# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

 Version 5.1R
 Page 1 / 11
 Revision Date 10.12.2018

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

**Product Identifier** 

Product Name: SiSiB® PC11576

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

Relevant applications identified Cosmetics

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

Flammable liquids Category 3 H226

Label elements

Labelling according to Regulation (EC) No 1272/2008

**Hazard pictograms** 



Signal word WARNING

**Hazard statements** 

H226 Flammable liquid and vapor.

**Precautionary statements:** 

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P233 Keep container tightly closed.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry

chemical or carbon dioxide to extinguish.

P403 + P235 Store in a well-ventilated place. Keep cool.



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R	Page 2 / 11	Revision Date 10.12.2018
--------------	-------------	--------------------------

P501

Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards

None

# **SECTION 3: Composition/information on ingredients**

#### **Substances**

This product is a substance.

CASRN / EC-No. /	Concentration	Component	Classification: REGULATION (EC) No
Index-No.			1272/2008
CASRN 717908-03-7 EC-No. Polymer Index-No. –	>= 90.0 - <= 100.0 %	Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated	Not classified
CASRN 70131-69-0 EC-No. 939-487-8 Index-No. –	>= 4.0 - <= 7.0 %	Silsesquioxanes, phenyl trimethylsilyloxy-terminated	Acute Tox 2 - H330

For the full text of the H-Statements mentioned in this Section, see Section 16.

# **SECTION 4: First aid measures**

#### Description of first aid measures

# General advice

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

#### If inhaled

Move person to fresh air; if effects occur, consult a physician.

#### In case of skin contact

Wash off with plenty of water.

#### In case of eye contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

#### If swallowed

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1K	Version 5.1R	Page 3 / 11	Revision Date 10.12.2018
--------------	--------------	-------------	--------------------------

and effects are described in Section 11: Toxicology Information.

#### Indication of any immediate medical attention and special treatment needed

**Notes to physician**: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

# **SECTION 5: Firefighting measures**

#### **Extinguishing media**

#### Suitable extinguishing media

Water spray, Alcohol-resistant foam, Carbon dioxide (CO2), Dry chemical

### Unsuitable extinguishing media

High volume water jet. Do not use direct water stream.

#### Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides Nitrogen oxides (NOx) Formaldehyde Carbon oxides

#### **Unusual Fire and Explosion Hazards:**

Flash back possible over considerable distance. Exposure to combustion products may be a hazard to health. Vapors may form explosive mixtures with air.

#### Advice for firefighters

**Fire Fighting Procedures:** Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Do not use a solid water stream as it may scatter and spread fire.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

#### Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

#### **Environmental precautions:**

Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

### Methods and materials for containment and cleaning up



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R	Page 4 / 11	Revision Date 10.12.2018
--------------	-------------	--------------------------

Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water spray jet. Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

#### Reference to other sections

See sections: 7, 8, 11, 12 and 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

Avoid inhalation of vapor or mist. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Non-sparking tools should be used. Handle in accordance with good industrial hygiene and safety practice.

Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation. Ground and bond container and receiving equipment.

## Conditions for safe storage, including any incompatibilities

Keep in properly labelled containers. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition. Do not store with the following product types: Strong oxidizing agents. Organic peroxides. Flammable solids. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. Explosives. Gases.

Unsuitable materials for containers: None known.

### Specific end use(s)

See the technical data sheet on this product for further information.

## **SECTION 8: Exposure Controls/Personal Protection**

#### **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Ethanol	ACGIH	TWA	1,000 ppm
	ACGIH	STEL	1,000 ppm
	GB EH40	TWA	1,920 mg/m3 1,000
			ppm



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R	Page 5 / 11	Revision Date 10.12.2018
--------------	-------------	--------------------------

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:

Ethanol

#### **Derived No Effect Level**

Silsesquioxanes, phenyl trimethylsilyloxy-terminated

#### Workers

Acute sys	stemic effects	Acute lo	cal effects	Long-term	systemic effects	Long-teri	n local effects
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
10 mg/kg bw/day	71 mg/m3	n.a.	n.a.	10 mg/kg bw/day	71 mg/m3	n.a.	n.a.
Consume	ers						
Acute sys	stemic effects	Acute lo	cal effects	Long-term	systemic effects	Long-ter	m local effects
Der Inha	alation Oral	Dermal	Inhalation	Dermal	Inhalation Oral	Derm	al Inhalation

Der mal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	n.a.	5 mg/kg bw/day	n.a.	n.a.	n.a.	n.a.	5 mg/kg bw/day	n.a.	n.a.

#### **Predicted No Effect Concentration**

Silsesquioxanes, phenyl trimethylsilyloxy-terminated

Compartment	PNEC
Fresh water	0.0007 mg/l
Marine water	0.00007 mg/l
Fresh water sediment	0.722 mg/kg
Marine sediment	0.0722 mg/kg
Soil	0.062 mg/kg
Sewage treatment plant	100 mg/l

#### **Exposure controls**

**Engineering controls**: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

#### Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

#### Skin protection

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Natural rubber ("latex"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

 Version 5.1R
 Page 6 / 11
 Revision Date 10.12.2018

substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

#### **Environmental exposure controls**

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

## **SECTION 9: Physical and Chemical Properties**

# Information on basic physical and chemical properties

Physical state liquid

Color Colorless to pale yellow

Odor slight

Odor Threshold no data available pH no data available Melting point/range no data available Freezing point no data available

Boiling point (760 mmHg) > 100 °C

Flash point: Pensky-Martens closed cup 44.4 °C

Evaporation rate (Butyl Acetate = 1) no data available Flammability (solid, gas) no data available Lower explosion limit no data available Upper explosion limit no data available Vapor pressure: no data available



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R Page 7 / 11 Revision Date 10.12.2018

Relative Vapor Density (air = 1) no data available

Relative Density (water = 1) 1.1

Water solubility:

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Dynamic Viscosity

No data available

no data available

no data available

no data available

2000 mm2/s at 25 °C

Explosive properties not explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

Molecular weight no data available
Particle size no data available

NOTE: The physical data presented above are typical values and should not be construed as a

specification.

