MED-4011 Part A

Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519

Revision Date: 2024/05/09 Preparation Date: 2016/05/17 Version: 2.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Form	Mixture
Product Name	MED-4011 Part A
Synonyms	Silicone Elastomer

Intended Use of the Product

Recommended Uses and Restrictions	For professional use only.

Name, Address, and Telephone of the Responsible Party

Customer

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
productstewardship@avantorsciencesgcc.com
www.nusil.com

Emergency Telephone Number

Emergency Number	+86-532-8388-9090 (NRCC) +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview:

A colorless, odorless liquid. Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects.

Classification of the Substance or Mixture

GHS Classification (CN)

Health Hazards	Reproductive toxicity, Category 2
Environmental Hazards	Hazardous to the aquatic environment – Chronic hazard, Category 3
Hazard Pictograms (GHS-CN)	
Signal Word (GHS-CN)	Warning
Hazard Statements (GHS-CN)	Suspected of damaging fertility or the unborn child (H361) Harmful to aquatic life with long lasting effects (H412)
Prevention Precautionary Statements	Obtain special instructions before use. (P201). Do not handle until all safety precautions have been read and understood. (P202). Avoid release to the environment. (P273). Wear eye protection, protective clothing, protective gloves. (P280).
Response Precautionary Statements	IF exposed or concerned: Get medical advice/attention. (P308+P313).

Storage Precautionary Statements	Store locked up. (P405).
Disposal Precautionary Statements	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501).

Health Hazard Information

Symptoms/Injuries	Suspected of damaging fertility or the unborn child.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	Prolonged exposure may cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Suspected of damaging fertility or the unborn child.

Physiochemical Hazard

Physical and Chemical Hazards	Not classified.

Environmental Hazard

Environmental Hazards	Harmful to aquatic life with long lasting effects.

Other Hazards

Other Hazards Which Do not Result in Classification	Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture/Substance

Distinction of Substance or Mixture: Mixture

Name	Concentration	CAS-No.
Octamethylcyclotetrasiloxane	< 0.25 %	(CAS-No.) 556-67-2

SECTION 4: FIRST AID MEASURES

First Aid

First-aid Measures After Inhalation	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact	Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.
First-aid Measures After Eye Contact	Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
First-aid Measures After Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

The Most Important Symptoms and Health Effects

Symptoms/Injuries	Suspected of damaging fertility or the unborn child.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact	Prolonged exposure may cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	Suspected of damaging fertility or the unborn child.

Advice for the Rescuer

Use appropriate personal protective equipment (PPE).

Special Note for Doctor

Other medical advice or treatment	If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical.
Unsuitable Extinguishing Media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards

Fire Hazard	Not considered flammable but may burn at high temperatures.
Explosion Hazard	Product is not explosive.
Reactivity in Case of Fire	Hazardous reactions will not occur under normal conditions.
Hazardous Decomposition Products in Case of Fire	Carbon oxides (CO, CO_2). Formaldehyde. Silicon oxides.

Fire Precautions and Protective Measures

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Specific Fire Fighting	Do not allow run-off from fire-fighting to enter drains or water courses.
Firefighting Instructions	Use water spray or fog for cooling exposed containers.
Prevention Measures for Secondary Accidents	Ventilate area.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the

	assistance of trained personnel as soon as conditions permit. Ventilate area.

Environmental Protection Measures

Environmental Precautions:	Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and Material Used for Collection, Disposal of Leak

For Containment	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up	Absorb and/or contain spill with inert material. Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Precautionary Measures to Prevent the Occurence of Secondary Disasters

Secondary Disaster Prevention Measures	Ventilate area.

SECTION 7: HANDLING AND STORAGE

Handling

Additional Hazards When Processed	Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours.
Technical Measures	Comply with applicable regulations.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety procedures.
Local and General Ventilation	Ensure adequate air ventilation.
Precautions for Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do NOT breathe (dust, vapor, mist, gas). Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Prevents Handling of Incompatible Substances or Mixtures	Keep away from: Incompatible materials.

Storage

Technical Measures	Comply with applicable regulations.
Incompatible Substances or Mixtures	Refer to Section 10
Storage Conditions	Store locked up/in a secure area. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Material Used in Packaging/Containers	No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits
No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Biological Limits
No additional information available

Monitoring Methods
Monitoring Methods	No additional information available

Engineering Controls
Appropriate Engineering Controls	Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment
Personal Protective Equipment	Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Respiratory Protection	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Hand Protection	Wear protective gloves.
Eye and Face Protection	Chemical safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties
Appearance	Colorless
Physical State	Liquid
Odor	Odorless
Odor Threshold	No data available
pH Value	No data available
Melting Point/Freezing Point	No data available
Boiling Point, Initial Boiling Point and Boiling Range	No data available
Flash Point	> 135 °C (275 °F)
Autoignition Temperature	No data available
Vapor Pressure	No data available
Relative Vapor Density At 20°C	No data available
Specific Gravity	> 1
Relative Density	> 1
Solubility	No data available

N-octanol/Water Distribution Coefficient	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Limits (g/m³)	No data available
Explosive Limits (Vol %)	Not applicable
VOC Content	< 1%

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended handling and storage conditions (see section 7).
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Direct sunlight, extremely high or low temperatures, and incompatible materials.
Incompatible Materials	Strong acids, strong bases, strong oxidizers.
Hazardous Decomposition Products	Thermal decomposition may produce: Carbon oxides (CO, CO_2). Silicon oxides. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral) - Description	Not classified
Acute Toxicity (Dermal) - Description	Not classified
Acute Toxicity (Inhalation) - Description	Not classified
Skin Corrosion/Irritation - Description	Not classified
Serious Eye Damage/Irritation - Description	Not classified
Respiratory or Skin Sensitization - Description	Not classified
Germ Cell Mutagenicity - Description	Not classified
Carcinogenicity - Description	No data available
Reproductive Toxicity - Description	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure) - Description	Not classified
Specific Target Organ Toxicity (Repeated Exposure) - Description	Not classified
Aspiration - Description	Not classified

Information on Toxicological Effects Ingredient(s)

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rabbit	> 2375 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Acute Aquatic Toxicity - Description: Not classified

Chronic Aquatic Toxicity - Description: Harmful to aquatic life with long lasting effects.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish	> 22 µg/l
NOEC Chronic Fish	0.0044 mg/l

Persistence and Degradability

MED-4011 PART A	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

MED-4011 PART A	
Bioaccumulative Potential	Not established.

Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish	12400
Partition coefficient n-octanol/water (Log Pow)	6.488 at 25.1 °C

Mobility in Soil

No additional information available

Other Adverse Effects

Ozone - Description: Not classified

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Chemicals

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Avoid release to the environment.

Diposal Matters

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with UNRTDG

Not regulated

In Accordance with IATA

Not regulated

In Accordance with IMDG

Not regulated

SECTION 15: REGULATORY INFORMATION

Asia/Pacific Regulations

All components in this mixture are listed on the following inventories, have been exempted, or are not disclosed due to CBI requirements or disclosure rules according to the relevant regulation: (AICS, CA DSL, KR ECL, EINECS, ELINCS, JP ENCS, CN IECSC, MX INSQ, JP ISHL, KECI, CA NDSL, EU NLP, NZIoC, PICCS, JP PDSCL, JP PRTR, US TSCA, TCSI)

Octamethylcyclotetrasiloxane (556-67-2)	
Catalogue of Hazardous Chemicals (2015)	Listed, Considered as Hazardous Chemical(s)
Priority List of Hazardous Chemical Wastes	No

International Agreements

Octamethylcyclotetrasiloxane (556-67-2)
United Nation Lists This chemical is subject to the International Convention for the Prevention of Pollution from Ships (MARPOL)

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision	2024/05/09
Data sources	Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other Information	This SDS is prepared in accordance with GB/T 16483, GB/T 17519

Indication of Changes

Section	Change	Date Changed	Version
1	Language modified	2024/05/09	2.0
2	Classification modified; Language modified	2024/05/09	2.0
3	Data modified; Language modified	2024/05/09	2.0
4	Language modified	2024/05/09	2.0
5	Language modified	2024/05/09	2.0
6	Language modified	2024/05/09	2.0
7	Language modified	2024/05/09	2.0
8	Language modified	2024/05/09	2.0
9	Data modified	2024/05/09	2.0
10	Language modified	2024/05/09	2.0
11	Data modified; Language modified	2024/05/09	2.0
12	Data modified	2024/05/09	2.0
13	Language modified	2024/05/09	2.0
14	Language modified	2024/05/09	2.0
15	Language modified	2024/05/09	2.0
16	Language modified	2024/05/09	2.0

