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

Product Identifier

Product Name:	SiSiB® PC5901
Chemical Name:	Trimethoxyoctylsilane
CAS-No.:	3069-40-7
EC-No.:	221-338-7

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]

Skin irritation	Category 2	H315

Label elements

Labelling as per (EU) 1272/2008

Statutory basis	EU-CLP as per Regulation (EU) No. 1272/2008
Symbol(s)	
Signal word	Warning
Hazard statement	H315 - Causes skin irritation.
Precautionary statement Prevention	P280 - Wear protective gloves/protective clothing/eye protection.
Precautionary statement Reaction	P302 + P352 - IF ON SKIN: Wash with plenty of water/ soap. P332 + P313 - If skin irritation occurs: Get medical advice/ attention.

Other hazards

Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

SECTION 3: Composition/information on ingredients

Substances

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No.1272/2008

Trimethoxyoctylsilane

CAS-No. 3069-40-7	EC-No. 221-338-7	
Skin irritation	Category 2	H315

Impurity

Methanol < 0,2%

CAS-No. 67-56-1	EC-No. 200-659-6	
Flammable liquids	Category 2	H225
Acute toxicity (Oral)	Category 3	H301
Acute toxicity (Dermal)	Category 3	H311
Acute toxicity (Inhalation)	Category 3	H331
Specific target organ toxicity - single exposure	Category 1	H370

Texts of H phrases, see in Chapter 16

Mixtures

-

SECTION 4: First aid measures

Description of first aid measures

Take off all contaminated clothing immediately.

Inhalation

If aerosol or mists are formed:

Move victims into fresh air.

In case of persistent discomfort: Consult doctor immediately.

Skin contact

Wash off immediately with plenty of water.

Consult a doctor in the event of permanent skin irritation.

Eye contact

Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, if necessary, eye rinsing solution.

In case of persistent discomfort: Consult an ophthalmologist.

Ingestion

Have the mouth rinsed with water.

Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms

After absorbing large amounts of substance:

Liberation of reaction products (Methanol) can lead to symptoms of poisoning.

Possible signs of poisoning:
daze, dizziness, nausea, colicky abdominal pain, respiratory disturbance.
Symptoms upon increasing intoxication: dysopia, loss of eyesight.
Indication of any immediate medical attention and special treatment needed
If required, therapy of irritative effect.
Treatment:
Immediate gastric lavage. Antidote treatment, correction of acid-base balance.
Detection of substance (Methanol) possible in:
Blood
Antidote treatment: ethanol.

SECTION 5: Firefighting measures

Extinguishing media
Suitable extinguishing media
Water spray jet
Foam
Carbon dioxide (CO_2)
Dry powder
Unsuitable extinguishing media
High volume water jet
Special hazards arising from the substance or mixture
Standard procedure for chemical fires.
Advice for firefighters
Water used to extinguish fi re should not enter drainage systems, soil or stretches of water.
Ensure there are sufficient retaining facilities for water used to extinguish fire.
Fire residues and contaminated fi re extinguishing water must be disposed of in accordance with local regulations.
In case of fi re: wear a self-contained respiratory apparatus

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Ensure adequate ventilation.
Environmental precautions
Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.
Methods and materials for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Fill into marked, sealable containers.

To be disposed of in compliance with existing regulations.

Reference to other sections

Wear personal protective equipment; see section 8.

Disposal considerations; see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Provide good ventilation or extraction.

Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Normal measures for preventive fi re protection.

Keep away from sources of ignition - No smoking.

Storage

Keep containers tightly closed in a cool, well-ventilated place.

Protect from moisture.

Advice on common storage

Bases

Specific end use(s)

no data available

SECTION 8: Exposure Controls/Personal Protection

Control parameters

DNEL/DMEL values

End Use	Worker
Routes of exposure	Inhalation
Possible health damage	Long-term systemic effects
Value	8 mg/m3
End Use	Worker
Routes of exposure	Inhalation
Possible health damage	Acute systemic effects
Value	8 mg/m3
End Use	Worker
Routes of exposure	Inhalation
Possible health damage	Long-term local effects
Remarks	Low hazard (no threshold derived).
End Use	Worker
Routes of exposure	Inhalation