# **SECTION 10: Stability And Reactivity**

#### Reactivity

Not classified as a reactivity hazard.

#### **Chemical stability**

Stable under normal conditions

#### Possibility of hazardous reactions

Can react with strong oxidizing agents. Vapors may form explosive mixture with air. Flammable liquid and vapor.

#### **Conditions to avoid**

Heat, flames and sparks.

#### Incompatible materials

Oxidizing agents

## **Hazardous decomposition products**

Benzene. Ethanol.

# **SECTION 11:Toxicological Information**

#### Information on toxicological effects

#### **Acute toxicity**

#### **Acute oral toxicity**

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

As product: Single dose oral LD50 has not been determined.



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R Page 8 / 11 Revision Date 10.12.2018

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

### Acute inhalation toxicity

As product: The LC50 has not been determined.

#### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

Brief contact may cause slight skin irritation with local redness.

#### Serious eye damage/eye irritation

May cause slight temporary eye irritation.

#### Sensitization

For skin sensitization:

Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:

No relevant data found.

### Specific target organ toxicity - single exposure

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

### Specific target organ toxicity - repeated exposure

No relevant data found.

#### Carcinogenicity

No relevant data found.

#### **Teratogenicity**

No relevant data found.

#### Reproductive toxicity

No relevant data found.

#### Mutagenicity

In vitro genetic toxicity studies were negative.

#### **Aspiration hazard**

Based on physical properties, not likely to be an aspiration hazard

### **COMPONENTS INFLUENCING TOXICOLOGY**

### Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

#### Acute oral toxicity

Single dose oral LD50 has not been determined.

## Acute dermal toxicity

The dermal LD50 has not been determined.

## Acute inhalation toxicity

The LC50 has not been determined.

### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

#### **Acute oral toxicity**

Single dose oral LD50 has not been determined.



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

Version 5.1R Page 9 / 11 Revision Date 10.12.2018

#### Acute dermal toxicity

On basis of test data. LD50, Rabbit, > 2,000 mg/kg

#### Acute inhalation toxicity

Applies to aerosolized material only. LC50, Rat, 4 Hour, dust/mist, 0.467 mg/l

# **SECTION 12: Ecological Effects**

#### **Toxicity**

## Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna, 48 Hour, > 100 mg/l, Estimated.

Not expected to be acutely toxic to aquatic organisms.

#### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

### Acute toxicity to fish

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

LC50, Danio rerio (zebra fish), 96 Hour, > 500 mg/l

#### Persistence and degradability

#### Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

Biodegradability: No relevant data found.

## Silsesquioxanes, phenyl trimethylsilyloxy-terminated

Biodegradability: No relevant data found.

#### Bioaccumulative potential

#### Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

Bioaccumulation: No relevant data found.

#### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

Bioaccumulation: No relevant data found.

#### Mobility in soil

# Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

No relevant data found.

#### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

No relevant data found.

#### Results of PBT and vPvB assessment

### Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

#### Other adverse effects

# Aminopropyl-, phenyl silsesquioxanes trimethylsiloxy-terminated

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

rage 10 / 11 Revision Date 10.12.2010		Version 5.1R	Page 10 / 11	Revision Date 10.12.2018
---------------------------------------	--	--------------	--------------	--------------------------

#### Silsesquioxanes, phenyl trimethylsilyloxy-terminated

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## **SECTION 13:Disposal considerations**

#### Waste treatment methods

Do not dump into any sewers, on the ground, or into any body of water. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

# **SECTION 14:Transport Information**

Classification for ROAD and Rail transport (ADR/RID)

UN number UN 1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S.(Trimethylethoxysilane, Ethanol)

Transport hazard class(es) 3
Packing group III

Environmental hazards Not considered environmentally hazardous based on available

data.

Special precautions for user Hazard Identification Number: 30

Classification for SEA transport (IMO-IMDG):

UN number UN 1993

**UN proper shipping name** FLAMMABLE LIQUID, N.O.S.(Trimethylethoxysilane, Ethanol)

Transport hazard class(es) 3
Packing group III

Environmental hazards Not considered as marine pollutant based on available data.

Special precautions for user EmS: F-E, S-E

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

UN 1993

**UN proper shipping name** Flammable liquid, n.o.s.(Trimethylethoxysilane, Ethanol)

Transport hazard class(es) 3
Packing group III

Environmental hazards Not applicable



# SAFETY DATA SHEET

(EC 1907/2006) SiSiB® PC11576

 Version 5.1R
 Page 11 / 11
 Revision Date 10.12.2018

#### Special precautions for user

No data available.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

# **SECTION 15:Regulatory Information**

# Safety, health and environmental regulations/legislation specific for the substance or mixture REACh Regulation (EC) No 1907/2006

Polymers are exempted from registration under REACH. All relevant starting materials and additives have been either pre-registered, registered, or are exempt from registration to Regulation (EC) No. 1907/2006 (REACH).,The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: FLAMMABLE LIQUIDS

Number in Regulation: P5c

5,000 t 50,000 t

Chemical safety assessment

Not applicable

## **SECTION 16:Other Information**

#### Full text of H-Statements referred to under sections 2 and 3.

H226 Flammable liquid and vapor.

H330 Fatal if inhaled.

#### **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.

