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

Product Identifier

Product Name:	SiSiB® PC3200
Chemical Name:	[3-(2,3-epoxypropoxy)propyl]triethoxysilane
CAS-No.:	2602-34-8
EC-No.:	220-011-6

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

Relevant applications identified	For industrial use Coupling agent Crosslinking agents Surface modifier

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[EU-GHS/CLP]

Not a hazardous substance according to Regulation (EC) No. 1272/2008.

Label elements

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

Statutory basis	Labelling not required according to EU-CLP Ordinance (1272/2008).

Other hazards

Not a PBT, vPvB substance according to 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

[3-(2,3-epoxypropoxy)propyl]triethoxysilane			
CAS-No.	2602-34-8	EC-No.	220-011-6
Remarks	Not a hazardous substance or mixture.		

Texts of H phrases, see in Chapter 16

Mixtures

-

SECTION 4: First aid measures

If inhaled

If aerosol or mists are formed:

If necessary: Provide with fresh air.

In case of skin contact

Wash off with plenty of water and soap.

In case of eye contact

Rinse thoroughly with plenty of water keeping eyelid open.

In case of persistent discomfort: Consult an ophthalmologist.

If swallowed

Have the mouth rinsed with water.

After absorbing large amounts of substance / In case of discomfort: Supply with medical care.

Most important symptoms and effects, both acute and delayed

Symptoms

None known

Hazards

None known

Indication of any immediate medical attention and special treatment needed

After absorbing large amounts of substance:

administration of activated charcoal.

Acceleration of gastrointestinal passage

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water spray jet

Dry powder

Carbon dioxide (CO2)

Foam

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 fire 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 fire: wear a self-contained respiratory apparatus.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment.
Do not inhale vapors / aerosols.
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.
Avoid contact with skin and eyes.
Conditions for safe storage, including any incompatibilities
Advice on protection against fire and explosion
Normal measures for preventive fire protection.
Storage
Keep containers tightly closed in a cool, well-ventilated place.
Protect from moisture.
Specific end use(s)
no data available
Applications; see Section 1.

SECTION 8: Exposure Controls/Personal Protection

Control parameters

DNEL/DMEL values

Remarks not necessary (see chapter 15)

PNEC values

Remarks not necessary (see chapter 15)

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

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

Form	liquid
Color	colorless
Physical state	liquid (20 °C) (1013 hPa)
Odor Threshold	not determined
pH	3,5 - 4,0 (1000 g/l) (20 °C) method: DIN 38404-C5
Melting point/ range	< -70 °C Method: OECD TG 102
Boiling point/ range	270 °C (1013 hPa) Method: DIN 51 356
Flash point:	125°C Method: DIN EN ISO 2719 (Pensky-Martens, Closed Cup)
Evaporation rate	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Vapor pressure:	1,05 hPa (20 °C)
Density:	1,006 g/cm3 (20 °C) Method: DIN 51757
Water solubility:	not miscible decomposition by hydrolysis
Partition coefficient: n-octanol/water	log Pow: 2,0 (20 °C) Method: QSAR
Auto-inflammability	230 °C (1013 hPa) Method: EC Method A.15
Thermal decomposition	> 276 °C
Viscosity, dynamic	3,35 mPa.s (20 °C) Method: DIN 53 015
Explosiveness	Method: 440/2008/EC A.14 not explosive

Other information

Ignition temperature not determined

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

Reacts with:

Alkalis

Acids

Amines

Exothermic reaction with:

Peroxides

Conditions to avoid

Vapors can form explosive mixtures with air. In the presence of oxygen and heat, the ethanol forming during the reaction may produce acetaldehyde.

Material may form acetaldehyde when heated with inorganic pigments in the presence of air.

Incompatible materials

alkalis, Amines, Acids, Peroxides, water

Hazardous decomposition products

Ethanol 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:	> 5,3 mg/l / 4 h / dust/mist
Method:	OECD Test Guideline 403
Test substance:	Structurally similar substance
Assessment:	The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity

LD50 Rabbit:	> 2000 mg/kg
Method:	OECD Test Guideline 402
Test substance:	Structurally similar substance
Assessment:	The substance or mixture has no acute dermal toxicity

Skin irritation

Rabbit

No 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

Repeated dose toxicity

Oral Rat / 90-day

Number of exposures:	7 days a week
NOAEL:	>= 1000 mg/kg
Method:	OECD TG 408
Test substance:	Structurally similar substance

Oral Rat / 28-day

Number of exposures:	5 days/weeks
NOAEL:	>= 1000 mg/kg
Method:	OECD Test Guideline 407
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	positive and negative
Gentoxicity in vivo	positive and negative
Carcinogenicity	No data available

Toxicity to reproduction

Oral Rat

NOAEL (No Observed Adverse Effect Level) of parents:

>= 400 mg/kg

Method: OECD TG 414
Test substance: Structurally similar substance

SECTION 12: Ecological Effects

Toxicity
Toxicity to fish
LC50 Danio rerio (zebra fish): > 100 mg/l / 96 h
Method: OECD TG 203
Toxicity in aquatic invertebrates
EC50 Daphnia magna (Water flea): > 100 mg/l / 48 h
Method: OECD TG 202
Toxicity to algae
EC50 Desmodesmus subspicatus (green algae) > 100 mg/l / 72 h
Method: OECD TG 201
NOEC Desmodesmus subspicatus (green algae) >= 100 mg/l / 72 h
Method: OECD TG 201
Toxicity to bacteria
NOEC >= 1000 mg/l / 3 h
local activated sludge:
Method: OECD TG 209

Persistence and degradability
Biodegradability
Exposure time: 28 d
Result: 53 % Not readily biodegradable.
Method: OECD TG 301 F

Bioaccumulative potential
Bioaccumulation low

Mobility in soil
Mobility Adsorption on the floor: low.

Results of PBT and vPvB assessment
Not a PBT, vPvB substance according to the criteria of the REACH Regulation.

Other adverse effects
Further Information
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

Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

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.

UN number	**--**
UN proper shipping name	**--**
Transport hazard class(es)	**--**
Packing group	**--**
Environmental hazards	**--**
Special precautions for user	**Yes**

Not dangerous according to transport regulations.

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

No exposure or risk assessment is required for this product since it is not classified for health or environmental risks.

SECTION 16:Other Information

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.