



# SAFETY DATA SHEET

According to JIS Z 7253:2019 Issue Date 19-Dec-2024 Revision Number 2.07

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Antifoam SI
Product Code	016-17431 , 018-17435

Supplier FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan

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Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

**Recommended uses** For research use only

**Restrictions on use**Seek expert judgment when using for purposes other than those recommended.

### **Section 2: HAZARDS IDENTIFICATION**

**GHS** classification

Classification of the substance or mixture

Reproductive Toxicity

Specific target organ toxicity (repeated exposure)

Category 2

Category 2

Category 2 lung

Chronic aquatic toxicity Category 1

#### **Pictograms**





Signal word

Warning

#### **Hazard statements**

H361 - Suspected of damaging fertility or the unborn child

H410 - Very toxic to aquatic life with long lasting effects

H373 - May cause damage to the following organs through prolonged or repeated exposure: lung

# **Precautionary statements-(Prevention)**

- Obtain special instructions before use
- · Do not handle until all safety precautions have been read and understood
- · Use personal protective equipment as required
- Do not breathe dust/fume/gas/mist/vapors/spray
- Avoid release to the environment

### **Precautionary statements-(Response)**

- IF exposed or concerned: Get medical advice/attention
- · Collect spillage

#### Precautionary statements-(Storage)

Store locked up

# **Precautionary statements-(Disposal)**

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

### Others

Other hazards Not available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Emulsion	> 88	N/A	N/A	N/A	N/A-01-1743-1
Octamethylcyclotetrasilo	< 10	296.62	(7)-475	*	556-67-2
xane					
Cyclohexasiloxane,dode camethyl-	< 1.0	444.92	(7)-475	*	540-97-6
Decamethylcyclopentasil	< 1.0	370.77	(7)-475	*	541-02-6
oxane					

Note on ISHL No.:

### **Section 4: FIRST AID MEASURES**

#### Inhalation

Remove to fresh air. If symptoms persist, call a physician.

#### Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

#### Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

#### Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

### Protection of first-aiders

Use personal protective equipment as required.

### **Section 5: FIRE FIGHTING MEASURES**

### Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

### Unsuitable extinguishing media

No information available

### Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### Special extinguishing method

No information available

#### Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

### Section 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

### **Environmental precautions**

To be careful not discharged to the environment without being properly handled waste water contaminated.

# Methods and materials for contaminent and methods and materials for cleaning up

<sup>\*</sup> in the table means announced chemical substances.

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

#### Recoverly, neutralization

No information available

### Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

### Section 7: HANDLING AND STORAGE

#### Handling

### Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

#### **Precautions**

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

#### Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions Keep container protect from light and tightly closed in well ventilated cool place under

25°C Glass

Safe packaging material

Incompatible substances Strong oxidizing agents

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Protective mask

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

**General hygiene considerations** 

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to

them.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Form** 

Color White - nearly white

Appearance liquid

Odor

Melting point/freezing point

Boiling point, initial boiling point and boiling range
Flammability

Evaporation rate:

Flammability (solid, gas):

no data available
no data available
no data available
no data available

Upper/lower flammability or explosive limits

no data available Upper: no data available Lower: no data available Flash point no data available **Auto-ignition temperature: Decomposition temperature:** no data available no data available pН no data available Viscosity (coefficient of viscosity) Dynamic viscosity no data available

**Solubilities** water: . Ethanol, acetone: practically insoluble, or insoluble.

n-Octanol/water partition coefficient:(log Pow)
No data available
Napour pressure
No data available
Napour density
Napour density
No data available
Particle characteristics
No data available
No data available
No data available

# **Section 10: STABILITY AND REACTIVITY**

### **Stability**

**Reactivity** no data available **Chemical stability** May be altered by light.

**Hazardous reactions** 

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Silicon compounds

# **Section 11: TOXICOLOGICAL INFORMATION**

\*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\_search/srhInput

**Acute toxicity** 

-totic toxioity				
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	
Octamethylcyclotetrasiloxane	= 1540 mg/kg (Rat)	> 2375 mg/kg (Rat)	= 36 mg/L (Rat)4 h	
Cyclohexasiloxane,dodecamet hyl-	> 50 g/kg (Rat)	> 2000 mg/kg (Rat)	N/A	
Decamethylcyclopentasiloxane	> 24134 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 8.67 mg/L (Rat)4 h	

Chemical Name	Acute toxicity -oral- source	Acute toxicity -dermal- source	Acute toxicity -inhalation gas-
	information	information	source information
Octamethylcyclotetrasiloxane	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
	classification results.	classification results.	classification results.
Decamethylcyclopentasiloxane	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
, , .	classification results.	classification results.	classification results.

	Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Γ	Octamethylcyclotetrasiloxane	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
L		classification results.	classification results.	classification results.
Γ	Decamethylcyclopentasiloxane	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
		classification results.	classification results.	classification results.

### Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.

STOT -repeated exposure- source information

**Aspiration Hazard source information** 

Based on the NITE GHS classification results.

Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
Serious eye damage/ irritation		
Chemical Name	Serious eye damage/irritation source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
Respiratory or skin sensitization		
Chemical Name	Respiratory or Skin sensitization source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
Reproductive cell mutagenicity		
Chemical Name	germ cell mutagencity source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
Carcinogenicity		
Chemical Name	Carcinogenicity source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
Reproductive toxicity		
Chemical Name	Reproductive toxicity source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
STOT-single exposure		
Chemical Name	STOT -single exposure- source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification results.	
STOT-repeated exposure		

Section 12: ECOLOGICAL INFORMATION

\*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\_search/srhInput

Chemical Name

Octamethylcyclotetrasiloxane

Decamethylcyclopentasiloxane

**Chemical Name** 

Octamethylcyclotetrasiloxane

Decamethylcyclopentasiloxane

### **Ecotoxicity**

Aspiration hazard

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Octamethylcyclotetrasiloxane	N/A	LC50 : Lepomis macrochirus 1000 mg/L 96 h LC50 : Brachydanio rerio 500 mg/L 96 h	EC50 : Daphnia magna 25.2 mg/L 24 h

#### Other data

Chemical Name	Short-term (acute) hazardous to the	Long-term (chronic) hazardous to the	
	aquatic environment source information	aquatic environment source information	
Octamethylcyclotetrasiloxane	Based on the NITE GHS classification	Based on the NITE GHS classification	
	results.	results.	
Decamethylcyclopentasiloxane	Based on the NITE GHS classification	Based on the NITE GHS classification	
	results.	results.	

Persistence and degradability
Bioaccumulative potential
Mobility in soil

No information available
No information available
No information available

Hazard to the ozone layer No information available

### **Section 13: DISPOSAL CONSIDERATIONS**

#### Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### **Section 14: TRANSPORT INFORMATION**

ADR/RID

UN number UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Octamethylcyclotetrasiloxane

mixture)

UN classfication

Subsidiary hazard class

Packing group III
Marine pollutant Yes

**IMDG** 

UN number UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Octamethylcyclotetrasiloxane

mixture)

UN classfication 9

Subsidiary hazard class

Packing group III
Marine pollutant (Sea) Yes

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

**IATA** 

UN number UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Octamethylcyclotetrasiloxane

mixture)

UN classfication 9

Subsidiary hazard class

Packing group III
Environmentally Hazardous Yes

**Substance** 

# **Section 15: REGULATORY INFORMATION**

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Not applicable
Not applicable

**Substances Control Law** 

Industrial Safety and Health Act Not applicable

Act on the Evaluation of Monitoring Chemical Substances (Law Art.2, Para.4)

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc

Regulations for the carriage and storage of dangerous

Noxious Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding

Transport by Ship and Storage, Attached Table 1)

goods in ship

Civil Aeronautics Law Misellaneous Dangerous Substances and Articles (Ordinance Art.194, MITL Nortification

for Air Transportation of Explosives etc., Attached Table 1)

Pollutant Release and Transfer Class 1

**Register Law** 

(2023.4.1-)

**Class 1 - No.** 601

**Export Trade Control Order** Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Octamethylcyclotetrasiloxane 556-67-2 ( < 10 )	-	-	Applicable

### **Section 16: OTHER INFORMATION**

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\_search/srhInput

IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

**Record of SDS revisions** 

The following contents were revised. Composition/information on ingredients. Fire fighting measures. Exposure controls/personal protection. Physical and chemical properties. Toxicological information. Ecological information. Regulatory information.

#### Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**