



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 25-Mar-2024

Revision Number 1.09

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	(+/-)-Camphor-10-sulfonic Acid
Product Code	030-15971,038-15972

Supplier FUJIFILM Wako Pure Chemical Corporation

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

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

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

Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture
Skin corrosion/irritation
Serious eye damage/eye irritation

Category 2 Category 1

Pictograms



Signal word Danger

Hazard statements

H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse

Precautionary statements-(Storage)

Not applicable

Precautionary statements-(Disposal)

Not applicable

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula C10H16O4S

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
(+/-)-Camphor-10-sulpho	98.0	232.30	(4)-309	公表	5872-08-2
nic acid					

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

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.

^{*} in the table means announced chemical substances.

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 Dust mask (JIS T 8151)

chemical protective gloves (JIS T 8116) Hand protection

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

Long-sleeved work clothes Skin and body protection

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

Odor

White - pale brown Color

crystalline powder - powder **Appearance**

characteristic odor 200 °C (dec.) Melting point/freezing point no data available Boiling point, initial boiling point and boiling range **Flammability** no data available no data available **Evaporation rate:** no data available Flammability (solid, gas):

Upper/lower flammability or explosive limits

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

Solubilities water and Ethanol: freely soluble. acetic acid: slightly soluble.

Diethyl ether: practically insoluble, or insoluble.

no data available n-Octanol/water partition coefficient:(log Pow) 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, Moisture

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Sulfur oxides (SOx)

Section 11: TOXICOLOGICAL INFORMATION

no data available **Acute toxicity**

Skin irritation/corrosion no data available no data available Serious eye damage/ irritation Respiratory or skin sensitization no data available no data available Reproductive cell mutagenicity Carcinogenicity no data available

no data available Reproductive toxicity STOT-single exposure no data available STOT-repeated exposure no data available no data available **Aspiration hazard**

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity no data available

Other data no data available

No information available 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 Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

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

Substances Control Law

Industrial Safety and Health Act Not applicable

Industrial Safety and Health Act (

2024~)

[2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)

Regulations for the carriage Not applicable and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable Pollutant Release and Transfer Not applicable

Register Law

(2023.4.1-)

Export Trade Control Order Not 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. etc.

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

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