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

Product Identifier

Product Name:	SiSiB® PC7500
Chemical Name:	Vinyltris(methylethylketoximino)silane
CAS-No.:	2224-33-1

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

Relevant applications identified	for industrial use
	Crosslinking agents

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 Irrit. 2	Category 2	H315
Eye irritation	Category 2	H319
Skin Sensitization	Category 1	H317
Flammable liquids	Category 4	H227

Label elements

Labeling 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.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H227	Combustible liquid.

Precautionary statement Prevention

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash skin thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Precautionary statement Reaction

P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P370 + P378	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Precautionary statement (Storage and Disposal)

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved incineration plant.

Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

SECTION 3: Composition/information on ingredients

Substances

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

Chemical Name	CAS-No.	Concentration	Classification
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime	2224-33-1	>= 90% - <= 100%	H317, 1B, Skin.sens. H318, 1, Eye Dam. H373, 2, STOT RE
2-Butanone, oxime	96-29-7	>= 0.1% - < 1%	H312, 4 ,Acute Tox. , dermal H318, 1, Eye Dam. H317, 1, Skin.sens. H351, 2, Carc.

Texts of H phrases, see in Chapter 16

SECTION 4: First aid measures

Description of first aid measures

General advice:

Remove soiled or soaked clothing immediately.

Inhalation:

Ensure supply of fresh air.

In the event of symptoms seek medical advice.

S**kin contact**

In case of contact with skin wash off with soap and water.
In the event of symptoms seek medical advice.

Eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion

Thoroughly clean the mouth with water.
In the event of symptoms seek medical advice.

Most important symptoms and effects, both acute and delayed

Symptoms: risk of serious damage to eyes

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:	Foam
	Carbon dioxide (CO2)
	Dry powder
Unsuitable extinguishing media:	water

Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon dioxide, carbon monoxide
Nitrogen oxides (NOx)
Under certain conditions of combustion traces of other toxic substances cannot be excluded

Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing 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, and drainage systems.

Methods and material 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.

SECTION 7: Handling and storage

Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).

Remove soiled or soaked clothing immediately. Do not eat, drink or smoke when working. Wash hands before breaks and after work. Use barrier skin cream.

Avoid contact with eyes and skin. Do not inhale gases/vapors/aerosols.

Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Normal measures for preventive fire protection.

Storage

Information: No special measures required.

Further information: Keep container tightly closed in a cool, well-ventilated place.

On storage conditions: Protect from atmospheric moisture and water.

Storage temperature: < 50 °C.

Storage moisture: Keep in a dry place.

Advice on common: Do not store together with alcohols.

Storage: Do not store together with amines.

Do not store together with oxidizing agents.

Do not store with acids or alkalis.

Keep away from water.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limit(s)

Ingredients	CAS-No.	Statutory basis/list (Update)	Value type (Form of exposure; Expressed as)	Value	Short-term
Toluene	108-88-3	ACGIH (2009)	TWA	20 ppm	
		ACGIH (01 2005)	SKIN_DES		
	Can be absorbed through the skin.				
		NIOSH (2005)	REL	100 ppm 375 mg/m3	
		NIOSH (2005)	STEL	150 ppm 560 mg/m3	
		OSHA Z2 (02 2006)	TWA	200 ppm	
		OSHA Z2 (02 2006)	Ceiling	300 ppm	
		OSHA Z2 (02 2006)	MAX. CONC	500 ppm	

Exposure controls

Good general (mechanical) ventilation should be sufficient to control airborne levels.

Personal protective equipment

Eye protection

Safety goggles.

Hand protection

Glove material: butyl-rubber

Break through time: 480 min

Glove thickness: 0.7 mm

Body Protection

Protective clothing

Respiratory protection

Case of formation of vapors/aerosols

Short term: filter apparatus, Filter A-P2

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	liquid (20 °C, 1,013 hPa)
Form	liquid
Color	colorless
Odor	pungent
Odor Threshold	not measured
PH	not measured
Melting point range	< -20 °C
Method	OECD 102
Boiling range	359 °C (1,013 hPa)
Method	EC Method A.2
Flash point	96 °C (Closed cup) (1.013 hPa) Method: GB/T 5208-2008
Evaporation rate	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Vapor pressure	0.025 Pa
Method	OECD 104
Relative vapor density	not measured
Relative density	not measured
Solubility (ies)	not measured
Water solubility	hydrolyses
Partition coefficient: n-octanol/water	not measured

Autoignition temperature	not measured
Thermal decomposition	> 120 °C
Viscosity, kinematic	10.33 mm2/s (25 °C)
Method	ASTM D 445
Viscosity, dynamic	5 - 15 mPa·s (25 °C)
Explosive properties	not measured
Oxidizing properties	not oxidizing
Other information	
Density	0.984 g/cm3 (20 °C)
Method	DIN 51757
Metal corrosion	does not corrode metal
Ignition temperature	310 °C (1,013 hPa)
Method	EC Method A.15

SECTION 10: Stability and reactivity

Reactivity

See section “Possibility of hazardous reactions”.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No hazardous reactions with proper storage and handling.