Possible health damage	Acute local effects
Remarks	Low hazard (no threshold derived).
End Use	Worker
Routes of exposure	dermal
Possible health damage	Long-term systemic effects
Value	4,5 mg/kg bw/day
End Use	Worker
Routes of exposure	dermal
Possible health damage	Acute systemic effects
Value	4,5 mg/kg bw/day
End Use	Worker
Routes of exposure	dermal
Possible health damage	Long-term local effects
Remarks	Medium hazard (no threshold derived).
End Use	Worker
Routes of exposure	dermal
Possible health damage	Acute - local effects
Remarks	Medium hazard (no threshold derived).
End Use	general populace
Routes of exposure	Inhalation
Possible health damage	Long-term systemic effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	Inhalation
Possible health damage	Long-term local effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	Inhalation
Possible health damage	Acute local effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	dermal
Possible health damage	Acute systemic effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	dermal
Possible health damage	Long-term local effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	dermal

Possible health damage	Acute - local effects
Remarks	No hazard identified.
End Use	general populace
Routes of exposure	Oral
Possible health damage	Long-term systemic effects
Value	3,1 mg/kg bw/day
End Use	general populace
Routes of exposure	Oral
Possible health damage	Acute systemic effects
Value	3,1 mg/kg bw/day

PNEC values

	Fresh water
Value	0,64 mg/l
	Marine water
Value	0,064 mg/l
	water - intermittent releases
Value	6,4 mg/l
	Fresh water sediment
Value	4,8 mg/kg dry weight
	Marine sediment
Value	0,48 mg/kg dry weight
	Soil
Value	0,59 mg/kg dry weight
	sewage treatment plant (STP)
Value	>= 100 mg/l

Exposure controls

Engineering measures

Provide good ventilation or extraction.

Personal protective equipment

Respiratory protection

In case of dusts/vapors/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self-contained respiratory apparatus. Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Note time limit for wearing respiratory protective equipment.

Hand protection

Glove material	for example, butyl-rubber
Material thickness	0,5 mm

Break through time	>= 480 min
Glove material	for example, Fluorinated rubber (Viton)
Material thickness	0,4 mm
Break through time	>= 480 min

Selection of protective gloves to meet the requirements of specific workplaces. Suitability for specific workplaces should be clarified with protective glove manufacturers. The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials. Please observe that the daily duration of usage of a chemical protective glove is in practice far shorter due to the many influencing factors (e.g. temperature, mechanical strain on the glove material) than the permeation time determined acc. EN 374.

Eye protection

Safety glasses

Skin and body protection

When handling larger quantities: chemical protective suit, disposable protective suit (Solvent-resistant)

Hygiene measures

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work.
Remove contaminated or saturated clothing.
Wash contaminated clothing before re-use.

Protective measures

Handle in accordance with good industrial hygiene and safety practice.
The personal protective equipment used must meet the requirements of directive 89/686/EEC and amendments (CE certification).
If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.
If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.
Do not breathe in vapors or aerosols.
Avoid contact with skin and eyes.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Form: liquid
Color	colorless
Odor	like fruit
Odor Threshold	no data available
pH	no data available
Melting point/range	-66 °C (1013,25 hPa) Method: EC Method A.1
Boiling point/range	246 °C (1013 hPa) Method: DIN 51 751

Flash point:	102°C
	Method: DIN EN ISO 2719 (Pensky-Martens, Closed Cup)
Evaporation rate	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure:	3 hPa (20 °C)
	Product
	2,1 Pa (20 °C)
	Method: dynamic method
	pure substance
	52,4 hPa (140 °C)
	Method: dynamic method
	pure substance
Density	ca. 0,91 g/cm3 (20 °C)
Relative density	0,91 (20 °C)
	Method: EC Method A.3
Water solubility	not miscible
	decomposition by hydrolysis
Partition coefficient: noctanol/ water	log Pow: 3,9 (25 °C)
Autoinflammability	225 °C (1013 hPa)
	Method: EC Method A.15
Thermal decomposition	no data available
Viscosity, dynamic	2 mPa.s (20 °C)
	Method: DIN 53 015
Explosiveness	not explosive
Other information	
Ignition temperature	225 °C (1013 hPa)
	Method: DIN 51 794

SECTION 10: Stability And Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

Protect from moisture.

Incompatible materials

alkalis, Acids, humid air and water

Hazardous decomposition products

Methanol in case of hydrolysis.

Alcohol formed by hydrolysis lowers the flash point of the product.

SECTION 11:Toxicological Information

Information on toxicological effects

Acute oral toxicity	LD50 Rat: > 2000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	LC50 Rat: 3,9 mg/l / 4 h / dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity

Based on the data available, the acute toxicity of trimethoxy-octyl-silane is not classified in compliance with Regulation (EC) No. 1272/2008. The effects observed the acute inhalation study with rats did not result from the systemic availability of the test substance but from an exposure to an aerosol. The inhalation of aerosol droplets does not constitute a route of exposure which is relevant to humans.

