# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC2710

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# SECTION 1: Identification of the substance/mixture and of the company

**Product Identifier** 

Product Name: SiSiB® PC2710

Chemical Name: 3-Isocyanatopropyltrimethoxysilane

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

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral)	Category 4	H302
Acute toxicity (dermal)	Category 4	H312
Acute toxicity (inhalation: vapor)	Category 1	H330
Skin corrosion/irritation	Category 1B	H314
Serious eye damage/eye irritation	Category 1	H318
Respiratory sensitization	Category 1	H334
Skin sensitization	Category 1	H317

Full text of H statements: see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

#### Label elements

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



Hazard pictograms (CLP)

Signal word (CLP): Danger

Hazard statements (CLP)

H302+H312 Harmful if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.



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H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

Precautionary statements (CLP)

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

protection.

P260 Do not breathe vapors.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P310 Immediately call a POISON CENTER or doctor/physician

P501 Dispose of contents/container to licensed waste disposal facility.

Other hazards

No additional information available

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

**Substances** 

Substance type Mono-constituent

Name 3-ISOCYANOTOPROPYLTRIMETHOXYSILANE

**CAS-No.** 15396-00-6 **EC-No.** 239-415-9

	Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-Isocya	anatopropyltrimethoxysil ane	(CAS-No.) 15396-00-6 (EC-No.) 239-415-9	95-100	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 1 (Inhalation), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317

Full text of H-statements: see section 16

Mixtures
Not applicable

#### **SECTION 4: First aid measures**

#### Description of first aid measures

## First-aid measures general

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.



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#### If inhaled

Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

#### In case of skin contact

Wash with plenty of soap and water. Get medical advice/attention.

#### In case of eye contact

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

#### If swallowed

Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.

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

#### Symptoms/effects

Causes severe skin burns and eye damage.

#### Symptoms/injuries after inhalation

Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.

#### Symptoms/injuries after skin contact

May cause an allergic skin reaction. Harmful in contact with skin. Causes (severe) skin burns.

### Symptoms/injuries after eye contact

Causes serious eye damage.

#### Symptoms/injuries after ingestion

Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

## **Chronic symptoms**

On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system.

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

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

## SECTION 5: Firefighting measures

## **Extinguishing media**

#### Suitable extinguishing media

Water spray. Foam. Carbon dioxide. Dry chemical.

### Unsuitable extinguishing media



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Do not use straight streams.

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

#### Fire hazard

Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

### Advice for firefighters

#### Firefighting instructions

Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.

#### **Protection during firefighting**

Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

#### **SECTION 6: Accidental release measures**

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Protective equipment Wear protective equipment as described in Section 8.

Emergency procedures Evacuate unnecessary personnel.

For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment.

Equip cleanup crew with proper protection. For further information

refer to section 8: "Exposure controls/personal protection".

#### **Environmental precautions:**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

# Methods and materials for containment and cleaning up

For containment Contain any spills with dikes or absorbents to prevent migration

and entry into sewers or streams.

Methods for cleaning up Clean up any spills as soon as possible, using an absorbent

material to collect it.

#### Reference to other sections

See section 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

#### Precautions for safe handling

Precautions for safe handling Avoid all eye and skin contact and do not breathe vapor and mist.

Use only outdoors or in a well-ventilated area.

Hygiene measures Wash contaminated clothing before reuse. Wash hands and other

exposed areas with mild soap and water before eating, drinking or



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smoking and when leaving work.

# Conditions for safe storage, including any incompatibilities

Storage conditions Keep container tightly closed. Store locked up.

Incompatible materials Amines. Moisture. Water.

Storage area Store in a well-ventilated place. Store away from heat.

Specific end use(s)
No data available

# **SECTION 8: Exposure Controls/Personal Protection**

#### **Control parameters**

No additional information available

#### **Exposure controls**

### Appropriate engineering controls:

Handle in an enclosing hood with exhaust ventilation.

## Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:

Neoprene or nitrile rubber gloves

## Eye protection:

Chemical goggles or face shield. Contact lenses should not be worn

## Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. NIOSH-certified combination organic vapor/acid gas (yellow cartridge) respirator.

# **SECTION 9: Physical and Chemical Properties**

## Information on basic physical and chemical properties

Appearance Form: clear liquid Molecular mass 205.29 g/mol

Color straw
Odor mild

Odor Threshold no data available

Refractive index 1.4219

pH no data available

Relative evaporation rate (butyl acetate=1) < 1



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Melting point no data available

Freezing point < 0 °C

Boiling point 95 - 98 °C @ 10 mm Hg

Flash point: 108 °C Auto-ignition temperature 265 °C

Decomposition temperature no data available
Flammability (solid, gas) no data available
Vapor pressure: < 1 mm Hg @ 20°C

Relative vapor density at 20 °C > 1
Relative density 1.073

Solubility Reacts with water.

