 50°C (Method DIN 51757)

10. Stability and reactivity

Hazardous decomposition products : Hydrogen chloride gas

Hazardous reactions : Reacts violently with water, alkalines, acids, alcohols,

esters, ketones, aldehydes and amino compounds.

11. Toxicological information

Acute inhalation toxicity : LCL0 mousse

Dose : 0,5 mg/l

Skin irritation : Rabbit

Result : Corrosive

12. Ecological information

Ecotoxicity effects

Toxicity to fish : Species : Brachydanio rerio

Dose : 1.000 mg/l

Exposure time : 96 h

Remarks : No harmful influence

Toxicity to bacteria : EC50

Species : activated sludge

Dose : >10.000 mg/l

13. Disposal considerations

Product : According to local regulations, can be taken to an appropriate incinerator

Equipped with exhaust gas cleaning. Contact supplier for return shipment.

14. Transport information

ADR UN-N° 1298 Class 3

Item 21 Letter b

Description of the goods Trimethylchlorosilane

IMDG UN-N° 1298

Class 3.1 Ems 3-04

MFAG 700 IMDG Page 3145

Packaging group II Marine pollutant

Description of the goods Trimethylchlorosilane IATA

UN-N° 1298 Class 3

Packaging group II

Description of the goods Trimethylchlorosilane

15. Other information

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