

# SAFETY DATA SHEET

# KEMAUS

## HYDROXYLAMMONIUM CHLORIDE AR

### 1. Identification of the substance/preparation and of the company or firm

#### 1.1 Identification of the substance or preparation:

Catalogue no. : KA263

Product name : Hydroxylammonium chloride AR

Synonym : Hydroxylamine Hydrochloride

#### 1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

#### 1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

#### 1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [ Office hours ]

### 2. Identification of dangers

#### 2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Acute Toxicity, dermal, Category 4: Harmful in contact with skin.

Acute Toxicity, oral, Category 4: Harmful if swallowed or in contact with skin.

Eye Damage/Irritation, Category 2A: Causes serious eye irritation.

Skin irritant, Category 2: Causes skin irritation.

Skin sensitisation, Category 1: May cause an allergic skin reaction.

Carcinogenicity, Category 2: Suspected of causing cancer.

Specific Target Organ Toxicity, Repeated exposure, Category 2: Causes damage to organs through prolonged or repeated exposure.

Acute toxicity to the aquatic environment, Category 1: Very toxic to aquatic life.

Corrosive to Metals, Category 1: May be corrosive to metals.

#### 2.2 Label elements.

Hazard pictograms



Signal words : Warning.

Hazard statements (H) :

H290 : May be corrosive to metals.

H302+H312 : Harmful if swallowed or 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.

H373 : May cause damage to organs through prolonged or repeated exposure.

H400 : Very toxic to aquatic life.

Precautionary statements (P) :

P201 : Obtain special instructions before use.

P260 : Do not breathe vapours, spray, dust, fume, gas.

P273 : Avoid release to the environment.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

P321 : Specific treatment (show this label).

P390 : Absorb spillage to prevent material damage.

P501 : Dispose of contents / container according to the regulation.

#### 2.3 Other hazards.

None known.

### 3. Composition/information on ingredients

#### 3.1 Substance / Preparation.

Hydroxylammonium chloride

Formular:  $\text{ClH}_4\text{NO}$

CAS No : 5470-11-1

Molecular weight : 69.49

Contains no other components or impurities which will influence the classification of the product.

- 3.2 Mixture.  
Not applicable.
- 

#### 4. First-aid measures

##### 4.1 Description of first aid measures.

- Inhaling: Take the person out into the fresh air. If breathing is irregular or stops, perform artificial respiration.  
Skin contact: Remove contaminated clothing. Wash skin with water and soap or a suitable skin cleaner.  
Eyes: Wash with plenty of water, keeping eyelids open and seek medical assistance.  
Ingestion: Rinse mouth. Never induce vomiting. Seek immediate medical assistance.

##### 4.2 Most important symptoms and effects, both acute and delayed.

Harmful and Corrosive Product, can causes skin and eye burns. Inhalation can cause internal damage. Prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

##### 4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Seek immediate medical advice.

---

#### 5. Fire-fighting measures

##### 5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

##### 5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present. Exposure to combustion or decomposition products can be harmful to your health.

##### 5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.  
Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

---

#### 6. Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

##### 6.2 Environmental precautions.

Product Dangerous for the environment. Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains. If the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation.

##### 6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials.

##### 6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.  
For later elimination of waste, follow the recommendations under section 13.

---

#### 7. Handling and storage

##### 7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Keep the product in containers made of a material identical to the original.

##### 7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. Dry atmosphere. Away from sources of ignition and heat. Prevent the entry of non-authorised persons.

##### 7.3 Specific end use(s).

None.

---

#### 8. Exposure controls/personal protection

##### 8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.  
The product does NOT contain substances with Biological Limit Values.

##### 8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.  
Respiratory protection : Wear approved mask.  
Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Hygiene measures : Remove contaminated clothing. Wash hands before breaks and when the job is done.

---

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties.

Appearance:	Solid.
Colour:	White crystals.
Odour:	No data available.
Odour threshold:	No data available.
pH value:	2.5-3.5 (5%, 20 °C)
Melting Point:	159 °C
Boiling Point:	No data available.
Flash point:	No data available.
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	No data available.
Upper Explosive Limit:	No data available.
Solubility:	470 g/l @ 20°C
Density:	No data available.
Relative density	1.70 g/cm <sup>3</sup>
Partition coefficient (n-octanol/water):	-2.66 (log Pow)
Viscosity:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	>150 °C
Explosive properties:	No data available.
Oxidizing properties:	No data available.

### 9.2 Other information.

None.

---

## 10. Stability and reactivity

### 10.1 Reactivity.

The product does not present hazards by their reactivity.

### 10.2 Chemical stability.

Stable under room temperature. Store away from Metals.

### 10.3 Possibility of hazardous reactions.

May be corrosive to metals.

### 10.4 Conditions to avoid.

Avoid contact with incompatible materials and improper handling.

### 10.5 Incompatible materials.

Keep away from oxidising agents and from explosives materials.

### 10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive vapors or gases.

---

## 11. Toxicological information

### 11.1 Information on toxicological effects.

Acute toxicity.	LD50 oral rat : 141 mg/kg
Inhalation:	Based on available data, the classification criteria are not met.
Dermal:	Harmful in contact with skin.
Ingestion:	Harmful if swallowed.
Corrosion:	Based on available data, the classification criteria are not met.
Irritation:	Causes skin irritation.
Sensitization:	May cause an allergic skin reaction.
Mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Suspected of causing cancer.
Toxic for reproduction:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Specific Target Organ Toxicity, Repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard:	Based on available data, the classification criteria are not met.

---

## 12. Ecological information

### 12.1 Toxicity.

Not established.

### 12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Partition coefficient: n-octanol/water log Pow: -2.66

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

---

**13. Disposal considerations**

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

---

**14. Transport information**

14.1 UN number.

UN No: UN2923

14.2 UN proper shipping name.

ADR: UN 2923, CORROSIVE SOLID, TOXIC, N.O.S. (HYDROXYLAMMONIUM CHLORIDE), 8 (6.1), PG III, (E)

IMDG: UN 2923, CORROSIVE SOLID, TOXIC, N.O.S. (HYDROXYLAMMONIUM CHLORIDE), 8 (6.1), PG III, MARINE POLLUTANT

ICAO: UN 2923, CORROSIVE SOLID, TOXIC, N.O.S. (HYDROXYLAMMONIUM CHLORIDE), 8 (6.1), PG III

14.3 Transport hazard class(es).

Class(es): 8 (6.1)

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes.

Dangerous for the environment.

14.6 Special precautions for user.

Labels: 8, 6.1

Hazard number: 86

ADR LQ: 5 kg

IMDG LQ: 5 kg

ICAO LQ: 5 kg

Provisions concerning carriage in bulk ADR:

VC1: Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2: Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

AP7: Carriage in bulk shall only be as a full load.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A, S-B

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

---

**15. Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

---

**16. Other Information**

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.0

Date published.

20-May-2016

Further information.

None.

---

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable