

# SAFETY DATA SHEET

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

Version 2.02

Product name 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane



Revision date 01-June-2020

## Section 1 - Identification of the material and supplier

### 1.1 Product identifier

Product name 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane  
Product Number SICOSIL® SICO-O186  
CAS No. 3388-04-3

### 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 8010989  
Fax: +86 537 8010989  
E-Mail: info@silanechem.com

### 1.4 Emergency telephone number

Emergency response service: +86 537 8017875

## Section 2 - Hazards identification

### 2.1 Classification of the substance or mixture

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

Germ cell mutagenicity (Category 2), H341

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 2), H351

Carcinogenicity (Category 2), H351

### 2.2 Label elements

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

Pictogram



Signal word :

Warning

### Hazard statement(s)

H341	Suspected of causing genetic defects.
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H351	Suspected of causing cancer.
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## Precautionary statement(s)

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

## 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.

## Section 3 - Composition/information on ingredients

### 3.1 Substances

Synonyms:	3-(2-Trimethoxysilylethyl)cyclohexene oxide 2-(7-Oxabicyclo[4.1.0]hept-3-yl)ethyl-trimethoxysilane
Formula	C <sub>11</sub> H <sub>22</sub> O <sub>4</sub> Si
Molecular Weight	246.38 g/mol

Component	Concentration
2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	
CAS-No. 3388-04-3	-
EC-No. 222-217-1	-

### 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

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

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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

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

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

Carbon oxides, nitrogen oxides (NOx), silicon oxides

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

No data available

## 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

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.

### 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.

Moisture sensitive.

### 7.3 Specific end uses

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

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## Section 8 - Exposure Controls / Personal Protection

### 8.1 Control parameters

Components with workplace control parameters

### 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).

##### 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

Appearance	Colourless liquid
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing	no data available
Initial boiling point and	310 °C - lit.
Flash point	146 °C - closed cup
Evaporation rate	no data available

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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	1.065 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

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Avoid moisture.

### 10.5 Incompatible materials

Strong oxidizing agents, Amines, Bases

### 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 - 8,528 mg/kg(2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane)

LD50 Dermal - Rabbit - 6,716 mg/kg(2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane)

#### Skin corrosion/irritation

Skin - Rabbit(2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane)

Result: Open irritation test

#### Serious eye damage/eye irritation

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no data available

## Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

Suspected of causing genetic defects.(2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane)

## 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

## Additional Information

RTECS: VV4000000

## 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

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

Offer surplus and non-recyclable solutions to a licensed disposal company.

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## Contaminated packaging

Dispose of as unused product.

## Section 14 - Transport Information

### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

### 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

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