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

Product Identifier

Product Name: SiSiB® PC2640

Chemical Name: 3-THIOCYANATOPROPYLTRIETHOXYSILANE

CAS-No.: 34708-08-2

EC-No.: 252-161-3

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]

Hazard pictograms (CLP):

Signal word (CLP) : Warning

Hazard statements (CLP) :
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) :
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ if you feel unwell. a doctor
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards

Other hazards not contributing to the classification : The hydrolysis product of this compound is ethanol. Overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness).

Ethanol is metabolized to acetaldehyde and acetic acid which in large quantities result in metabolic acidosis, CNS depression and death due to respiratory arrest. This product contains ethanol which is classified as a carcinogen by IARC in alcoholic beverages.

SECTION 3: Composition/information on ingredients

Substances

Substance type Mono-constituent

Name 3-THIOCYANATOPROPYLTRIETHOXYSILANE

CAS-No. 34708-08-2

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-Thiocyanatopropyltriethoxysilane	(CAS-No.) 34708-08-2 (EC-No.) 252-161-3	>95	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5		Flam. Liq. 2, H225

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.

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

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. Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

No information available.

Symptoms/injuries after skin contact

May cause skin irritation.

Symptoms/injuries after eye contact

May cause eye irritation.

Symptoms/injuries after ingestion

No information available.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media

None known.

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 or fog for cooling exposed containers.

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

Emergency procedures — Evacuate unnecessary personnel.

For emergency responders

Protective equipment — Equip cleanup crew with proper 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

Methods for cleaning up — Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

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. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures — Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage conditions — Keep container tightly closed.

Incompatible materials — 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

Ethanol (64-17-5)

Austria	MAK (mg/m³)	1900 mg/m³
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (mg/m³)	3800 mg/m³
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (mg/m³)	1907 mg/m³
Belgium	Limit value (ppm)	1000 ppm
Bulgaria	OEL TWA (mg/m³)	1000 mg/m³

France	VLE (mg/m³)	9500 mg/m³
France	VLE (ppm)	5000 ppm
France	VME (mg/m³)	1900 mg/m³
France	VME (ppm)	1000 ppm
Germany	Occupational exposure limit value (mg/m³)	960 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	Occupational exposure limit value (ppm)	500 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Greece	OEL TWA (mg/m³)	1900 mg/m³
Greece	OEL TWA (ppm)	1000 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	1000 ppm
Latvia	OEL TWA (mg/m³)	1000 mg/m³
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Spain	VLA-EC (mg/m³)	1910 mg/m³
Spain	VLA-EC (ppm)	1000 ppm
Switzerland	KZGW (mg/m³)	1920 mg/m³
Switzerland	KZGW (ppm)	1000 ppm
Switzerland	MAK (mg/m³)	960 mg/m³
Switzerland	MAK (ppm)	500 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	260 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	1900 mg/m³
United Kingdom	WEL TWA (mg/m³)	1920 mg/m³
United Kingdom	WEL TWA (ppm)	1000 ppm
United Kingdom	WEL STEL (mg/m³)	5760 mg/m³ (calculated)
United Kingdom	WEL STEL (ppm)	3000 ppm (calculated)
Czech Republic	Expoziční limity (PEL) (mg/m³)	1000 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	1900 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	1000 ppm
Finland	HTP-arvo (8h) (mg/m³)	1900 mg/m³
Finland	HTP-arvo (8h) (ppm)	1000 ppm
Finland	HTP-arvo (15 min)	2500 mg/m³
Finland	HTP-arvo (15 min) (ppm)	1300 ppm
Hungary	AK-érték	1900 mg/m³
Hungary	CK-érték	7600 mg/m³
Ireland	OEL (15 min ref) (ppm)	1000 ppm
Lithuania	IPRV (mg/m³)	1000 mg/m³
Lithuania	IPRV (ppm)	500 ppm
Lithuania	TPRV (mg/m³)	1900 mg/m³
Lithuania	TPRV (ppm)	1000 ppm
Norway	Grenseverdier (AN) (mg/m³)	950 mg/m³
Norway	Grenseverdier (AN) (ppm)	500 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	950 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	500 ppm
Poland	NDS (mg/m³)	1900 mg/m³

