Safety Data Sheet

Date of Issue: 18.11.2024 Date of Expiry: 18.11.2029

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
Facsimile : +64 9 480 4385
Emergency phone number : 0800 243 622 (24 hours)

Product Name	**Ammonium Chloride**
Product Code	12201
CAS No.	12125-02-9

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification
Acute toxicity, Oral (Category 4), H302
Serious eye damage/eye irritation (Category 2), H319

2.2 GHS Label elements, including precautionary statements
Pictogram

Signal Word : Warning

Hazard Statements
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary Statements
Prevention
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection/ face protection.

Response
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Disposal
P501 Dispose of contents/ container to an approved waste disposal plant.

3: Composition/information on ingredients

3.1 Substances

Substance name	:	Ammonium chloride
Molecular formula	:	$(NH_4)Cl$
Molecular weight	:	53.49 g/mol
CAS No.	:	12125-02-9
EC-No.	:	235-186-4
Index-No.	:	017-014-00-8

4: First aid measures

4.1 Description of first aid measures

General information

IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Call a POISON CENTRE/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately.
In case of skin reactions, consult a physician.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Overexposure may cause: Vomiting. Nausea. Headache.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water
Foam.
Dry extinguishing powder
ABC-powder
Alcohol resistant foam

Extinguishing media which must not be used for safety reasons
Full water jet

5.2 Special hazards arising from the substance or mixture
In case of fire may be liberated:
Hydrogen chloride (HCl)
Nitrogen oxides (NOx)

5.3 Advice for firefighters
DO NOT fight fire when fire reaches explosives.
Special protective equipment for firefighters :
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information
Do not allow run-off from fire-fighting to enter drains or water courses.
Do not inhale explosion and combustion gases.
Use water spray jet to protect personnel and to cool endangered containers.
In case of fire: Evacuate area.

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions
Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up
Spilled product must never be returned to the original container for recycling. Clean contaminated articles and floor according to the environmental legislation. Collect in closed and suitable containers for disposal.

6.4 Additional information
Clear spills immediately.

7: Handling and storage

7.1 Precautions for safe handling
Avoid:
Dust formation
Inhalation
Avoid contact with eyes and skin.
Use extractor hood (laboratory).
If handled uncovered, arrangements with local exhaust ventilation have to be used.
If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.
Protect from moisture.

7.2 Conditions for safe storage, including any incompatibilities
Recommended storage temperature: 15-25°C
Storage class: 10-13
Keep container tightly closed and in a well-ventilated place. Do not store together with:
Nitrates Alkalis

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8: Exposure controls/personal protection

8.1 Control parameters
Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Ammonium chloride	12125-02-9	WES-TWA	10 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
		WES-STEL	20 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

8.2 Exposure controls
Appropriate engineering controls
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment
Eye/face protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

Control of environmental exposure
Do not let product enter drains.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
(a) Appearance
Physical state : solid
Colour : white
(b) Odour : no data available
(c) Odour threshold : no data available

Safety relevant basic data
(d) pH : 5 (50 g/l; H2O; 20 °C)
(e) Melting point/freezing point : 335 °C
(f) Initial boiling point and boiling range : no data available

(g) Flash point	:	no data available
(h) Evaporation rate	:	no data available
(i) Flammability (solid, gas)	:	not applicable
(j) Flammability or explosive limits		
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
(k) Vapour pressure	:	1 mmHg (160 °C)
(l) Vapour density	:	no data available
(m) Density	:	1.5256 g/cm³ (20 °C)
(n) Solubility(ies)		
Water solubility	:	372 g/l (20 °C)
(o) Partition coefficient: n-octanol/water	:	-4.37 (20 °C; calculated)
(p) Auto-ignition temperature	:	> 400 °C
(q) Decomposition temperature	:	not applicable
(r) Viscosity		
Kinematic viscosity	:	no data available
Dynamic viscosity	:	no data available
(s) Explosive properties	:	not applicable
(t) Oxidising properties	:	not applicable
(u) Particle characteristics	:	not applicable - no nanoform/not combustible

10: Stability and reactivity

10.1 Reactivity
Thermal decomposition:
Temperature control required.
To avoid thermal decomposition, do not overheat.

10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions
Violent reaction with:
Nitrates
Acids
Alkali hydroxide

10.4 Conditions to avoid
Keep away from heat.

10.5 Incompatible materials
Aluminium
Lead
Copper.
Iron.

10.6 Hazardous decomposition products
Decomposition products in case of fire: see section 5.

10.7 Additional information
no data available

11: Toxicological information

11.1 Information on toxicological effects
Acute effects

Acute oral toxicity:
LD50: > 1440 mg/kg - Rat - (Merck KGaA)
LD50: < 1410 mg/kg (14 d) - Rat - (OECD 401)

Acute dermal toxicity:
LC50: < 2000 mg/kg (24 h) - Rat - (European Food Safety Authority)

Acute inhalation toxicity:
no data available

Irritant and corrosive effects
Primary irritation to the skin:
not applicable

Irritation to eyes:
Causes serious eye irritation.

Irritation to respiratory tract:
not applicable

Respiratory or skin sensitisation
In case of skin contact: not sensitising
After inhalation: not sensitising

STOT-single exposure
not applicable

STOT-repeated exposure
not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity
No indication of human carcinogenicity.

Germ cell mutagenicity
No indications of human germ cell mutagenicity exist.

Reproductive toxicity
No indications of human reproductive toxicity exist.

Aspiration hazard
not applicable

Other adverse effects
no data available

Additional information
no data available

12: Ecological information

12.1 Ecotoxicity

Fish toxicity	:	no data available
Daphnia toxicity	:	no data available
Algae toxicity	:	no data available
Bacteria toxicity	:	no data available

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
Partition coefficient: n-octanol/water: -4.37 (20 °C; berechnet)

12.4 Mobility in soil:
no data available

12.5 Results of PBT/vPvB assessment
not applicable

12.6 Other adverse effects
no data available

13: Disposal considerations

13.1 Waste treatment methods
Appropriate disposal / Product
Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package
Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	**UN Number**	-	-	-
14.2	**UN Proper Shipping name**	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	**Transport Hazard Class**	-	-	-
14.4	**Packaging group**	-	-	-
14.5	**Environmental Hazards**	No	No	No
14.6	**Special precautions for user**	-		

15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulatory information
HSNO Approval Code:
HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006
Tracking Required: not required
Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

****END*******END*******END*******END*******END****