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

Product Identifier

Product Name: SiSiB® PC6151

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]

Flammable liquids,	Category 3	H226
Serious eye damage/eye irritation	Category 2	H319

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Label elements

Hazard pictograms (CLP)

Signal word (CLP) Warning

Hazard statements (CLP)

H226 - Flammable liquid and vapor.

H319 - Causes serious eye irritation.

Precautionary statements (CLP)

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 - Ground/bond container and receiving equipment.

P264 - Wash hands thoroughly after handling.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Other hazards

Other hazards not contributing to the classification

Note: The hydrolysis product of vinyltriisopropenoxysilane is acetone. Overexposure by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, muscle weakness).

SECTION 3: Composition/information on ingredients

Substances

Substance type Mono-constituent

Name VINYLTRIISOPROPENOXYSILANE

CAS-No. 15332-99-7

EC-No. 239-362-1

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Vinyltrisisopropenyloxysilane	(CAS-No.) 15332-99-7 (EC-No.) 239-362-1	> 95	Flam. Liq. 3, H226 Eye Irrit. 2, H319
Acetone	(CAS-No.) 67-64-1 (EC-No.) 200-662-2 (EC Index-No.) 606-001-00-8		Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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

May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact

May cause skin irritation.

Symptoms/injuries after eye contact

Causes serious eye irritation.

Symptoms/injuries after ingestion

May be harmful if swallowed.

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.

Special hazards arising from the substance or mixture

Fire hazard

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

Advice for firefighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

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

General measures	Remove ignition sources. Use special care to avoid static electric charges.

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. Use only non-sparking tools.

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. Containers must be properly grounded before beginning transfer. Take precautionary measures against static discharge. Use only non-sparking tools.
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

Technical measures	Ground/bond container and receiving equipment.
Storage conditions	Keep container tightly closed.
Incompatible materials	Oxidizing agent. 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

Acetone (67-64-1)

EU	IOELV TWA (mg/m³)	1210 mg/m³
EU	IOELV TWA (ppm)	500 ppm
Austria	MAK (mg/m³)	1200 mg/m³
Austria	MAK (ppm)	500 ppm
Austria	MAK Short time value (mg/m³)	4800 mg/m³
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (mg/m³)	1210 mg/m³
Belgium	Limit value (ppm)	500 ppm
Belgium	Short time value (mg/m³)	2420 mg/m³
Belgium	Short time value (ppm)	1000 ppm
Bulgaria	OEL TWA (mg/m³)	600 mg/m³
Bulgaria	OEL STEL (mg/m³)	1400 mg/m³
Cyprus	OEL TWA (mg/m³)	1210 mg/m³

Cyprus	OEL TWA (ppm)	500 ppm
France	VLE (mg/m³)	2420 mg/m³ (restrictive limit)
France	VLE (ppm)	1000 ppm (restrictive limit)
France	VME (mg/m³)	1210 mg/m³ (restrictive limit)
France	VME (ppm)	500 ppm (restrictive limit)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	1200 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	500 ppm
Germany	TRGS 903 Biological limit value	80 mg/l (Medium: urine - Time: end of shift - Parameter: Acetone)
Gibraltar	Eight hours mg/m3	1210 mg/m³
Gibraltar	Eight hours ppm	500 ppm
	OSHA PEL (TWA) (ppm)	1000 ppm
Greece	OEL TWA (mg/m³)	1780 mg/m³
Greece	OEL STEL (mg/m³)	3560 mg/m³
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	250 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	500 ppm
Italy	OEL TWA (mg/m³)	1210 mg/m³
Italy	OEL TWA (ppm)	500 ppm
Latvia	OEL TWA (mg/m³)	1210 mg/m³
Latvia	OEL TWA (ppm)	500 ppm
USA IDLH	US IDLH (ppm)	2500 ppm (10% LEL)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	590 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Spain	VLA-ED (mg/m³)	1210 mg/m³ (indicative limit value)
Spain	VLA-ED (ppm)	500 ppm (indicative limit value)
Switzerland	KZGW (mg/m³)	2400 mg/m³
Switzerland	KZGW (ppm)	1000 ppm
Switzerland	MAK (mg/m³)	1200 mg/m³
Switzerland	MAK (ppm)	500 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	1210 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	2420 mg/m³
United Kingdom	WEL TWA (mg/m³)	1210 mg/m³
United Kingdom	WEL TWA (ppm)	500 ppm
United Kingdom	WEL STEL (mg/m³)	3620 mg/m³
United Kingdom	WEL STEL (ppm)	1500 ppm
Czech Republic	Expoziční limity (PEL) (mg/m³)	800 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	600 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	250 ppm
Finland	HTP-arvo (8h) (mg/m³)	1200 mg/m³
Finland	HTP-arvo (8h) (ppm)	500 ppm
Finland	HTP-arvo (15 min)	1500 mg/m³
Finland	HTP-arvo (15 min) (ppm)	630 ppm
Hungary	AK-érték	1210 mg/m³
Hungary	CK-érték	2420 mg/m³ (Substances with European indicative

		limits (96/94/EC, 2000/39/EC, 2006/15/EC, 2009/161/EU), which currently has no peak limit concentration. In these cases, Annex 3.1. should be used exercised)
Ireland	OEL (8 hours ref) (mg/m³)	1210 mg/m³
Ireland	OEL (8 hours ref) (ppm)	500 ppm
Lithuania	IPRV (mg/m³)	1210 mg/m³
Lithuania	IPRV (ppm)	500 ppm
Lithuania	TPRV (mg/m³)	2420 mg/m³
Lithuania	TPRV (ppm)	1000 ppm
Malta	OEL TWA (mg/m³)	1210 mg/m³
Malta	OEL TWA (ppm)	500 ppm
Norway	Grenseverdier (AN) (mg/m³)	295 mg/m³
Norway	Grenseverdier (AN) (ppm)	125 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	295 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	125 ppm
Poland	NDS (mg/m³)	600 mg/m³
Poland	NDSCh (mg/m³)	1800 mg/m³
Romania	OEL TWA (mg/m³)	1210 mg/m³
Romania	OEL TWA (ppm)	500 ppm
Slovakia	NPHV (priemerná) (mg/m³)	1210 mg/m³
Slovakia	NPHV (priemerná) (ppm)	500 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	2420 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	600 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	250 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	1200 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	500 ppm
Canada (Quebec)	VECD (mg/m³)	2380 mg/m³
Canada (Quebec)	VECD (ppm)	1000 ppm
Canada (Quebec)	VEMP (mg/m³)	1190 mg/m³
Canada (Quebec)	VEMP (ppm)	500 ppm
Australia	TWA (mg/m³)	1185 mg/m³
Australia	TWA (ppm)	500 ppm
Australia	STEL (mg/m³)	2375 mg/m³
Australia	STEL (ppm)	1000 ppm
Portugal	OEL TWA (mg/m³)	1210 mg/m³ (indicative limit value)
Portugal	OEL TWA (ppm)	500 ppm (indicative limit value)
Portugal	OEL STEL (ppm)	750 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

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Form: clear liquid
Molecular mass	226.35 g/mol
Color	no data available
Odor	characteristic
Odor Threshold	no data available
Refractive index	1.4373
pH	no data available
Relative evaporation rate (butyl acetate=1)	no data available
Melting point	no data available
Freezing point	< 0 °C
Boiling point	73 - 75 °C @ 12 mm Hg
Flash point:	> 38 °C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Flammability (solid, gas)	no data available
Vapor pressure:	< 2 mm Hg @ 20°C
Relative vapor density at 20 °C	~ 7
Relative density	0.926
Solubility	Insoluble in water. Reacts 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

Possibility of hazardous reactions

Material decomposes slowly in contact with moist air or with water liberating acetone. . Hazardous polymerization can occur if product is heated over 150°C.

Conditions to avoid

Heat. Open flame. Sparks

Incompatible materials

Oxidizing agent. Moisture. Water.

Hazardous decomposition products

Acetone. Organic acid vapors. Silicon dioxide.

SECTION 11:Toxicological Information

Information on toxicological effects

Acute toxicity

Not classified

VINYLTRIISOPROPENOXYSILANE, tech-95 (15332-99-7)

LD50 oral rat	12300 µl/kg

Acetone (67-64-1)

LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m³ (Exposure time: 8 h)
ATE CLP (oral)	5800 mg/kg bodyweight
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
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.
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.
Reason for classification	Expert judgment

SECTION 12: Ecological Effects

Toxicity

Acute aquatic toxicity	Not classified
Chronic aquatic toxicity	Not classified

Acetone (67-64-1)	
LC50 fish 1	4.74 - 6.33 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	10294 - 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	6210 - 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	12600 - 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence and degradability

No data available

Bioaccumulative potential

Acetone (67-64-1)	
BCF fish 1	0.69
Log Pow	-0.24

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:

Incinerate. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.

