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Version 2.02

Product name Trimethoxysilane



Revision date 01-June-2020

# Section 1 - Identification of the material and supplier

1.1 Product identifier

Product name Trimethoxysilane
Product Number SICOSIL®SICO-H13

CAS No. 2487-90-3

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

Recommended use: Industrial use.

Uses advised against: Not for food, drug, pesticide or biocidal product use

1.3 Details of the supplier of the safety data sheet

Manufacturer: Sico Performance Material (Shandong) Co., Ltd

Address: Jining Chemical Industrial Park, Jinxiang, Shandong, China

Telephone: +86 537 8017875 Fax: +86 537 8017875 E-Mail: info@silanechem.com

1.4 Emergency telephone number

Emergency response service: +86 537 4555878

#### Section 2 - Hazards identification

#### 2.1 Classification of the substance or mixture

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

Flammable liquids (Category 2)

Acute toxicity, Inhalation (Category 1)

Eye irritation (Category 2)

# 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram





Signal word: Danger

**Hazard statement(s)** 

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No

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smoking.

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

P284 Wear respiratory protection.

IF IN EYES: Rinse cautiously with water for several minutes.

P305 + P351 + P338 Remove contact lenses, if present and easy to do. Continue

rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

#### 2.3 Other hazards - Reacts violently with water.

# Section 3 - Composition/information on ingredients

#### 3.1 Substances

Formula  $C_3H_{10}O_3Si$ Molecular Weight 122.2 g/mol

Component		Concentration
Trimethoxysilane		
CAS-No.	2487-90-3	<u>-</u>
EC-No.	219-637-2	

#### 3.2 Mixtures

Not Relevant

# 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

Wash off with soap and plenty of water. 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.

# **Section 5 - Firefighting Measures**

# 5.1 Extinguishing media

Suitable extinguishing media

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Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, silicon oxides

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

# Section 6 - Accidental release measures

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

Wear respiratory protection. Avoid breathing vapors, 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. 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.

#### 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). Keep in suitable, closed containers for disposal.

#### 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.

#### 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.

Recommended storage temperature: 2 - 8 °C

Store under inert gas.

#### 7.3 Specific end uses

no data available

# Section 8 - Exposure Controls / Personal Protection

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#### 8.1 Control parameters

#### Components with workplace 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.

# **Body Protection**

Complete suit protecting against chemicals, 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 a full-face Respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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).

# Section 9 - Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Appearance Colourless liquid
Odour no data available
Odour Threshold no data available
pH no data available

Melting point/freezing Melting point/range: -115 °C - lit.

Initial boiling point and 81 °C - lit.

Flash point 9 °C - closed cup Evaporation rate no data available Flammability (solid, gas) no data available Upper/lower flammability or no data available

explosive limits

Vapour pressure < 7.2 mmHg at 20 °C

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Vapour density 4.22 - (Air = 1.0)
Relative density 0.96 g/cm³ at 25 °C
Water solubility no data available
Partition coefficient: n-octanol no data available

/water

Auto-ignition temperature no data available no data available viscosity no data available no data available Explosive properties no data available no data available no data available

9.2 Other safety information

Relative vapour density 4.22 - (Air = 1.0)

# Section 10 - Stability and Reactivity

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

no data available

#### 10.3 Possibility of hazardous reactions

Reacts violently with water.

#### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

#### 10.5 Incompatible materials

Strong acids, Strong oxidizing agents

# 10.6 Hazardous decomposition products

Other decomposition products - no data available

# **Section 11 - Toxicological Information**

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - rat - 8929 mg/kg

LC50 Inhalation - rat - 4 h - 42 ppm

LD50 Dermal - rabbit - 6029 mg/kg

#### Skin corrosion/irritation

Skin - rabbit - Mild skin irritation - 24 h

#### Serious eye damage/eye irritation

Eyes - rabbit - Moderate eye irritation - 24 h

# Respiratory or skin sensitization

no data available

Germ cell mutagenicity

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no data available

#### 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

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

# Specific target orgtoxicity - repeated exposure

no data available

#### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin

irritation.

**Eyes** Causes eye irritation.

# Signs and Symptoms of Exposure

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

#### **Additional Information**

RTECS: VV6750000

# **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

#### 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available

# **Section 13 - Disposal Considerations**

#### 13.1 Waste treatment methods

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#### **Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. 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: 3384 IMDG: 3384 IATA: 3384

#### 14.2 UN proper shipping name

ADR/RID: TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. (Trimethoxysilane) IMDG: TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. (Trimethoxysilane)

IATA: Toxic by inhalation liquid, flammable, n.o.s. (Trimethoxysilane)

#### 14.3 Transport hazard class(es)

ADR/RID: 6.1(3) IMDG: 6.1(3) IATA: 6.1(3)

14.4 Packaging group

ADR/RID: I IMDG: I IATA: I

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**

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

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

no data available

#### 15.2 Chemical Safety Assessment

no data available

#### Section 16 - Other Information

#### Further information:

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.

- End of Safety Data Sheet

Sico Performance Material (Shandong) Co., Ltd