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

Version 2.02

Product name [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane



Revision date 01-June-2020

Section 1 - Identification of the material and supplier

1.1 Product identifier

Product name [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane

Product Number SICOSIL® SICO-O187

CAS No. 2530-83-8

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]

Serious damage/eye irritation, Category 1 – H318

2.2 Label elements

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

Pictogram



Signal word: Danger

Hazard statement(s)

H318 Causes serious eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ eye protection/ face 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.

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P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards - none

Section 3 - Composition/information on ingredients

3.1 Substances

Synonyms: Glycidyl 3-(trimethoxysilyl)propyl ether

3-Glycidyloxypropyltrimethoxysilane

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Component Concentration

3-(2,3-Epoxypropoxy)propyltrimethoxysilane

CAS-No. 2530-83-8 EC-No. 219-784-2

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.

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

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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

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 vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe 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. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation of vapour or mist.

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.

Storage class (TRGS 510): Combustible liquids

7.3 Specific end uses

no data available

Section 8 - Exposure Controls / Personal Protection

8.1 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

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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. Discharge into the environment must be avoided.

Section 9 - Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Liquid
Colour colorless
Odour aromatic

Odour Threshold no data available
pH no data available
Melting point/freezing no data available
Initial boiling point and 120 °C at 3 hPa - lit.

boiling range

Flash point 122 °C - Cleveland open cup

Evaporation rate no data available Flammability (solid, gas) no data available Upper/lower flammability or no data available

explosive limits

Vapour pressure no data available

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Vapour density no data available
Density 1.07 g/cm3 at 20°C
Water solubility no data available
Partition coefficient: noctanol/ no data available

water

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 normal usage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

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 - 8,030 mg/kg([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

LD50 Dermal - Rabbit - 4,248 mg/kg([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Skin corrosion/irritation

Serious eye damage/eye irritation

Eyes - Rabbit([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Result: Risk of serious damage to eyes.

Respiratory or skin sensitization

No data available([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Germ cell mutagenicity

No data available([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

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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([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Specific target organ toxicity - single exposure

No data available([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Specific target orgtoxicity - repeated exposure

No data available([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Aspiration hazard

No data available([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

Section 12 - Ecological Information

12.1 Toxicity

Toxicity to fish LC50 - Cyprinus carpio (Carp) - 55 mg/l - 96 h([3-(2,3-

Epoxypropoxy)propyl]trimethoxysilane)

LC0 - Cyprinus carpio (Carp) - 30 mg/l - 96 h([3-(2,3-

Epoxypropoxy)propyl]trimethoxysilane)

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 473 mg/l - 48 h([3-(2,3-

other aquatic invertebrates Epoxypropoxy)propyl]trimethoxysilane)

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 255 mg/l -

72 h([3-(2,3-Epoxypropoxy)propyl]trimethoxysilane)

12.2 Persistence and degradability

Biodegradability

Result: - Readily biodegradable

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

Harmful to aquatic life.

No data available

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Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product

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: - 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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