Ecology - waste materials:

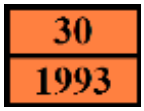
Avoid release to the environment.

SECTION 14:Transport Information

UN number

In accordance with ADR / RID / IMDG / IATA / ADN

UN-No. (ADR)	1993
UN-No. (IMDG)	1993
UN-No. (IATA)	1993
UN-No. (ADN)	1993
UN-No. (RID)	1993
UN proper shipping name	
Proper Shipping Name (ADR)	FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IMDG)	FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IATA)	Flammable liquid, n.o.s.
Proper Shipping Name (ADN)	FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (RID)	FLAMMABLE LIQUID, N.O.S.
Transport document description (ADR)	UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLTRIISOPROPENOXYSILANE), 3, III, (D/E)
Transport document description (IMDG)	UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLTRIISOPROPENOXYSILANE), 3, III
Transport document description (IATA)	UN 1993 Flammable liquid, n.o.s. (VINYLTRIISOPROPENOXYSILANE), 3, III
Transport document description (ADN)	UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLTRIISOPROPENOXYSILANE), 3, III
Transport document description (RID)	UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLTRIISOPROPENOXYSILANE), 3, III
Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	3
IMDG	
Transport hazard class(es) (IMDG)	3
IATA	
Transport hazard class(es) (IATA)	3
ADN	
Transport hazard class(es) (ADN)	3
RID	
Transport hazard class(es) (RID)	3
Packing group	
Packing group (ADR)	III
Packing group (IMDG)	III
Packing group (IATA)	III
Packing group (ADN)	III
Packing group (RID)	III
Environmental hazards	

Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available
Special precautions for user	
Overland transport	
Classification code (ADR)	F1
Special provisions (ADR)	274, 601, 640E
Limited quantities (ADR)	5l
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	MP19
Portable tank and bulk container instructions (ADR)	T4
Portable tank and bulk container special provisions (ADR)	TP1, TP29
Tank code (ADR)	LGBF
Vehicle for tank carriage	FL
Transport category (ADR)	3
Special provisions for carriage - Packages (ADR)	V12
Special provisions for carriage - Operation (ADR)	S2
Hazard identification number (Kemler No.)	30
Orange plates	
Tunnel restriction code (ADR)	D/E
Transport by sea	
Special provisions (IMDG)	223, 274, 955
Limited quantities (IMDG)	5 L
Excepted quantities (IMDG)	E1
Packing instructions (IMDG)	P001, LP01
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	T4
Tank special provisions (IMDG)	TP1, TP29
EmS-No. (Fire)	F-E
EmS-No. (Spillage)	S-E
Stowage category (IMDG)	A
Air transport	
PCA Excepted quantities (IATA)	E1

PCA Limited quantities (IATA)	Y344
PCA limited quantity max net quantity (IATA)	10L
PCA packing instructions (IATA)	355
PCA max net quantity (IATA)	60L
CAO packing instructions (IATA)	366
CAO max net quantity (IATA)	220L
Special provisions (IATA)	A3
ERG code (IATA)	3L

Inland waterway transport

Classification code (ADN)	F1
Special provisions (ADN)	274, 601, 640E
Limited quantities (ADN)	5 L
Excepted quantities (ADN)	E1
Carriage permitted (ADN)	T
Equipment required (ADN)	PP, EX, A
Ventilation (ADN)	VE01
Number of blue cones/lights (ADN)	0

Rail transport

Classification code (RID)	F1
Special provisions (RID)	274, 601, 640E
Limited quantities (RID)	5L
Excepted quantities (RID)	E1
Packing instructions (RID)	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	MP19
Portable tank and bulk container instructions (RID)	T4
Portable tank and bulk container special provisions (RID)	TP1, TP29
Tank codes for RID tanks (RID)	LGBF
Transport category (RID)	3
Special provisions for carriage – Packages (RID)	W12
Colis express (express parcels) (RID)	CE4
Hazard identification number (RID)	30

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

VINYLTRIISOPROPENOXYSILANE, tech-95 is not on the REACH Candidate List

VINYLTRIISOPROPENOXYSILANE, tech-95 is not on the REACH Annex XIV List

VINYLTRIISOPROPENOXYSILANE, tech-95 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.

VINYLTRIISOPROPENOXYSILANE, tech-95 is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

% Volatiles > 75 %

National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 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

Classification remarks

Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16:Other Information

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3,

	Narcosis
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

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.