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**SECTION 1: Identification of the substance/mixture and of the company****Product Identifier**

Product Name: SiSiB® PC3510  
Chemical Name: 2-(3,4-epoxycyclohexyl)-ethyltriethoxysilane  
CAS-No.: 10217-34-2  
EC No.: 425-050-4

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

Relevant applications identified For industrial use

**Details of the supplier of the safety data sheet**

**Company** Nanjing SiSiB Silicones Co., Ltd.  
Guanghua Sci & Tech Industrial Zone,  
No. 104, Guanghua Road, Nanjing 210007, P.R.China  
Email: SDS@SiSiB.com

**Emergency Telephone Number:** +86-25-8468-0091

**SECTION 2: Hazardous identification****Classification of the substance or mixture**

The product has been classified according to the legislation in force.

**Classification according to Regulation (EC) No 1272/2008 as amended.****Health Hazards**

Skin sensitizer Category 1 H317: May cause an allergic skin reaction.

**Environmental Hazards**

Chronic hazards Category 3 H412: Harmful to aquatic life with long lasting effects.  
to the aquatic environment

**Label Elements**

**Contains:** Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane



**Signal Words:** Warning

**Hazard Statement(s):**

H317: May cause an allergic skin reaction.  
H412: Harmful to aquatic life with long lasting effects.

**Precautionary Statements****Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P272: Contaminated work clothing should not be allowed out of the workplace.

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P273: Avoid release to the environment.

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

**Response:**

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

**Disposal:**

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Unknown toxicity - Health**

Acute toxicity, inhalation, vapor 0 %

Acute toxicity, inhalation, dust or mist 0 %

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment 0 %

Chronic hazards to the aquatic environment 0 %

**Hazard summary****Physical Hazards:**

No data available.

**Health Hazards****Inhalation:**

No data available.

**Eye contact:**

No evidence of adverse effects from available information.

**Skin Contact:**

May cause allergic skin reaction.

**Ingestion:**

No evidence of adverse effects from available information.

**Other Health Effects:**

No data available.

**Environmental Hazards:**

No data available.

**Additional Information:**

No data available.

**Other hazards**

No data available.

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

**Chemical nature:** Beta-(3,4-Epoxy cyclohexyl)ethyltriethoxysilane

**Substances**

**General information:** No data available.

**Chemical name:** Beta-(3,4-Epoxy cyclohexyl)ethyltriethoxysilane

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**CAS-No.:** 10217-34-2

**EC No.:** 425-050-4

Chemical Name	CAS-No.	EC No.	Concentration %	Notes
Beta-(3,4-Epoxy cyclohexyl)ethyltriethoxysilane	10217-34-2	425-050-4	50 - <100%	

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s). PBT: persistent, biaccumulative and toxic substance. vPvB: very persistent and very biaccumulative substance.

#### SECTION 4: First aid measures

##### General:

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. Consult a physician for specific advice. Treat symptomatically.

##### Description of first aid measures

##### Inhalation:

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Call a physician or poison control center immediately.

##### Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

##### Skin Contact:

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Wash contaminated clothing before reuse. Get medical attention.

##### Ingestion:

If conscious, drink plenty of water. Do not induce vomiting. Call a physician or poison control center immediately.

##### Most important symptoms and effects, both acute and delayed:

Skin sensitization

Symptoms may be delayed.

##### Indication of any immediate medical attention and special treatment needed

##### Hazards:

No data available.

##### Treatment:

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through

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and flush skin with water. If swallowed, do NOT induce vomiting. Give a glass of water. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Do not give victim anything to drink if he is unconscious.

**SECTION 5: Firefighting measures****General Fire Hazards:**

Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

**Extinguishing media****Suitable extinguishing media:**

Alcohol resistant foam. Carbon dioxide Dry chemical.

**Unsuitable extinguishing media:**

Avoid water in straight hose stream; will scatter and spread fire.

**Special hazards arising from the substance or mixture:**

In case of fire, carbon monoxide and carbon dioxide may be formed.

**Advice for firefighters****Special fire fighting procedures:**

Take precautionary measures against static discharges. To prevent and minimize fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system.

**Special protective equipment for fire-fighters:**

Wear self-contained breathing apparatus and protective clothing.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Avoid contact with eyes, skin, and clothing. Avoid contact with liquid and vapors. Use personal protective equipment.

**Environmental Precautions:**

Do not allow runoff to sewer, waterway or ground.

**Methods and material for containment and cleaning up:**

Absorb spillage with suitable absorbent material. Shovel up and place in a container for salvage or disposal.