Log Pow no data available

Log Kow no data available

Viscosity, kinematic 1.4 cSt

Viscosity, dynamic no data available
Explosive properties no data available
Oxidizing properties no data available
Explosive limits no data available

Other information no data available

# **SECTION 10: Stability And Reactivity**

#### Reactivity

Can react exothermically with amines.

#### **Chemical stability**

Stable in sealed containers.

### Possibility of hazardous reactions

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

#### Conditions to avoid

Heat. Open flame. Sparks.

### Incompatible materials

Amines. Moisture. Water.

#### Hazardous decomposition products

Methanol. Organic acid vapors.

# **SECTION 11:Toxicological Information**



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#### Information on toxicological effects

#### **Acute toxicity**

Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: vapor: Fatal if inhaled.

#### 3-ISOCYANOTOPROPYLTRIMETHOXYSILANE, 95% (15396-00-6)

ATE CLP (oral) 878 mg/kg bodyweight ATE CLP (dermal) 1190 mg/kg bodyweight

ATE CLP (vapours) 0.05 mg/l/4h

#### 3-Isocyanatopropyltrimethoxysilane (15396-00-6)

LD50 oral rat 878 mg/kg Rat-female

OECD-Guideline 401

LD50 dermal rabbit 1190 mg/kg Rat-male OECD-Guideline 402

LC50 inhalation rat 0.13 mg/l Rat-male and female

OECD-Guideline 403

ATE CLP (oral) 878 mg/kg bodyweight ATE CLP (dermal) 1190 mg/kg bodyweight

 ATE CLP (gases)
 10 ppmv/4h

 ATE CLP (vapours)
 0.05 mg/l/4h

 ATE CLP (dust,mist)
 0.005 mg/l/4h

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitization May cause allergy or asthma symptoms or breathing

difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity Not classified

This material was tested in a bacterial mutagenicity assay

(Ames test) and found to be weakly mutagenic.

Carcinogenicity Not classified

None of the components in this product at concentrations >0.1%

are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

STOT-single exposure

STOT-repeated exposure

Aspiration hazard

Not classified

Not classified

Not classified

Potential adverse human health Once sensitized, a severe allergic reaction may occur when

effects and symptoms subsequently exposed to very low levels.

Symptoms/effects after inhalation Fatal if inhaled. May cause allergy or asthma symptoms or

breathing difficulties if inhaled. May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache.

Nausea.

Symptoms/effects after skin contact May cause an allergic skin reaction. Harmful in contact with

skin. Causes (severe) skin burns.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after ingestion Harmful if swallowed. Swallowing a small quantity of this

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material will result in serious health hazard.

Chronic symptoms On contact with water this compound liberates ethanol which

is known to have a chronic effect on the central nervous

system.

Reason for classification Expert judgment

## **SECTION 12: Ecological Effects**

## **Toxicity**

Acute aquatic toxicity

Not classified

Chronic aquatic toxicity

Not classified

## Persistence and degradability

No additional information available

## **Bioaccumulative potential**

No additional information available

## Mobility in soil

No additional information available

#### Results of PBT and vPvB assessment

No additional information available

#### Other adverse effects

This substance may be hazardous to the environment.

## **SECTION 13:Disposal considerations**

#### Waste treatment methods

#### Sewage disposal recommendations

Do not dispose of waste into sewer.

## Product/Packaging disposal recommendations:

May be incinerated. Dispose in a safe manner in accordance with local/national regulations.

#### **Ecology - waste materials:**

Avoid release to the environment.

## **SECTION 14:Transport Information**

#### **UN** number

In accordance with ADR / RID / IMDG / IATA / ADN UN-No. (ADR) 2927 UN-No. (IMDG) 2927 UN-No. (IATA) 2927



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UN-No. (ADN) 2927 UN-No. (RID) 2927

**UN proper shipping name** 

Proper Shipping Name (ADR) TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. Proper Shipping Name (IMDG) TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (IATA)

Toxic liquid, corrosive, organic, n.o.s.

Proper Shipping Name (ADN)

TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (RID)

TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

Transport document description (ADR)

UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

(3-ISOCYANOTOPROPYLTRIMETHOXYSILANE), 6.1 (8), II, (D/E)

Transport document description (IMDG)

UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (3-ISOCYANOTOPROPYLTRIMETHOXYSILANE), 6.1 (8), II

Transport document description (IATA)

UN 2927 Toxic liquid, corrosive, organic, n.o.s. (3-ISOCYANOTOPROPYLTRIMETHOXYSILANE), 6.1, II

Transport document description (ADN)

UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

(3-ISOCYANOTOPROPYLTRIMETHOXYSILANE), 6.1 (8), II

Transport document description (RID)

UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (3-ISOCYANOTOPROPYLTRIMETHOXYSILANE), 6.1 (8), II

### Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) 6.1 (8)
Danger labels (ADR) 6.1, 8