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
BEI - Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. - Chemical Abstracts Service Number
CN - China
COD – Chemical Oxygen Demand
EC50 - Median Effective Concentration
EmS-No. (Fire) - IMDG Emergency Schedule Fire
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
EU - European Union
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAC – Maximum Allowable Concentration
MFAG-No - Medical First Aid Guide for Use in Accidents Involving Dangerous Goods
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NTP – National Toxicology Program
OEL - Occupational Exposure Limits
pH – Potential Hydrogen
SADT - Self Accelerating Decomposition Temperature
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
ThOD – Theoretical Oxygen Demand
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TWA - Time Weighted Average
UN – United Nations
UN RTDG – United Nations Recommendations on the Transport of Dangerous Goods
VOC – Volatile Organic Compounds
WEEL - Workplace Environmental Exposure Levels

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S

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China GHS SDS

MED-4011 Part B

Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519

Revision Date: 2024/05/09 Preparation Date: 2016/05/17 Version: 2.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Form	Mixture
Product Name	MED-4011 Part B
Synonyms	Silicone Elastomer

Intended Use of the Product

Recommended Uses and Restrictions	For professional use only

Name, Address, and Telephone of the Responsible Party

Customer

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
productstewardship@avantorsciencesgcc.com
www.nusil.com

Emergency Telephone Number

Emergency Number	+86-532-8388-9090 (NRCC) +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview:

A colourless, odourless liquid that causes skin and eye irritation. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects.

Classification of the Substance or Mixture

GHS Classification (CN)

Health Hazards	Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2A Reproductive toxicity, Category 1B
Environmental Hazards	Hazardous to the aquatic environment - Chronic hazard, Category 2
Hazard Pictograms (GHS-CN)	
Signal Word (GHS-CN)	Danger
Hazard Statements (GHS-CN)	Causes skin irritation (H315) Causes serious eye irritation (H319) May damage fertility or the unborn child (H360) Toxic to aquatic life with long lasting effects (H411)
Prevention Precautionary Statements	Obtain special instructions before use. (P201). Do not handle until all safety precautions have been read and understood. (P202). Wash hands, forearms and face thoroughly after handling. (P264).

	Avoid release to the environment. (P273). Wear eye protection, protective clothing, protective gloves. (P280).
Response Precautionary Statements	IF ON SKIN: Wash with plenty of water. (P302+P352). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338). IF exposed or concerned: Get medical advice/attention. (P308+P313). Specific treatment (see supplemental first aid instruction on this label). (P321). If skin irritation occurs: Get medical advice/attention. (P332+P313). If eye irritation persists: Get medical advice/attention. (P337+P313). Take off contaminated clothing and wash it before reuse. (P362+P364). Collect spillage. (P391).
Storage Precautionary Statements	Store locked up. (P405).
Disposal Precautionary Statements	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501).

Health Hazard Information

Symptoms/Injuries	Causes skin irritation. Causes serious eye irritation. May damage fertility. Suspected of damaging the unborn child.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Injuries After Eye Contact	Contact causes severe irritation with redness and swelling of the conjunctiva.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	May damage fertility. Suspected of damaging the unborn child.

Physiochemical Hazard

Physical and Chemical Hazards	Not classified.

Environmental Hazard

Environmental Hazards	Toxic to aquatic life with long lasting effects.

Other Hazards

Other Hazards Which Do not Result in Classification	Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture/Substance

Distinction of Substance or Mixture Mixture

Name	Concentration	CAS-No.
Siloxanes and Silicones, dimethyl, methyl hydrogen	10 - < 20%	(CAS-No.) 68037-59-2

Methyl vinylcyclosiloxane	1 - 5%	(CAS-No.) 2554-06-5
Octamethylcyclotetrasiloxane	< 1%	(CAS-No.) 556-67-2

SECTION 4: FIRST AID MEASURES

First Aid

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

First-aid Measures After Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

The Most Important Symptoms and Health Effects

Symptoms/Injuries: Causes skin irritation. Causes serious eye irritation. May damage fertility. Suspected of damaging the unborn child.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May damage fertility. Suspected of damaging the unborn child.

