



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 25-Mar-2024 Revision Number 2.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | O-Methylhydroxylammonium Chloride |
|---|---|
| Product Code | 139-18071 |
| 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 Recommended uses Restrictions on use | +81-6-6203-3741 / +81-3-3270-8571 For research use only Seek expert judgment when using for purposes other than those recommended. |

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Acute toxicity - Oral Acute toxicity - Dermal Skin corrosion/irritation Skin sensitization Carcinogenicity Specific target organ toxicity (repeated exposure) Acute aquatic toxicity Chronic aquatic toxicity

Category 4 Category 4 Category 2 Category 1 Category 2 Category 1 Category 1 Category 3

Pictograms



Hazard statements

- H315 Causes skin irritation
- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H351 Suspected of causing cancer
- H372 Causes damage to organs through prolonged or repeated exposure
- H317 May cause an allergic skin reaction
- H400 Very toxic to aquatic life
- H412 Harmful to aquatic life with long lasting effects

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

- · Contaminated work clothing should not be allowed out of the workplace
- · Wear protective gloves
- 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
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell
- · Take off contaminated clothing and wash before reuse
- · If skin irritation or rash occurs: Get medical advice/attention
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- 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

Substance

Formula

CH5NO·HCI

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|-----------------------|----------|--------------------|---------------------|----------|----------|
| O-Methylhydroxylamine | 97.0 | 83.52 | N/A | N/A | 593-56-6 |
| hydrochloride | | | | | |
| Note on ISHL No.: | * in the | table means announ | ced chemical substa | ances. | |

in the table means announced chemical substances.

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.

Eve 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

Safe packaging material

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

Storage

Safe storage conditions Storage conditions

Incompatible substances

Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Packed with an inert gas. Glass 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 limi | |
|---------------|--|
| | |

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 Eye protection Skin and body protection General hygiene considerations

Dust mask (JIS T 8151) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles (JIS T 8147) Long-sleeved work clothes 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 | crystals - powder |
| Odor | no data available |
| Melting point/freezing point | 149 °C |
| Boiling point, initial boiling point and boiling range | no data available |
| Flammability | no data available |
| Evaporation rate: | no data available |
| Flammability (solid, gas): | no data available |
| Upper/lower flammability or explosive limits | |
| Upper: | no data available |
| Lower: | no data available |
| Flash point | no data available |
| Auto-ignition temperature: | no data available |
| Decomposition temperature: | no data available |
| рН | no data available |
| Viscosity (coefficient of viscosity) | no data available |
| Dynamic viscosity | no data available |
| Solubilities | Ethanol, water: soluble. |
| n-Octanol/water partition coefficient:(log Pow) | 1.84 |
| 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
 May be altered by light.

 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), Halides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

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

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

Section 12: ECOLOGICAL INFORMATION

| Ecotoxicity | no data available |
|---|--|
| Other data | no data available |
| Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer | No information available 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 | |
|--|--|
| UN number | UN3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (O-Methylhydroxylamine hydrochloride) |
| UN classfication | 9 |
| Subsidiary hazard class | |
| Packing group | III |
| Marine pollutant | Yes |
| IMDG | |
| UN number | UN3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (O-Methylhydroxylamine hydrochloride) |
| UN classfication | 9 |
| Subsidiary hazard class | |
| Packing group | |
| Marine pollutant (Sea) | Yes |
| Transport in bulk according to | |
| Annex II of MARPOL 73/78 and | |
| the IBC Code | |
| | |
| UN number | UN3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (O-Methylhydroxylamine hydrochloride) |
| UN classfication | 9 |
| Subsidiary hazard class | |
| Packing group | |
| Environmentally Hazardous Substance | Yes |

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 (| [2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1) |
| <u>2024~)</u> | |
| Regulations for the carriage | Noxious Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding |
| and storage of dangerous goods in ship | Transport by Ship and Storage, Attached Table 1) |
| 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 | 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 | The following contents were revised. Regulatory information. |

Record of SDS revisions 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