

# SAFETY DATA SHEET



Regulation (EC) No 1907/2006 (REACH) &  
COMMISSION REGULATION (EU) 2015/830

Version 2.02

Product name 3-Isocyanatopropyltriethoxysilane

Revision date 01-June-2020

## Section 1 - Identification of the material and supplier

### 1.1 Product identifier

Product name 3-Isocyanatopropyltriethoxysilane

Product Number SICOSIL®SICO-IC23

CAS No. 24801-88-5

### 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 us

### 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]

Acute Toxicity – Oral (Category 4 )

Acute Toxicity – Dermal (Category 4 )

Skin Corrosion / Irritation (Category 1B)

Acute Toxicity – Inhalation (Category 1)

Sensitisation – Respiratory (Category 1)

### 2.2 Label elements

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

Pictogram



Signal word :

Danger

### Hazard statement(s)

H227 Combustible liquid.

H302+H312 Harmful if swallowed or in contact with skin.

H314 Causes severe skin burns and eye damage.

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H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing
<b>Precautionary statement(s)</b>	
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/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.

## 2.3 Other hazards - none

## Section 3 - Composition/information on ingredients

### 3.1 Substances

Synonyms:	3-Isocyanatopropyltriethoxysilane
Formula	C <sub>10</sub> H <sub>21</sub> NO <sub>4</sub> Si
Molecular Weight	247,36 g/ mol

Component	Concentration
3-Isocyanatopropyltriethoxysilane	
CAS-No. 24801-88-5	
EC-No. 246-467-6	-

### 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.

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## 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

dry chemical, carbon dioxide, sand.

#### Extinguishing media which shall not be used for safety reasons

No data available.

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

In combustion toxic fumes may form.

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Wear protective clothing to prevent contact with skin and eyes.

## Section 6 - Accidental release measures

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

Use personal protective equipment. 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.

### 6.2 Environmental precautions

Do not discharge into drains or rivers.

Contain the spillage using bunding.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. 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

Do not swallow. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Workers sensitized to other isocyanates should not handle this material. Keep away from children. Attention: Not for injection into humans.

### 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

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which are opened must be carefully resealed and kept upright to prevent leakage.

## 7.3 Specific end uses

no data available

## Section 8 - Exposure Controls / Personal Protection

### 8.1 Control parameters

No Data Available

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 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	liquid
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing	no data available
Boiling point	283°C -lit
Flash point	77 °C - closed cup

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Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	0.999 g/cm <sup>3</sup> at 25 °C
Water solubility	no data available
Partition coefficient: noctanol/water	no data available
Autoignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

## 9.2 Other safety information

no data available

## Section 10 - Stability and Reactivity

### 10.1 Reactivity

Can react exothermically with amines

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Reacts with water and moisture in air, liberating methanol. Hazardous polymerization may occur at temperatures exceeding 150°C.

### 10.4 Conditions to avoid

Heat, Open flame, Sparks.

### 10.5 Incompatible materials

Amines, Moisture, Water

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides, silicon oxides.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral rat	878 mg/kg
LD50 dermal rabbit	1190 mg/kg
ATE US(oral)	878.000 mg/kg body weight

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ATE US (demal) 1190.000 mg/kg body weight

## **Skin corrosion/irritation**

strong corrosive effect on skin and mucous membranes

## **Serious eye damage/eye irritation**

strong corrosive effect.

## **Respiratory or skin sensitization**

no data available

## **Germ cell mutagenicity**

no data available

## **Carcinogenicity**

no data available

## **Reproductive toxicity**

no data available

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

no data available

## **Specific target orgtoxicity - repeated exposure**

no data available

## **Aspiration hazard**

no data available

## **Potential health effects**

### **Inhalation**

harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

### **Ingestion**

swallowing will lead to a strong caustic effect on mouth and throat and the danger of perforation of oesophagus and stomach.

### **Skin**

Harmful if absorbed through skin. Causes 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**

no data available

## **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

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## 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

#### 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: 3390

IMDG: 3390

IATA: 3390

### 14.2 UN proper shipping name

ADR/RID: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.  
(Triethoxy(3-isocyanatopropyl)silane)

IMDG: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.  
(Triethoxy(3-isocyanatopropyl)silane)

IATA: Toxic by inhalation liquid, corrosive, n.o.s. (Triethoxy(3-isocyanatopropyl)silane)

### 14.3 Transport hazard class(es)

ADR/RID: 6.1 (8)

IMDG: 6.1 (8)

IATA: 6.1 (8)

### 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

product is not subject to any additional regulations or provisions

### 15.2 Chemical Safety Assessment

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no chemical safety assessment

## 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

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