

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision Date** 14-Jul-2020  
 Version 2.01

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

|   |   |
|---|---|
| <b>Product name</b>                             | Hydroxylammonium Chloride   |
| <b>Product code</b>                             | 081-01471,089-01472,083-01475   |
| <b>Manufacturer</b>                             | FUJIFILM Wako Pure Chemical Corporation<br>1-2 Doshomachi 3-Chome<br>Chuo-ku, Osaka 540-8605, Japan<br>Phone: +81-6-6203-3741<br>Fax: +81-6-6203-5964 |
| <b>Supplier</b>                                 | FUJIFILM Wako Pure Chemical Corporation<br>1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan<br>Phone: +81-6-6203-3741<br>Fax: +81-6-6203-2029   |
| <b>Emergency telephone number</b>               | +81-6-6203-3741 / +81-3-3270-8571   |
| <b>Recommended uses and restrictions on use</b> | For research purposes   |

## Section 2: HAZARDS IDENTIFICATION

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

Acute toxicity - Oral

Skin corrosion/irritation

Serious eye damage/eye irritation

Skin sensitization

Specific target organ toxicity (single exposure)

Category 2 blood

Category 3 Respiratory tract irritation

Category 3

Category 2

Category 2A

Category 1

Category 2, Category 3

**Pictograms****Signal word**

Danger

**Hazard statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H301 - Toxic if swallowed

H335 - May cause respiratory irritation

H317 - May cause an allergic skin reaction

H371 - May cause damage to the following organs: blood

**Precautionary statements-(Prevention)**

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace
- Do not breathe dust/fume/gas/mist/vapors/spray

- Use only outdoors or in a well-ventilated area

**Precautionary statements-(Response)**

- IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water
- Take off contaminated clothing and wash before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth.

**Precautionary statements-(Storage)**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed

**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** HONH3Cl

| Chemical Name             | Weight-% | Molecular weight | ENCS            | ISHL No. | CAS RN    |
|---------------------------|----------|------------------|-----------------|----------|-----------|
| Hydroxylammonium chloride | 98.0     | 69.49            | (1)-375,(1)-215 | 公表       | 5470-11-1 |

**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**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable extinguishing media**

Powder, Foam

**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 contaminant and methods and materials for cleaning up**

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

**Recovery, 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**

Do not give shock. Avoid contact with strong bases. 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**

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

**Storage****Safe storage conditions**

**Storage conditions** Store away from sunlight in well-ventilated place at room temperature (preferably cool).  
Keep container tightly closed. Store locked up.

**Safe packaging material** Polypropylene, Polyethylene

**Incompatible substances**

Strong bases

## 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 hand- and 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

**Hand protection**

Protection 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

|   |   |
|---|---|
| <b>Form</b>   |   |
| <b>Color</b>  | white                                     |
| <b>Appearance</b>   | crystals - crystalline powder             |
| <b>Odor</b>   | Pungent odor                              |
| <b>Melting point/freezing point</b>                           | 151 °C                                    |
| <b>Boiling point, initial boiling point and boiling range</b> | No data available                         |
| <b>Flammability</b>   | No data available                         |
| <b>Evaporation rate:</b>                                      | No data available                         |
| <b>Flammability (solid, gas):</b>                             | No data available                         |
| <b>Upper/lower flammability or explosive limits</b>           |   |
| <b>Upper :</b>  | No data available                         |
| <b>Lower :</b>  | No data available                         |
| <b>Flash point</b>  | No data available                         |
| <b>Auto-ignition temperature:</b>                             | No data available                         |
| <b>Decomposition temperature:</b>                             | No data available                         |
| <b>pH</b>   | 2.5 - 3.5 (50g/L, 25°C)                   |
| <b>Viscosity (coefficient of viscosity)</b>                   | No data available                         |
| <b>Dynamic viscosity</b>                                      | No data available                         |
| <b>Solubilities</b>   | water : Very soluble. Ethanol : soluble . |
| <b>n-Octanol/water partition coefficient:(log Pow)</b>        | No data available                         |
| <b>Vapour pressure</b>  | No data available                         |
| <b>Specific Gravity / Relative density</b>                    | 1.67                                      |
| <b>Vapour density</b>   | No data available                         |
| <b>Particle characteristics</b>                               | No data available                         |

## Section 10: STABILITY AND REACTIVITY

### Stability

|   |  |
|---|--|
| <b>Reactivity</b>                       | No data available  |
| <b>Chemical stability</b>               | This material is deliquescent.   |
| <b>Hazardous reactions</b>              | None under normal processing   |
| <b>Conditions to avoid</b>              | Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark, Shock |
| <b>Incompatible materials</b>           | Strong bases   |
| <b>Hazardous decomposition products</b> | Nitrogen oxides (NO <sub>x</sub> ), Halides  |

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

| Chemical Name             | Oral LD50         | Dermal LD50 | Inhalation LC50 |
|---------------------------|-------------------|-------------|-----------------|
| Hydroxylammonium chloride | 141 mg/kg ( Rat ) | N/A         | N/A             |

| Chemical Name             | Acute toxicity -oral- source information      | Acute toxicity -dermal- source information    | Acute toxicity -inhalation gas-source information |
|---------------------------|---|---|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. | Based on the NITE GHS classification results. | Based on the NITE GHS classification results.     |

| Chemical Name             | Acute toxicity -inhalation vapor- source information | Acute toxicity -inhalation dust-source information | Acute toxicity -inhalation mist-source information |
|---------------------------|--|--|--|
| Hydroxylammonium chloride | Based on the NITE GHS classification results.        | Based on the NITE GHS classification results.      | Based on the NITE GHS classification results.      |

### Skin irritation/corrosion

| Chemical Name             | Skin corrosion/irritation source information  |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

### Serious eye damage/ irritation

| Chemical Name | Serious eye damage/irritation source information |
|---------------|--|
|               |  |

|                           |   |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |
|---------------------------|---|

**Respiratory or skin sensitization**

| Chemical Name             | Respiratory or Skin sensitization source information |
|---------------------------|--|
| Hydroxylammonium chloride | Based on the NITE GHS classification results.        |

**Reproductive cell mutagenicity**

| Chemical Name             | germ cell mutagenicity source information     |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

**Carcinogenicity**

| Chemical Name             | Carcinogenicity source information            |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

**Reproductive toxicity**

| Chemical Name             | Reproductive toxicity source information      |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

**STOT-single exposure**

| Chemical Name             | STOT -single exposure- source information     |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

**STOT-repeated exposure**

| Chemical Name             | STOT -repeated exposure- source information   |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

**Aspiration hazard**

| Chemical Name             | Aspiration Hazard source information          |
|---------------------------|---|
| Hydroxylammonium chloride | Based on the NITE GHS classification results. |

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity** No information available

**Other data**

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

**Persistence and degradability** No information available

**Bioaccumulative potential** No information available

**Mobility in soil** 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**

|                                |  |
|--------------------------------|--|
| <b>UN number</b>               | UN3288   |
| <b>Proper shipping name:</b>   | Toxic solid, inorganic, n.o.s. (Hydroxylammonium chloride) |
| <b>UN classification</b>       | 6.1  |
| <b>Subsidiary hazard class</b> |  |
| <b>Packing group</b>           | III  |
| <b>Marine pollutant</b>        | Not applicable   |

**IMDG**

|                  |        |
|------------------|--------|
| <b>UN number</b> | UN3288 |
|------------------|--------|

**Proper shipping name:** Toxic solid, inorganic, n.o.s. (Hydroxylammonium chloride)  
**UN classification** 6.1  
**Subsidiary hazard class**  
**Packing group** III  
**Marine pollutant (Sea)** Not applicable  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available

**IATA**

**UN number** UN3288  
**Proper shipping name:** Toxic solid, inorganic, n.o.s. (Hydroxylammonium chloride)  
**UN classification** 6.1  
**Subsidiary hazard class**  
**Packing group** III  
**Environmentally Hazardous Substance** Not applicable

## Section 15: REGULATORY INFORMATION

**International Inventories**

**EINECS/ELINCS** Listed  
**TSCA** Listed

**Japanese regulations**

**Fire Service Act** Category V, hydroxylamine salts, dangerous grade 2  
**Poisonous and Deleterious Substances Control Law** Deleterious Substances 3rd. Grade  
**Industrial Safety and Health Act** Not applicable  
**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc** Priority Assessment Chemical Substances (Law Article 2, Para.5)  
**Regulations for the carriage and storage of dangerous goods in ship** Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)  
**Civil Aeronautics Law** Toxic and Infectious Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)  
**Pollutant Release and Transfer Register Law** Not applicable  
**Water Pollution Control Act** Harmful Substances (Law Art.2, Enforcement Order Art.2, Ordinance Designating Wastewater Standards Art.1)  
**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 |
|---|--|--|---|
| Hydroxylammonium chloride<br>5470-11-1 ( 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 Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
 Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
 etc

**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 Z7252(2019). \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**