# WATSON INTERNATIONAL LTD

# **SAFETY DATA SHEET**

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Methyltrichlorosilane

CAS-No. : 75-79-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

# 1.3 Details of the supplier of the safety data sheet

Company : Watson International Ltd

Room 1518, Asia Pacific Plaza,

NO. 18, Zhaofeng Road, Kunshan City, Jiangsu Province, China. 215332

Telephone : +86-512-81-867260/70/80

Fax : +86-512-81-867260/70/80-3

# **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 4), H312 Skin corrosion (Category 1A), H314

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

# 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H302 + H312 Harmful if swallowed or in contact with skin Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

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

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

protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

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

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to

extinguish.

Supplemental Hazard information (EU)

EUH014 Reacts violently with water.
EUH071 Corrosive to the respiratory tract.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Reacts violently with water., Corrosive to the respiratory tract.

# **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

Synonyms : Trichloro(methyl)silane

Formula : CH<sub>3</sub>Cl<sub>3</sub>Si

Molecular weight : 149.48 g/mol
CAS-No. : 75-79-6
EC-No. : 200-902-6

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Methyltrichlorosilane			
CAS-No. EC-No.	75-79-6 200-902-6	Flam. Liq. 2; Acute Tox. 4; Acute Tox. 3; Acute Tox. 4; 1A; H225, H302, H331, H312, H314 Concentration limits: >= 1 %: Skin Irrit. 2, H315; >= 1 %: Eye Irrit. 2, H319; >= 1 %: STOT SE 3, H335;	<= 100 %

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

# **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

# If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 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

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

### Suitable extinguishing media

Dry powder

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas, silicon oxides

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

# 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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water.

# 6.4 Reference to other sections

For disposal see section 13.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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

Handle and store under inert gas.

Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

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

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

### 8.2 Exposure controls

# Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

# 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm Break through time: 210 min

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 CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., 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 (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engine 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).

### Control of environmental exposure

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

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Odour No data available b) c) Odour Threshold No data available No data available d)

e) Melting point/freezing Melting point/freezing point: -77.79 °C

f) Initial boiling point and boiling range

point

66 °C - lit.

Flash point 8 °C - closed cup g) **Evaporation rate** No data available h) Flammability (solid, gas) No data available i)

i) Upper/lower Upper explosion limit: 43 %(V) flammability or Lower explosion limit: 4.5 %(V) explosive limits

Vapour pressure 201.6 hPa at 20 °C I) Vapour density 5.16 - (Air = 1.0)m) Relative density 1.273 g/cm3 at 25 °C n) Water solubility No data available Partition coefficient: n-

octanol/water

No data available

408 °C Auto-ignition at 1013.0 hPa temperature

Decomposition No data available temperature

No data available Viscosity r) Explosive properties No data available s) No data available Oxidizing properties

Other safety information 9.2

> Relative vapour density 5.16 - (Air = 1.0)

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 **Chemical stability**

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Reacts violently with water.

#### 10.4 Conditions to avoid

Heat, flames and sparks. Exposure to moisture

# Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents, Reacts violently with water.

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides

Other decomposition products - No data available

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - male and female - < 1,280 mg/kg(Methyltrichlorosilane)

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 4.17 mg/l(Methyltrichlorosilane)

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 1,067 mg/kg(Methyltrichlorosilane)

Remarks: Behavioral: Altered sleep time (including change in righting reflex). Liver: Other changes.

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

### Skin corrosion/irritation

Skin - Rabbit(Methyltrichlorosilane) Result: Causes severe burns. - 4 h (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit(Methyltrichlorosilane)

Result: Corrosive

(OECD Test Guideline 405)

# Respiratory or skin sensitisation

No data available(Methyltrichlorosilane)

# Germ cell mutagenicity

Ames test(Methyltrichlorosilane)

Salmonella typhimurium

Result: negative

OECD Test Guideline 474(Methyltrichlorosilane)

Rat - male Result: negative

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

No data available(Methyltrichlorosilane)

### Specific target organ toxicity - single exposure

No data available(Methyltrichlorosilane)

# Specific target organ toxicity - repeated exposure

No data available

### **Aspiration hazard**

No data available(Methyltrichlorosilane)

### **Additional Information**

RTECS: VV4550000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea(Methyltrichlorosilane)

# **SECTION 12: Ecological information**

### 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available (Methyltrichlorosilane)

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

### 14.1 UN number

ADR/RID: 1250 IMDG: 1250 IATA: 1250

# 14.2 UN proper shipping name

ADR/RID: METHYLTRICHLOROSILANE IMDG: METHYLTRICHLOROSILANE

IATA: Methyltrichlorosilane

Passenger Aircraft: Not permitted for transport

# 14.3 Transport hazard class(es)

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)

### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

# 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**

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

### Full text of H-Statements referred to under sections 2 and 3.

EUH014 Reacts violently with water.
EUH071 Corrosive to the respiratory tract.
H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H302 + H312 Harmful if swallowed or in contact with skin
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.

### **Further information**

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