Romania	OEL TWA (mg/m³)	1900 mg/m³
Romania	OEL TWA (ppm)	1000 ppm
Romania	OEL STEL (mg/m³)	9500 mg/m³
Romania	OEL STEL (ppm)	5000 ppm
Slovakia	NPHV (priemerná) (mg/m³)	960 mg/m³
Slovakia	NPHV (priemerná) (ppm)	500 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	1920 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	1000 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	500 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	1900 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	1000 ppm
Canada (Quebec)	VEMP (mg/m³)	1880 mg/m³
Canada (Quebec)	VEMP (ppm)	1000 ppm
Australia	TWA (mg/m³)	1880 mg/m³
Australia	TWA (ppm)	1000 ppm
Portugal	OEL TWA (ppm)	1000 ppm
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

Exposure controls

Appropriate engineering controls

Provide local exhaust or general room 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. Contact lenses should not be worn.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Form: Yellowish liquid
Molecular mass	263.43 g/mol
Color	straw
Odor	mild
Odor Threshold	no data available
Refractive index	1.446
pH	no data available
Relative evaporation rate (butyl acetate=1)	no data available

Melting point	no data available
Freezing point	< 0 °C
Boiling point	95 °C @ 5 mm Hg
Flash point:	112°C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Flammability (solid, gas)	no data available
Vapor pressure:	< 0.01 mm Hg @ 25°C
Relative vapor density at 20 °C	> 1
Relative density	1.03
Solubility	Insoluble in water. Reacts slowly with water.
Log Pow	no data available
Log Kow	no data available
Viscosity, kinematic	no data available
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

no data available

Chemical stability

Stable in sealed containers.

Possibility of hazardous reactions

Reacts with water and moisture in air, liberating ethanol.

Conditions to avoid

Heat. Open flame. Sparks

Incompatible materials

Moisture. Water.

Hazardous decomposition products

Organic acid vapors. Ethanol.

SECTION 11:Toxicological Information

Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Ethanol (64-17-5)

LD50 oral rat	7060 mg/kg
LC50 inhalation rat (mg/l)	124.7 mg/l/4h
LC50 inhalation rat (ppm)	20000 ppm 10 hrs.
LDLo oral rat	1400 mg/kg (Human)
ATE CLP (oral)	7060 mg/kg bodyweight
ATE CLP (vapours)	124.7 mg/l/4h
ATE CLP (dust,mist)	124.7 mg/l/4h

3-Thiocyanatopropyltriethoxysilane (34708-08-2)

LD50 oral rat	1423 mg/kg
ATE CLP (oral)	1423 mg/kg bodyweight

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

Ethanol (64-17-5)

IARC group	1 - Carcinogenic to humans
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Symptoms/effects after inhalation	May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.
Symptoms/effects after ingestion	May be harmful if swallowed.
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

Ethanol (64-17-5)	
LC50 fish 1	> 10000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [rainbow trout])
LC50 fish 2	> 13400 mg/l (Exposure time: 96 h - Species: Pimephales promelas [fathead minnow])

Persistence and degradability

No data available

Bioaccumulative potential

Ethanol (64-17-5)	
Log Pow	-0.32

Mobility in soil

No data 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

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)	Not applicable
UN-No. (IMDG)	Not applicable
UN-No. (IATA)	Not applicable
UN-No. (ADN)	Not applicable
UN-No. (RID)	Not applicable

UN proper shipping name

Proper Shipping Name (ADR)	Not applicable
Proper Shipping Name (IMDG)	Not applicable
Proper Shipping Name (IATA)	Not applicable
Proper Shipping Name (ADN)	Not applicable
Proper Shipping Name (RID)	Not applicable

Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	Not applicable

IMDG

Transport hazard class(es) (IMDG)	Not applicable

IATA

Transport hazard class(es) (IATA)	Not applicable

ADN

Transport hazard class(es) (ADN)	Not applicable

RID

Transport hazard class(es) (RID)	Not applicable

Packing group

Packing group (ADR)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Packing group (ADN)	Not applicable
Packing group (RID)	Not applicable
Environmental hazards	
Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available

Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

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-THIOCYANATOPROPYLTRIETHOXYSILANE, 96% is not on the REACH Candidate List

3-THIOCYANATOPROPYLTRIETHOXYSILANE, 96% is not on the REACH Annex XIV List

3-THIOCYANATOPROPYLTRIETHOXYSILANE, 96% is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

3-THIOCYANATOPROPYLTRIETHOXYSILANE, 96% is not subject to Regulation (EU) No 2019/1021 of

the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

National regulations

Germany

Regulatory reference :

WGK 2, Significantly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 1862)

Hazardous Incident Ordinance (12. BImSchV) :

Is not subject of the 12. BImSchV (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

SECTION 16:Other Information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

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.