**Reference to other sections:**

Remove sources of ignition. In case of spills, beware of slippery floors and surfaces.

**SECTION 7: Handling and storage****Precautions for safe handling**

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Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Provide adequate ventilation. Avoid inhalation of dust and vapors.

**Storage conditions:**

Keep container tightly closed. Keep away from sources of ignition - No smoking.

**Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed. Keep away from sources of ignition - No smoking.

**Storage Stability:**

Material is stable under normal conditions.

**Specific end use(s):**

No data available.

## SECTION 8: Exposure Controls/Personal Protection

**Control Parameters**

**Occupational Exposure Limits**

Chemical name	Type	Exposure Limit Values	Source
Ethanol	TWA	1.000 ppm 1.920 mg/m3	UK. EH40 Workplace Exposure Limits (WELs)

**Biological Limit Values**

None.

**Exposure controls**

**Appropriate Engineering Controls:**

Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment. Provide adequate ventilation if fumes or vapors are generated.

**Individual protection measures, such as personal protective equipment**

**General information:**

Use only in well-ventilated areas. Do not eat, drink or smoke when using the product. Wash hands after handling. Practice good housekeeping.

**Eye/face protection:**

Safety glasses with side-shields conforming to EN166

**Skin protection**

**Hand Protection:**

Advice: This recommendation is valid only for our Product as delivered. If this product will be mixed with other substances you need to contact a supplier of CE approved protective gloves.

Material: 730 Camatril

Glove thickness: 0,3 mm

Guideline: EN 374

**Other:**

Safety shoes Wear suitable protective clothing.

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**Respiratory Protection:**

Respirator with a vapor filter (EN 141) Respiratory protection mask with Filtertype ABEK

**Hygiene measures:**

Avoid contact with eyes. When using do not smoke. Wash thoroughly after handling.

**Environmental exposure controls:**

No release to wastewater from process as such, wastewater emissions limited to release generated from final equipment cleaning step using water

**SECTION 9: Physical and Chemical Properties****Information on basic physical and chemical properties**

## Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor	Faint
Odor Threshold:	No data available.
PH	No data available
Freezing point:	< 0 °C
Boiling Point:	> 300 °C (1.013 hPa)
Flash Point:	129 °C (ASTM D 93)
Evaporation Rate:	< 1 (n-Butyl acetate=1)
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	< 1,33 hPa (20 °C)
Vapor density (air=1):	> 1
Density:	1,0035 g/cm <sup>3</sup> (25 °C)
Relative density:	1,0035 (25 °C)
Solubility(ies)	
Solubility in Water:	Reactive.
Solubility (other):	No data available.
Partition coefficient	
(n-octanol/water) Log Pow:	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
Explosive properties:	No data available.

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Oxidizing properties: No data available.

**SECTION 10: Stability And Reactivity****Reactivity:**

No data available.

**Chemical Stability:**

Material is stable under normal conditions.

**Possibility of hazardous reactions:**

Hazardous polymerisation does not occur.

**Conditions to avoid:**

Keep away from moisture.

**Incompatible Materials:**

Oxidizing agents. Amines. Alkalies. Reacts with water or moisture to form: Ethanol.

**Hazardous Decomposition Products:**

Carbon oxides, Oxides of silicon.

**SECTION 11: Toxicological Information****Information on likely routes of exposure****Inhalation:**

No data available.

**Ingestion:**

No data available.

**Skin Contact:**

No data available.

**Eye contact:**

No data available.

**Information on toxicological effects****Acute toxicity****Oral****Product:** LD 50 (Rat, males): > 5.000 mg/kg**Specified substance(s)**Beta-(3,4-Epoxy cyclohexyl)ethyltriethoxysilane  
LD 50 (Rat): > 5.000 mg/kg**Dermal****Product:** LD 50 (Rat, males): > 2.000 mg/kg Not classified**Specified substance(s)**Beta-(3,4-Epoxy cyclohexyl)ethyltriethoxysilane  
LD 50 (Rabbit): > 2.000 mg/kg

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xyl)ethyltriethoxysilane

#### Inhalation

##### Product:

Not classified for acute toxicity based on available data.

