



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 29-Nov-2022 Revision Number 5.04

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Cafenstrole Standard
Product Code	035-17001

Manufacturer FUJIFILM Wako Pure Chemical Corporation

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Phone: +81-6-6203-3741 Fax: +81-6-6203-2029

Emergency telephone number Recommended uses and

+81-6-6203-3741 / +81-3-3270-8571 For research use only

restrictions on use

Section 2: HAZARDS IDENTIFICATION

GHS classification Classification of the substance or mixture **Reproductive Toxicity**

Specific target organ toxicity (repeated exposure) Category 1 blood system, nervous system

Category 2 liver, Digestive tract

Category 2

Category 1, Category 2

Pictograms

Supplier



Signal word

Danger

Hazard statements

H361 - Suspected of damaging fertility or the unborn child

H372 - Causes damage to the following organs through prolonged or repeated exposure: blood system, nervous system

H373 - May cause damage to the following organs through prolonged or repeated exposure: liver, Digestive tract

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
- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- · Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary statements-(Response)

• IF exposed or concerned: Get medical advice/attention

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 Substance

Formula C16H22N4O3S

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
cafenstrole	98.0	350.44	N/A	8-(3)-834	125306-83-4

Note on ISHL No.: * in the table means announced chemical substances.

Impurities and/or Additives: Not applicable

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

Water spray (fog), 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

Sweep up and gather scattered particles, and collect it in an empty airtight container.

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 tightly closed. Store in a cool (2-10 °C) place.

Safe packaging material Glass

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
Hand protection
Dust mask
Protective gloves

Eye protection protective eyeglasses or chemical safety goggles

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color white

Appearance crystalline powder - powder
Odor no data available

Melting point/freezing point

Boiling point, initial boiling point and boiling range
Flammability

Evaporation rate:

Flammability (solid, gas):

116 - 121 °C

no data available

no data available

no data available

Upper/lower flammability or

explosive limits

Upper:
Lower:
no data available
no data available
no data available
Auto-ignition temperature:
no data available

no data available **Decomposition temperature:** рΗ no data available Viscosity (coefficient of viscosity) no data available Dynamic viscosity no data available

Solubilities acetone: soluble. water: practically insoluble, or insoluble.

n-Octanol/water partition coefficient:(log Pow) 3.21

Vapour pressure no data available Specific Gravity / Relative density no data available Vapour density no data available Particle characteristics 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), Nitrogen oxides (NOx), Sulfur oxides (SOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
cafenstrole	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 1.97 mg/L (Rat) 4h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
cafenstrole	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	Acute toxicity -inhalation dust-	Acute toxicity -inhalation mist-
	vapor- source information	source information	source information
cafenstrole	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	
cafenstrole	Based on the NITE GHS classification results.	
On the same Annual Marketine		

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information	
cafenstrole	Based on the NITE GHS classification results.	
Despiratory or alsin consistention		

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
cafenstrole	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagencity source information
cafenstrole	Based on the NITE GHS classification results.
Carcinogenicity	

Chemical Name	Carcinogenicity source information
cafenstrole	Based on the NITE GHS classification results.

Reproductive toxicity

Chemical Name	Reproductive toxicity source information

cafenstrole	Based on the NITE GHS classification results.		
STOT-single exposure			
Chemical Name	STOT -single exposure- source information		
cafenstrole	Based on the NITE GHS classification results.		
STOT-repeated exposure			
Chemical Name	STOT -repeated exposure- source information		
cafenstrole	Based on the NITE GHS classification results.		
Aspiration hazard			
Chemical Name	Aspiration Hazard source information		
cafenstrole	Based on the NITE GHS classification results.		

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
cafenstrole	EC50:Pseudokirchneriella subcapitata > 0.0021 mg/L 72h	N/A	N/A

Other data

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

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Hazard to the ozone layer

No information available
No information available
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 Not regulated

UN number

Proper shipping name:

UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

UN number

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number

Proper shipping name: **UN classfication** Subsidiary hazard class

Packing group

Environmentally Hazardous

Substance

Not applicable

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS TSCA

Japanese regulations

Fire Service Act Not applicable Not applicable **Poisonous and Deleterious**

Substances Control Law

Industrial Safety and Health Act Not applicable Regulations for the carriage Not applicable

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable

Pollutant Release and Transfer Class 1

Register Law $(\sim 2023.3.31)$

148 Class 1 - No. Pollutant Release and Transfer Class 1

Register Law

(2023/4/1~)

Class 1 - No. 148

Export Trade Control Order Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2) (~2024.3.31)	Pollutant Release and Transfer Register Law (~2023.3.31)
cafenstrole 125306-83-4 (98.0)	-	-	Applicable

Section 16: OTHER INFORMATION

Key literature references and

sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)

http://www.safe.nite.go.jp/japan/db.html 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.

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GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet