

Safety Data Sheet **HYDROXYLAMMONIUM CHLORIDE**

SDS no. YXL4BW4X • Version 1.0 • Date of issue: 2024-03-12

SECTION 1: Identification

GHS Product identifier

Product name HYDROXYLAMMONIUM CHLORIDE

Recommended use of the chemical and restrictions on use

Organic synthesis, photographic developer, medicine, controlled reduction reactions, non-discolouring short stopper for synthetic rubbers, antioxidant for fatty acids and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:
Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Carcinogenicity, Cat. 2
- Corrosive to metals, Cat. 1

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- Acute toxicity, dermal, Cat. 4
- Serious eye damage/eye irritation, Cat. 2A
- Acute toxicity, oral, Cat. 4
- Skin corrosion/irritation, Cat. 2
- Specific target organ toxicity following repeated exposure, Cat. 1
- Skin sensitizer, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original packaging.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material-damage.
P391	Collect spillage.
P405	Store locked up.
P406	Store in a corrosive resistant/... container with a resistant inner liner.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

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Mixtures

Molecular weight: 69.49

Components

Component	CAS no.	Concentration
HYDROXYLAMINE HYDROCHLORIDE (EC no.: 226-798-2)	5470-11-1	100 - 100 % (weight)
CLASSIFICATIONS: Corrosive to metals, Cat. 1; Carcinogenicity, Cat. 2; Serious eye damage/eye irritation, Cat. 2A; Skin corrosion/irritation, Cat. 2; Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4; Specific target organ toxicity following repeated exposure, Cat. 1; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1. HAZARDS: No data available.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain and drench facilities in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.
In case of skin contact	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Specific hazards arising from the chemical

Hazards from Combustion Products: Hydrogen chloride gas, nitrogen oxides.

Combustible material. Fire or heat will produce irritating, poisonous and/or corrosive gases. Containers may explode when heated.

Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection.

SECTION 6: Accidental release measures

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Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 50m. Do NOT touch or walk through this product. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas.

Cover with DRY earth, sand or other non-combustible material followed by plastic sheet to minimize spreading or contact with rain.

Evacuate the area of all non-essential personnel. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

Do not discharge to the environment or sewer system. Prevent further leaking if safe to do so. If product contaminates rivers and lakes or drains inform respective authorities.

SECTION 7: Handling and storage

Precautions for safe handling

Keep container tightly closed and in a cool, dry, well-ventilated place, away from direct sunlight and other sources of heat or ignition.

Conditions for safe storage, including any incompatibilities

Corrosive to metals in the presence of water.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Wear suitable protective clothing to prevent skin contact. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels.

SECTION 9: Physical and chemical properties

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Basic physical and chemical properties

Physical state	Solid
Appearance	Colourless, hygroscopic crystals.
Color	No data available.
Odor	Slight chlorine odour.
Odor threshold	No data available.
Melting point/freezing point	155-157°C (decomposes)
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	2.5 - 3.5 at 50g/l at 20°C
Kinematic viscosity	No data available.
Solubility	Solubility in Water: 830 g/L @ 20 °C Solubility in Organic Solvents: Soluble in glycerol, propylene glycol, ethanol and methanol. Insoluble in ether.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 1.67 at 20 deg C
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under normal conditions. Slowly decomposes when moist.

Possibility of hazardous reactions

Risk of dust explosion.

Conditions to avoid

Exposure to air, moisture. Heating - may be unstable at temperatures above 75°C.

Incompatible materials

Strong oxidising agents, phosphorus pentachloride, calcium, anhydrous copper(II) sulfate, aluminium, zinc, tin

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - nitrogen oxides, hydrogen chloride gas.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Harmful if swallowed. May cause irritation and burning of soft mucous tissues of mouth and throat, stomach pains, vomiting and internal damage.

Inhalation: May cause irritation and burning of soft mucous tissues of mouth and throat, stomach pains, vomiting and internal damage.

Skin corrosion/irritation

Irritating to skin. May cause sensitisation by skin contact.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Sensitisation possible through skin contact.

Germ cell mutagenicity

No data available.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

H372 Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Harmful: Danger of serious damage to health by prolonged exposure if swallowed. Repeated or prolonged skin contact may cause chronic dermatitis, skin eruptions and possible methaemoglobinemia.

SECTION 12: Ecological information

Toxicity

Information on Ecological Effects: Very toxic to aquatic organisms.

Acute Toxicity - Fish: LC50 *Leuciscus idus* (Golden orfe) - 1-10 mg/l /48hr

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 2923

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S. (Contains Hydroxylammonium Chloride)

Marine Pollutant: Yes

Hazchem emergency action code (EAC)

2X

IMDG

UN Number: 2923

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S. (Contains Hydroxylammonium Chloride)

Marine Pollutant: Yes

IATA

UN Number: 2923

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S. (Contains Hydroxylammonium Chloride)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)