##### Specified substance(s)

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane No data available.

xyl)ethyltriethoxysilane

#### Repeated dose toxicity

##### Product:

NOEL - No Observable Effect Level (Rat(males), Oral, 28 h): 1000 mg/kg

NOEL - No Observable Effect Level (Rat(female), Oral, 28 h): 1000 mg/kg

NOEL - No Observable Effect Level (Rat(males), Oral, 90 h): 1000 mg/kg (OECD 408) NOEL - No Observable Effect Level (Rat(female), Oral, 90 h): 1000 mg/kg (OECD 408)

##### Specified substance(s)

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

NOAEL (Rat, 28 d): 1.000 mg/kg

NOAEL (Rat, 90 d): 1.000 mg/kg

#### Skin Corrosion/Irritation:

##### Product:

(Rabbit, 72 h): No skin irritation

##### Specified substance(s)

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

(Rabbit): No skin irritation

#### Serious Eye Damage/Eye

##### Irritation:

##### Product:

(Rabbit, 72 h): Non irritating

##### Specified substance(s)

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

Measured (Rabbit): No eye irritation

#### Respiratory or Skin Sensitization:

##### Product:

OECD Test Guideline 406 (Guinea Pig)Sensitizer

##### Specified substance(s)

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

Sensitisation, skin, OECD Test Guideline 406 (Guinea Pig): positive

#### Germ Cell Mutagenicity

##### In vitro

##### Product:

Chromosomal aberration (OECD 473): positive



DNA Damage and repair assay.: negative

Chinese Hamster Ovary (CHO): negative

SCE assay: negative

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

Salmonella Typhimurium/ Escherichia coli (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative

Chinese Hamster Ovary (CHO) (OECD 476): negative

**In vivo**

**Product:**

Micronucleus test (mouse) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)): negative

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

Micronucleus test (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) (Mouse): negative

**Carcinogenicity**

**Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Reproductive toxicity**

**Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Aspiration Hazard**

**Product:**

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No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Other effects:**

No data available.

**SECTION 12: Ecological Effects****Toxicity****Acute toxicity****Fish****Product:**

LC50 (Common Carp, 96 h): 42,3 mg/l (OECD-Guideline 203 (Fish, Acute Toxicity Test))

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Aquatic Invertebrates****Product:**

EC50 (Daphnia magna, 48 h): 58 mg/l (OECD Test Guideline 202)

NOEC (Daphnia magna, 48 h): 32 mg/l (OECD Test Guideline 202)

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

EC50 (Daphnia magna): 58 mg/l (OECD Test Guideline 202)

**Chronic Toxicity****Fish****Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Aquatic Invertebrates****Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Toxicity to Aquatic Plants****Product:**

ErC50 (Selenastrum capricornutum, 72 h): 108 mg/l (OECD Test Guideline 201) NOEC (Selenastrum

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capricornutum, 72 h): 6 mg/l (OECD Test Guideline 201)

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

EC50 (Algae): 36 mg/l (OECD Test Guideline 201)

**Persistence and Degradability Biodegradation****Product:**

The product is not readily biodegradable.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**BOD/COD Ratio****Product**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Bioaccumulative potential****Product:**

No data available.

**Specified substance(s)**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Mobility in soil:**

No data available.

**Known or predicted distribution to environmental compartments**

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Results of PBT and vPvB assessment:**

No data available.

Beta-(3.4-Epoxy cyclohexyl)ethyltriethoxysilane

No data available.

**Other adverse effects:**

No data available.

**SECTION 13: Disposal considerations****Waste treatment methods****General information:**

The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the

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ground.

**Disposal methods:**

Can be incinerated when in compliance with local regulations.

## SECTION 14: Transport Information

**ADR**

Not regulated.

**ADN**

Not regulated.

**RID**

Not regulated.

**IMDG**

Not regulated.

**IATA**

Not regulated.

**Special precautions for user:**

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods. Keep away from foodstuffs and animal feed.

**Transport in bulk according to Annex II of MARPOL and the IBC Code:**

Not applicable

## SECTION 15: Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture: EU Regulations**

**Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:** none

**Regulation (EC) No. 850/2004 on persistent organic pollutants:** none

**Regulation (EC) No. 649/2012 Import and export of dangerous chemicals:** none

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended:** none

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:**

Chemical name	CAS-No.	Concentration
Ethanol	64-17-5	0,1 - 1,0%

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work:** none

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding:** none

**Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous**

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**substances:** none

**EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:**  
none

**Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:**

Chemical name	CAS-No.	Concentration
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Ethanol	64-17-5	0,1 - 1,0%
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Beta-(3.4-Epoxycycl	10217-34-2	100%
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ohexyl)ethyltriethoxysilane

**Chemical safety assessment:**

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other Information

**Revision Information:**

Not relevant.

**Key literature references and sources for data:**

No data available.

**Wording of the H-statements in section 2 and 3**

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Training information:**

No data available.

**Classification according to Regulation (EC) No 1272/2008 as amended.**

Skin Sens. 1, H317

Aquatic Chronic 3, H412

**Further information**

It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.