Advice for the Rescuer

Use appropriate personal protective equipment (PPE).

Special Note for Doctor

Other medical advice or treatment: If medical advice is needed, have product container or label at hand. If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity in Case of Fire	Contact with water, alcohols, acids or bases, and many metals or metallic compounds can liberate flammable Hydrogen gas which can form explosive mixtures in air.
Hazardous Decomposition Products in Case of Fire	Carbon oxides (CO, CO_2). Explosive hydrogen gas. Formaldehyde. Silicon oxides.

Fire Precautions and Protective Measures

Precautionary Measures Fire	Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Specific Fire Fighting	Exercise caution when fighting any chemical fire. When heated, material emits irritating fumes.
Firefighting Instructions	Use water spray or fog for cooling exposed containers.
Prevention Measures for Secondary Accidents	Ventilate area. Eliminate ignition sources.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

Environmental Protection Measures

Environmental Precautions:

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and Material Used for Collection, Disposal of Leak

For Containment	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up	Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Precautionary Measures to Prevent the Occurence of Secondary Disasters

Secondary Disaster Prevention Measures	Ventilate area. Eliminate ignition sources.

SECTION 7: HANDLING AND STORAGE

Handling

Technical Measures	Comply with applicable regulations.
Additional hazards when processed	Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety procedures.
Local and General Ventilation	Ensure adequate air ventilation.
Precautions for Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Prevents Handling of Incompatible Substances or Mixtures	Keep away from : Strong acids, strong bases, strong oxidisers.

Storage

Technical Measures	Comply with applicable regulations.
Incompatible Substances or Mixtures	Refer to Section 10
Storage Conditions	Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.
Material Used in Packaging/Containers	No additional information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Biological Limits

No additional information available

Monitoring Methods

Monitoring Methods	No additional information available

Engineering Controls

Appropriate Engineering Controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment

Personal Protective Equipment	Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Respiratory Protection	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Hand Protection	Wear protective gloves.
Eye and Face Protection	Chemical safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance	Colourless
Physical State	Liquid
Odour	Odourless
Odour Threshold	No data available
pH Value	No data available
Melting Point/Freezing Point	No data available
Boiling Point, Initial Boiling Point and Boiling Range	No data available
Flash Point	> 135 °C (275 °F)
Autoignition Temperature	No data available
Flammability	Flammable liquid and vapour
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Specific Gravity	< 1
Relative Density	< 1 (water = 1)
Solubility	No data available
N-octanol/Water Distribution Coefficient	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosion Limits (g/m^3)	No data available
Explosion Limits (Vol%)	No data available
VOC Content	< 1%

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended handling and storage conditions (see section 7).
Possibility of Hazardous Reactions	Hazardous polymerisation will not occur. Evolved hydrogen gas is flammable and may form explosive mixtures with air.
Conditions to Avoid	Direct sunlight, extremely high or low temperatures, and incompatible materials.
Incompatible Materials	Alcohols. Metals. Strong acids, strong bases, strong oxidisers. Water.

Hazardous Decomposition Products	May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition. Thermal decomposition may produce: Carbon oxides (CO, CO_2). Silicon oxides. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitiser. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral) - Description	Not classified
Acute Toxicity (Dermal) - Description	Not classified
Acute Toxicity (Inhalation) - Description	Not classified
Skin Corrosion/Irritation - Description	Causes skin irritation.
Serious Eye Damage/Irritation - Description	Causes serious eye irritation.
Respiratory or Skin Sensitization - Description	Not classified
Germ Cell Mutagenicity - Description	Not classified
Carcinogenicity - Description	Not classified
Reproductive Toxicity - Description	May damage fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure) - Description	Not classified
Specific Target Organ Toxicity (Repeated Exposure) - Description	Not classified
Aspiration - Description	Not classified

Information on Toxicological Effects Ingredient(s)

Methyl vinylcyclosiloxane (2554-06-5)	
LD50 Oral Rat	> 4800 mg/kg (Read accross, no deaths)
LD50 Dermal Rabbit	> 2000 mg/kg (no deaths)
LC50 Inhalation Rat	> 1.32 mg/l/4h

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rabbit	> 2375 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Acute Aquatic Toxicity - Description	No data available
Chronic Aquatic Toxicity - Description	Toxic to aquatic life with long lasting effects.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish	> 22 µg/l
NOEC Chronic Fish	0.0044 mg/l

Persistence and Degradability

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Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

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Bioaccumulative Potential	Not established.