Acute dermal toxicity	No data available Acute toxicity estimate: > 5000 mg/kg Method: Calculation method
Skin irritation	Rabbit Skin irritation Method: OECD Test Guideline 404
Eye irritation	Rabbit No eye irritation Method: OECD Test Guideline 405
Sensitization	Maximization test Guinea pig: Does not cause skin sensitization. Method: OECD Test Guideline 406 Test substance: Structurally similar substance
Repeated dose toxicity	Oral Rat / 28-day NOAEL: 150 mg/kg Method: OECD Test Guideline 407 Test substance: Structurally similar substance
Repeated dose toxicity	Species: Rat Application Route: inhalative Exposure duration: 28-day

	Frequency of exposure: 5 days/weeks, 6 hours/day NOAEC: 3000 mg/m³ Method: OECD TG 412 Test substance: Structurally similar substance
Assessment of STOT single exposure	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
Assessment of STOT repeat exposure	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Risk of aspiration toxicity	No evidence of aspiration toxicity
Gentoxicity in vitro	Ames test Salmonella typhimurium negative Method: OECD TG 471 chromosomal aberration Chinese hamster (CHO K1 -cells) negative Method: OECD TG 473 Test substance: Structurally similar substance gene mutation TK +/- mouse lymphoma cell (L5178Y) negative Method: OECD TG 476 Test substance: Structurally similar substance
Carcinogenicity	No evidence that cancer may be caused.
Toxicity to reproduction	Screening for reproductive/developmental toxicity Oral Rat NOAEL (No Observed Adverse Effect Level) of parents:300 mg/kg Method: OECD TG 422 Test substance: Structurally similar substance
Teratogenicity	Oral Rat NOAEL (No Observed Adverse Effect Level) teratogenesis: >= 1000 mg/kg NOAEL maternal (No Observed Adverse Effect Level): 300 mg/kg Method: OECD TG 422 Test substance: Structurally similar substance

SECTION 12: Ecological Effects

Toxicity

Toxicity to fish	LC50 Oncorhynchus mykiss (rainbow trout): > 100 mg/l / 96 h Test substance: Structurally similar substance Method: OECD TG 203

Toxicity in aquatic invertebrates	Daphnia magna (Water flea) Method: OECD Test Guideline 202 In the range of water solubility not toxic under test conditions.
Toxicity to algae	EC50 Pseudokirchneriella subcapitata (green algae): > 100 mg/l / 72 h Test substance: Structurally similar substance Method: OECD TG 201
Toxicity to bacteria	NOEC local activated sludge: > 1000 mg/l / 3 h Test substance: Structurally similar substance Method: OECD TG 209 EC50 local activated sludge: > 1000 mg/l / 3 h Test substance: Structurally similar substance Method: OECD TG 209
chronic toxicity in daphnia	NOEC Daphnia magna (Water flea): 32 mg/l / 21 d Test substance: Structurally similar substance Method: OECD TG 211

Persistence and degradability

Biodegradability	Exposure time: 28 d Result: 31,5 % Not readily biodegradable. Method: OECD TG 301 D

Bioaccumulative potential

not bioaccumulative

Mobility in soil

Adsorption on the floor: low.

Results of PBT and vPvB assessment

Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

Other adverse effects

The data we have at our disposal do not necessitate identification concerning environmental hazard.

SECTION 13:Disposal considerations

Waste treatment methods

Product:

With respect to local regulations, e.g. dispose of to suitable waste incineration plant.

Uncleaned packaging

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities.

If there is product residue in the emptied container, follow directions for handling on the container's label.

Incorrect disposal or reuse of this container is illegal and can be dangerous.

Other countries: observe the national regulations.

Waste Key Number

No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer.
The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

SECTION 14:Transport Information

Not dangerous according to transport regulations.

14.1. UN number:	--
14.2. UN proper shipping name:	--
14.3. Transport hazard class(es):	--
14.4. Packing group:	--
14.5. Environmental hazards:	--
14.6 Special precautions for user:	No

SECTION 15:Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National legislation

Major Accident Hazard Legislation
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
listing: not applicable

Chemical Safety Assessment

A substance safety assessment was carried out for this product.

SECTION 16:Other Information

Relevant H phrases from chapter 3

H225:	Highly flammable liquid and vapor.
H301:	Toxic if swallowed.
H311:	Toxic in contact with skin.
H315:	Causes skin irritation.
H331:	Toxic if inhaled.
H370:	Causes damage to organs.

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.