#### **IMDG**

Transport hazard class(es) (IMDG) 6.1 (8)
Danger labels (IMDG) 6.1, 8



#### **IATA**

Transport hazard class(es) (IATA) 6.1 (8)
Danger labels (IATA) 6.1, 8



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#### ADN

Transport hazard class(es) (ADN) 6.1 (8)
Danger labels (ADN) 6.1, 8



#### RID

Transport hazard class(es) (RID) 6.1 (8)
Danger labels (RID) 6.1, 8



## **Packing group**

Packing group (ADR)

Packing group (IMDG)

Packing group (IATA)

Packing group (ADN)

II

Packing group (RID)

II

Dangerous for the environment No Marine pollutant No

Other information No supplementary information available

### Special precautions for user

### **Overland transport**

Environmental hazards

Classification code (ADR) TC1
Special provisions (ADR) 274
Limited quantities (ADR) 100ml
Excepted quantities (ADR) E4

Packing instructions (ADR) P001, IBC02

Mixed packing provisions (ADR) MP15
Portable tank and bulk container T11

instructions (ADR)

Portable tank and bulk container TP2, TP27



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special provisions (ADR)

Tank code (ADR) L4BH

Tank special provisions (ADR) TU15, TE19

Vehicle for tank carriage AT Transport category (ADR) 2

Special provisions for carriage CV13, CV28

- Loading, unloading and handling (ADR)

Special provisions for carriage S9, S19

- Operation (ADR)

Hazard identification number (Kemler No.) 68

68 2927

Orange plates

Tunnel restriction code (ADR)

EAC code

APP code

D/E

2XE

Transport by sea

Special provisions (IMDG) 274

Limited quantities (IMDG) 100 ml

Excepted quantities (IMDG) E4

Packing instructions (IMDG) P001

IBC packing instructions (IMDG) IBC02

Tank instructions (IMDG) T11

Tank special provisions (IMDG) TP2, TP27

EmS-No. (Fire)F-AEmS-No. (Spillage)S-BStowage category (IMDG)BStowage and handling (IMDG)SW2

Properties and observations (IMDG)

Toxic if swallowed, by skin contact or by inhalation. Causes burns to skin, eyes and mucous membranes.

# Air transport

PCA Excepted quantities (IATA) E4
PCA Limited quantities (IATA) Y640
PCA limited quantity max net quantity (IATA)0.5L
PCA packing instructions (IATA) 653
PCA max net quantity (IATA) 1L
CAO packing instructions (IATA) 660
CAO max net quantity (IATA) 30L
Special provisions (IATA) A4, A137



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ERG code (IATA) 6C

**Inland waterway transport** 

Classification code (ADN) TC1
Special provisions (ADN) 274, 802
Limited quantities (ADN) 100 ml
Excepted quantities (ADN) E4
Carriage permitted (ADN) T

Equipment required (ADN) PP, EP, TOX, A

Ventilation (ADN) VE02 Number of blue cones/lights (ADN) 2

Rail transport

Classification code (RID) TC1
Special provisions (RID) 274
Limited quantities (RID) 100ml
Excepted quantities (RID) E4

Packing instructions (RID) P001, IBC02

Mixed packing provisions (RID) MP15
Portable tank and bulk container T11

instructions (RID)

Portable tank and bulk container TP2, TP27

special provisions (RID)

Tank codes for RID tanks (RID) L4BH
Special provisions for RID tanks (RID) TU15
Transport category (RID) 2

Special provisions for carriage CW13, CW28, CW31

- Loading, unloading and handling (RID)

Colis express (express parcels) (RID) CE5
Hazard identification number (RID) 68

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

No REACH Annex XVII restrictions

3-ISOCYANOTOPROPYLTRIMETHOXYSILANE, 95% is not on the REACH Candidate List 3-ISOCYANOTOPROPYLTRIMETHOXYSILANE, 95% is not on the REACH Annex XIV List

**National regulations** 

Germany



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12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Netherlands**

SZW-lijst van kankerverwekkende stoffen

The substance is not listed

SZW-lijst van mutagene stoffen

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

The substance is not listed

#### **Denmark**

**Danish National Regulations** 

Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### **Chemical safety assessment**

No additional information available

# SECTION 16:Other Information

#### Full text of H- and EUH-statements:

Acute Tox. 1 (Inhalation) Acute toxicity (inhal.), Category 1

Acute Tox. 1 (Inhalation: vapor) Acute toxicity (inhalation: vapor) Category 1

Acute Tox. 4 (Dermal) Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4

Eye Dam. 1 Serious eye damage/eye irritation, Category 1

Resp. Sens. 1 Respiratory sensitization, Category 1
Skin Corr. 1B Skin corrosion/irritation, Category 1B

Skin Sens. 1 Skin sensitization, Category 1

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

#### **Further information**



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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.