Methyl vinylcyclosiloxane (2554-06-5)	
Partition coefficient n-octanol/water (Log POW)	6.47

Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish	12400
Partition coefficient n-octanol/water (Log POW)	6.488 (at 25.1 °C)

Mobility in Soil

No additional information available

Other Adverse Effects

Ozone - Description: Not classified

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Chemicals

Ecology - Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Avoid release to the environment.

Diposal Matters

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with UNRTDG

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)

Packing Group: III

Identification Number: 3082

Hazard Class(es): 9

Label Codes: 9

Marine Pollutant: Marine pollutant

In Accordance with IATA

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)

Packing Group: III

Identification Number: UN3082

Hazard Class(es): 9

Label Codes: 9

ERG Code (IATA): 9L

In Accordance with IMDG

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)
Hazard Class(es)	9
Identification Number	UN3082
Packing Group	III
Label Codes	9
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-F

SECTION 15: REGULATORY INFORMATION

Asia/Pacific Regulations

All components in this mixture are listed on the following inventories, have been exempted, or are not disclosed due to CBI requirements or disclosure rules according to the relevant regulation: (AICS, CA DSL, KR ECL, EINECS, ELINCS, JP ENCS, CN IECSC, MX INSQ, JP ISHL, KECI, CA NDSL, EU NLP, NZIoC, PICCS, JP PDSCL, JP PRTR, US TSCA, TCSI)

Siloxanes and Silicones, dimethyl, methyl hydrogen (68037-59-2)	
CN - Uses of Additives in Food Containers and Packaging Material	Maximum permitted quantities present,Specific migration limits present
Priority List of Hazardous Chemical Wastes	No

Methyl vinylcyclosiloxane (2554-06-5)	
Priority List of Hazardous Chemical Wastes	No

Octamethylcyclotetrasiloxane (556-67-2)	
Catalogue of Hazardous Chemicals (2015)	Listed,Considered as Hazardous Chemical(s)
Priority List of Hazardous Chemical Wastes	No

International Agreements

Octamethylcyclotetrasiloxane (556-67-2)
United Nation Lists This chemical is subject to the International Convention for the Prevention of Pollution from Ships (MARPOL)

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision	2024/05/09
Data sources	Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other Information	This SDS is prepared in accordance with GB/T 16483, GB/T 17519

MED-4011 Part B

Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519

Indication of Changes

Section	Change	Date Changed	Version
1	Language modified	2024/05/09	2.0
2	Classification modified; Language modified	2024/05/09	2.0
3	Data modified; Language modified	2024/05/09	2.0
4	Language modified	2024/05/09	2.0
5	Language modified	2024/05/09	2.0
6	Language modified	2024/05/09	2.0
7	Language modified	2024/05/09	2.0
8	Language modified	2024/05/09	2.0
9	Data modified	2024/05/09	2.0
10	Language modified	2024/05/09	2.0
11	Data modified; Language modified	2024/05/09	2.0
12	Data modified	2024/05/09	2.0
13	Language modified	2024/05/09	2.0
14	Language modified	2024/05/09	2.0
15	Language modified	2024/05/09	2.0
16	Language modified	2024/05/09	2.0

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
BEI - Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. - Chemical Abstracts Service Number
CN - China
COD – Chemical Oxygen Demand
EC50 - Median Effective Concentration
EmS-No. (Fire) - IMDG Emergency Schedule Fire
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
EU - European Union
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAC – Maximum Allowable Concentration
MFAG-No - Medical First Aid Guide for Use in Accidents Involving Dangerous Goods
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NTP – National Toxicology Program
OEL - Occupational Exposure Limits
pH – Potential Hydrogen
SADT - Self Accelerating Decomposition Temperature
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
ThOD – Theoretical Oxygen Demand
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TWA - Time Weighted Average
UN – United Nations
UN RTDG – United Nations Recommendations on the Transport of Dangerous Goods
VOC – Volatile Organic Compounds
WEEL - Workplace Environmental Exposure Levels

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China GHS SDS