

Safety Data Sheet
According to Hazard Communication Standard (29 CFR 1910.1200)

Decamethylcyclopentasiloxane

Version 1.0

Revision date: 08/25/2022

Issue date: 08/25/2022

SDS record number: CSSS-TCO-010-152308

1. Product and Company Identification

Material name	Decamethylcyclopentasiloxane
Trade name	XHG-025
CAS #	See section 3
Product code	-
Product use	Not available
Manufacturer/Supplier	
Supplier(Manufacturer):	Zhejiang Xinan Chemical Industrial Group Co., Ltd
Address:	No.1 Xinan Building,Jiangbing Middle Road, Jiande City, Zhejiang Province, P.R.China
Contact person(E-mail):	-
Telephone:	+86-571-87215853
Fax:	+86-571-87515494
Emergency telephone Number:	+86-15869186083

2. Hazards identification

GHS classification	
Physical hazards	Not classified
Health hazards	Reproductive toxicity Category 2
Environmental hazards	Not classified

GHS label elements

Hazard Pictograms



Signal word	Warning
Hazard statement	Suspected of damaging fertility or the unborn child
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If exposed or concerned: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local regulation.
Other hazards	Not available

3. Composition / Information on Ingredients

Components	CAS#	Percent
Decamethylcyclopentasiloxane	541-02-6	≥ 99% wt
Octamethylcyclotetrasiloxane	556-67-2	≤ 0.10%

4. First Aid Measures

First aid procedures

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Eye contact	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid if irritation occurs.
Skin contact	Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Ingestion	Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 capfuls of milk or water.
Notes to physician	Treat symptoms.

5. Fire Fighting Measure

Flammable properties	Not available
Extinguishing media	
Suitable extinguishing media	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	Do not use water jet.
Firefighting equipment/instructions	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Hazardous combustion products	Carbon dioxide, carbon monoxide.

6. Accidental Release Measures

Personal precautions	See section 8.
Environmental precautions	Do not allow material to enter drains or watercourses.
Methods for cleaning up	Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with any inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (See Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

7. Handling and Storage

Handling	Put on appropriate personal protective equipment (See Section 8). Avoid exposure-obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, Sparks, open flame or any other ignition source. Use explosion-proof electrical (Ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Material		Type	Value
Decamethylcyclopentasiloxane (541-02-6)	(CAS	TWA	10 ppm

Material		Type	Value
Octamethylcyclotetrasiloxane (CAS 556-67-2)		TWA	10 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls:

Use appropriate engineering controls to reduce air contamination to approved/permmissible national exposure standard. Where such system is not effective wear suitable personal protective equipment, which perform satisfactorily and meets local/national standards. There should be local procedures for selection, training, inspection and maintenance of his equipment.

Individual protection measures, such as personal protective equipment:

Eye / face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body and appropriate footwear and any additional skin protection should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

General hygiene considerations

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

9. Physical & Chemical Properties

Appearance

Physical state	Liquid
Form	Liquid
Color	Colourless
Odor	Odorless
Odor threshold	Not available
pH	Not available
Vapor pressure	33.2 Pa (25°C)
Vapor density	Not available
Boiling point	210 °C
Melting point/Freezing point	-38 °C
Solubility (water)	Insoluble (< 0.1 mg/L)
Relative density	0.96,20 °C
Flash point	82.7 °C

Partition coefficient	log Pow=8.07, 24.6 °C
Explosive limits in air, upper, %by volume	Not available
Explosive limits in air, lower, % by volume	Not available
Auto-ignition temperature	645.15 K
Molecular formula	C10H30O5Si5
Molecular weight	370.77
Other data	
Viscosity	3.5mPa.s (25°C)
Dissociation constant	Not available

10. Chemical Stability & Reactivity Information

Reactivity	The substance is stable under normal storage and handling conditions.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Incompatible materials. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials; Slightly reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Carbon dioxide, carbon monoxide.
Possibility of hazardous reactions	No dangerous reactions known.

11. Toxicological Information

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: Not available

Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat):	> 5 000 mg/kg bw
LD50(Dermal, Rat):	> 2 000 mg/kg bw
LC50(Inhalation, Rat):	8.67 mg/L air, 4h
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Suspected of damaging fertility or the unborn child
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

12. Ecological Information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	> 16 µg/L	96h	Fish	OECD 203	N/A	N/A
EC50	> 2.9 µg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	> 12 µg/L	96h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Under test conditions no biodegradation observed

Bioaccumulative potential:	BCF= 7 060
Mobility in soil:	log Koc: 5.17
Results of PBT&vPvB assessment:	Not available.
Other adverse effects:	Not available.

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Basic shipping requirements:

UN number	Not regulated
Proper shipping name	Not regulated
Hazard class	Not regulated
Packing group	Not regulated
Environmental hazards	No

IATA

UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	No

IMDG

UN number	Not regulated
UN proper shipping name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Environmental hazards	No

15. Regulatory Information

US federal regulations

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Octamethylcyclotetrasiloxane 1.0 % One-Time Export Notification only.
(CAS 556-67-2)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories

Reproductive toxicity

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

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16. Other Information

HMIS® ratings

Health: 3

Flammability: 2

Physical hazard: 0

NFPA ratings

Health: 3

Flammability: 2

Instability: 0

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

Issue date

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