

Safety Data Sheet

Date of Issue: 19.11.2024 Date of Expiry: 19.11.2029

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 hydrogen carbonate	
Product Code	12501	
CAS No.	1066-33-7	

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification

Acute toxicity, Oral (Category 4), H302

2.2 GHS Label elements, including precautionary statements Pictogram



Signal Word: Warning

Hazard Statements

H302 Harmful if swallowed.

Precautionary Statements

Prevention

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

Disposal

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

3: Composition/information on ingredients

3.1 Substances

Formula : CH2O3.H3N Molecular weight : 79.06 g/mol CAS-No. : 1066-33-7 EC-No. : 213-911-5

4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

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

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

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

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Not combustible.

Fire may cause evolution of:

nitrogen oxides

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Storage conditions

Tightly closed. Dry.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

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

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state : solid b) Color : colourless

c) Odor : No data available

d) Melting point/freezing point

Melting point/freezing point : 60 °C

e) Initial boiling point and boiling range : No data available

f) Flammability (solid, gas) : The product is not flammable.

g) Upper/lower flammability or explosive limits:
h) Flash point
i) Autoignition temperature
j) Decomposition temperature
i No data available
No data available
No data available

k) pH : 7.0 - 8.5 at 79.1 g/l at 25 °C

I) Viscosity

p) Density

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

m) Water solubility : 79.1 g/l at 20 °C - completely soluble n) Partition coefficient: n-octanol/water : Not applicable for inorganic substances

o) Vapor pressure : 67.1 hPa at 20 °C

513 hPa at 50 °C No data available No data available No data available

Relative density : No data available q) Relative vapor density : No data available r) Particle characteristics : No data available s) Explosive properties : No data available

t) Oxidizing properties : none

9.2 Other safety information

Dissociation constant : 6.49 at 20 °C

- OECD Test Guideline 112

Relative vapor density : 2.73 - (Air = 1.0)

10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

nitrates

nitrites

Acids

alkalines

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - 1,576 mg/kg

(OECD Test Guideline 401)

Remarks: (ECHA)

LC50 Inhalation - Rat - male and female - 4.5 h - > 4.74 mg/l - dust/mist

(US-EPA)

Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: sodium hydrogen carbonate

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 434)

Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: ammonium sulphate

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation (OECD Test Guideline 431)

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(US-EPA)

Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: sodium hydrogen carbonate

Respiratory or skin sensitization Maximization Test - Guinea pig

Result: negative (US-EPA)

Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: ammonium chloride

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative Remarks: (ECHA)

Test Type: In vivo micronucleus test

Species: Mouse

Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: ammonium chloride

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12: Ecological information

12.1 Toxicity

Toxicity to fish

LC50 - Oncorhynchus mykiss (rainbow trout) - 173 mg/l - 96 h

Remarks: (ECOTOX Database)

LC50 - Oncorhynchus mykiss (rainbow trout) - 98.3 mg/l - 96 h

Remarks: (ECOTOX Database)

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Avoid release to the environment.

13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product 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	1	-	-
14.2	UN Proper	Not dangerous	Not dangerous	Not dangerous
	Shipping name	goods	goods	goods
14.3	Transport	-	-	-
	Hazard Class			
14.4	Packaging group	-	-	-
14.5	Environmental	No	No	No
	Hazards			
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 2006HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: not 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.