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

Product Identifier

Product Name: SiSiB® PC19556

Chemical Name: Amodimethicone

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

Relevant applications identified: Cosmetics, Additives

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

GHS Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3

GHS label elements

Hazard pictograms

Signal word: WARNING!

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

Wash skin thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/ eye protection/ face protection.

Response

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs:	Get medical advice/ attention.
If eye irritation persists:	Get medical advice/ attention.
	Take off contaminated clothing and wash before reuse.

Disposal

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

Other hazards

No data available

SECTION 3: Composition/information on ingredients

This product is a substance.

Component	CASRN	Concentration
Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated	106842-44-8	>= 87.0 - <= 100.0 %
Dimethyl,methyl(aminoethylamino isobutyl) cyclosiloxane	Not available	>= 1.3 - <= 1.7 %
Octamethyl Cyclotetrasiloxane	556-67-2	>= 0.17 - <= 0.23 %

SECTION 4: First aid measures

Description of first aid measures

General advice

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). 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. Suitable emergency safety shower facility should be available in work area.

In case of eye contact

Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

If swallowed

No emergency medical treatment necessary.

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 and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician:

If burn is present, treat as any thermal burn, after decontamination. 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

Hazchem Code

None Allocated

Suitable extinguishing media

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

Unsuitable extinguishing media

None known

Special hazards arising from the substance or mixture

Hazardous combustion products:

Silicon oxides Nitrogen oxides (NOx) Formaldehyde Carbon oxides

Unusual Fire and Explosion Hazards:

Exposure to combustion products may be a hazard to health. Fire burns more vigorously than would be expected.

Advice for firefighters

Fire Fighting Procedures

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.

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:
Do not release the product to the aquatic environment above defined regulatory levels 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
Soak up with inert absorbent material. 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. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.
Reference to other sections
See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

Precautions for safe handling
Do not get on skin or clothing. Avoid inhalation of vapor or mist. Do not swallow. Do not get in eyes. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice.
Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Conditions for safe storage:
Keep in properly labelled containers. Store locked up. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.
Unsuitable materials for containers: None known.

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
Octamethyl Cyclotetrasiloxane	US WEEL	TWA	10 ppm

Exposure controls

Engineering controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection

Use chemical goggles

Skin protection

Hand protection

Use chemical resistant gloves classified under standard AS/NZS 2161.10: 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 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. 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, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

Other Information:

Selection and use of personal protective equipment should be in accordance with the recommendations in

one or more of the relevant Australian/New Zealand Standards, including:
AS/NZS 1336: Eye and face protection – Guidelines.
AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.
AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.
AS/NZS 2161: Occupational protective gloves.
AS/NZS 2210: Occupational protective footwear.
AS/NZS 4501: Occupational protective clothing Set

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid
Color	Colorless to pale yellow
Odor	Fishy
Odor Threshold	no data available
pH	no data available
Melting point/range	no data available
Boiling point (760 mmHg)	> 150 °C
Flash point:	Pensky-Martens closed cup 132.22 °C
Evaporation rate (Butyl Acetate= 1)	no data available
Flammability (solid, gas)	Not applicable
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure:	no data available
Relative Vapor Density (air = 1)	no data available
Relative density (water = 1)	0.98
Water solubility:	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Dynamic Viscosity	3,000 cP
Kinematic Viscosity	no data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available
Particle size	Not applicable

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.

Conditions to avoid

None known.

Incompatible materials

Oxidizing agents

Hazardous decomposition products

Formaldehyde

SECTION 11:Toxicological Information

Information on toxicological effects

Not applicable

Acute toxicity

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

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

Based on information for component(s):

LD50, > 5,000 mg/kg Estimated.

Acute dermal toxicity

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

As product: The dermal LD50 has not been determined.

Based on information for component(s):

LD50, > 2,000 mg/kg Estimated.

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to vapor.

As product: The LC50 has not been determined.

Skin corrosion/irritation

Brief contact may cause severe skin irritation with pain and local redness.

Prolonged contact may cause skin irritation, even a burn.

Serious eye damage/eye irritation

May cause moderate eye irritation which may be slow to heal.

May cause corneal injury.

May cause pain.

Sensitization

For the major component(s):
Did not cause allergic skin reactions when tested in guinea pigs.
For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

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

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity

No relevant data found.

Teratogenicity

For the minor component(s): Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity

For the minor component(s): In animal studies, has been shown to interfere with fertility.

Mutagenicity

Contains a component(s) which were negative in in vitro genetic toxicity studies. Contains component(s) which were negative in animal genetic toxicity studies.

Aspiration Hazard

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

COMPONENTS INFLUENCING TOXICOLOGY:

Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated

Acute inhalation toxicity

On basis of test data.
Applies to aerosolized material only. LC50, Rat, 4 Hour, dust/mist, 0.204 mg/l

Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane

Acute inhalation toxicity

The LC50 has not been determined.

Octamethyl Cyclotetrasiloxane

Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, dust/mist, 36 mg/l OECD Test Guideline 403

SECTION 12: Ecological Effects

Ecotoxicity

Acute toxicity to aquatic invertebrates

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
EC50, Daphnia magna (Water flea), Static, 48 Hour, 11 mg/l

Persistence and degradability

Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated
Biodegradability: No appreciable biodegradation is expected.
Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane
Biodegradability: No relevant data found.
Octamethyl Cyclotetrasiloxane
Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Not applicable
Biodegradation: 3.7 %
Exposure time: 28 d
Method: OECD Test Guideline 310
Stability in Water (1/2-life)
Hydrolysis, DT50, 69.3 - 144 Hour, pH 7, Half-life Temperature 24.6 °C, OECD Test Guideline 111
Photodegradation
Atmospheric half-life: 16 d
Method: Estimated.

Bioaccumulative potential
Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated
Bioaccumulation: No relevant data found.
Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane
Bioaccumulation: No relevant data found.
Octamethyl Cyclotetrasiloxane
Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).
Partition coefficient: n-octanol/water(log Pow): 6.49 Measured
Bioconcentration factor (BCF): 12,400 Pimephales promelas (fathead minnow) Measured

Mobility in soil
Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated
No relevant data found.
Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane
No relevant data found.
Octamethyl Cyclotetrasiloxane
Expected to be relatively immobile in soil (Koc > 5000).

Results of PBT and vPvB assessment
Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated
This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane
This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Octamethyl Cyclotetrasiloxane

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB). Octamethylcyclotetrasiloxane (D4) meets the current REACh Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed anddeemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

Other adverse effects

Dimethyl, methyl(aminoethylaminoisobutyl) siloxane, trimethylsiloxy-terminated

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

Dimethyl,methyl(aminoethylaminoisobutyl) cyclosiloxane

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

Octamethyl Cyclotetrasiloxane

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

SECTION 13:Disposal considerations

Disposal methods:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

Treatment and disposal methods of used packaging:

Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

This product when disposed of in its unused and uncontaminated state should be treated as a hazardous waste.

SECTION 14:Transport Information

UN number

Not regulated as a dangerous good

UN proper shipping name

Not regulated as a dangerous good

Transport hazard class(es)

Not regulated as a dangerous good

Packing group

Not regulated as a dangerous good

Environmental hazards

Not regulated as a dangerous good

Special precautions for user

No data available

Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks

Not applicable for product as supplied.

SECTION 15:Regulatory Information

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

Not applicable

Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

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.