Conditions to avoid

Protect from heat, humidity.

Incompatible materials

Amines
Alcohols
Alkaline
Oxidizing agents
Acids
Water

Hazardous decomposition products

None with proper storage and handling.

SECTION 11: Toxicological information

Routes of Entry: Dermal contact, eye contact, inhalation, ingestion.

Acute Toxicity

Vinyl tris(methyl ethyl ketoximo)Silane

LD50 (Oral, rat): N/A

LC50 (Inhalation, rat): N/A

(CAS 2224-33-1)

LD50 (Dermal, rabbit): N/A

Skin corrosion/irritation

Cause skin irritation

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

No data available for this chemical.

Carcinogenicity

No data available for this chemical.

Reproductive toxicity

No data available for this chemical.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available for this chemical.

Chronic Effects

No data available for this chemical.

Further Information

No data

SECTION 12: Ecological information

Ecotoxicology Assessment

Acute aquatic toxicity	no data available
Chronic aquatic toxicity	no data available

Toxicity

Aquatoxicity, fish

Static test

Species	Oncorhynchus mykiss (rainbow trout)
Exposure duration	96 h
EC50	> 120 mg/l
Method	OECD 203

Semi-static test

Species	Oryzias latipes (Japanese medaka)
Exposure duration	96 h
LC50	> 100 mg/l

Method	OECD 203
Test substance	hydrolysis product
Static test	
Species	Lepomis macrochirus (Bluegill sunfish)
Exposure duration	96 h
LC50	48 mg/l
Method	US-EPA
Test substance	hydrolysis product

Aquatoxicity, Invertebrates

Static test	
Species	Daphnia magna (Water flea)
Exposure duration	48 h
EC50	> 120 mg/l
Method	OECD 202

The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Aquatoxicity, algae / aquatic plants

Species	Pseudokirchneriella subcapitata
Exposure duration	72 h
LC50	19.19 mg/l
Method	OECD 201
Species	Pseudokirchneriella subcapitata
Exposure duration	72 h
NOEC	3.12 mg/l
Method	OECD 201
Static test	
Species	Pseudokirchneriella subcapitata
Exposure duration	72 h
EC50	94 mg/l
Method	OECD 201
Toxicity in Microorganisms	static test
Species	activated sludge
Respiration rate	
Exposure duration	3 h
EC50	> 1,000 mg/l
Method	OECD 209

Chronic toxicity in fish

Flow-through	
Species	Oryzias latipes (Orange-red killifish)
Adult mortality	
Exposure duration	14 d

NOEC	>= 100 mg/l
Method	OECD 204
Test substance	hydrolysis product

Chronic toxicity in aquatic Invertebrates

Semi-static test

Species	Daphnia magna (Water flea)
Reproduction	
Exposure duration	21 d
NOEC	>= 100 mg/l
Method	OECD 211
Test substance	hydrolysis product

Persistence and degradability

Photodegradation	no data available
Biological degradability	0 %
Exposure duration	28 d
Result	Not readily biodegradable.
Method	OECD 301 A
Test substance	hydrolysis product

Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Bio-accumulative potential

Species	Cyprinus carpio
Exposure duration	42 d
	< 2.5
Method	OECD 305 C
Test substance	hydrolysis product

Mobility in soil

Mobility	No data available

Results of PBT and vPvB assessment

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

Other adverse effects

General Information	Do not allow to enter soil, waterways or waste water canal.

SECTION 13: Disposal considerations

Waste treatment methods

Product:

In accordance with local authority regulations, take to special waste incineration plant

Contaminated 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: Transportation 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**

For USA only: This product is not regulated in packages < 119 gallons / 450 L. In bulk packages this products is a Combustible Liquid, NA1993.

SECTION 15: Regulatory information

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the (M)SDS contains all information required by the Controlled Products Regulation
Canada
WHMIS CLASSIFICATION
Class D, Division 2, Subdivision B
Class B, Division 3
This product contains component(s) that are listed on the WHMIS Ingredient Disclosure List.
Benzene, methyl-108-88-3

US regulations

SARA Title III Section 311/312 Hazard Categories
Fire Hazard
Acute Health Hazard
Chronic Health Hazard
CERCLA: CAS 108-88-3: 1000 lbs

State Right to Know

ZUSPA_RTK: No components are subject to the Pennsylvania Right to Know Act.
ZUSMA_RTK: No components are subject to the Massachusetts Right to Know Act.
ZUSNJ_RTK: No components are subject to the New Jersey Right to Know Act.
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

Toluene (CAS-No.: 108-88-3)
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
TSCA lists: TSCA 8D - Yes
HMIS Ratings
Health: 2
Flammability: 1
Reactivity: 0
Personal Protection: X

Notification status

USA (TSCA): listed / registered or exempted
GHS: control of Ebsoft
Canada (DSL): listed/registered or exempted

SECTION 16: Other information

Relevant H phrases from chapter 3

H225	Highly flammable liquid and vapor.
H305	May be harmful if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

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.