

AMMONIUM CHLORIDE

PRODUCT CODE 027149

SYNONYMS

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C.I. NO.

—

CASR NO.

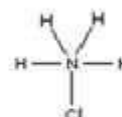
12125-02-9

ATOMIC OR MOLECULAR FORMULA

NH₄Cl

ATOMIC OR MOLECULAR WEIGHT

53.49



PROPERTIES

Hygroscopic. Slightly soluble in alcohol

PARAMETER

LIMIT

Description

A white crystalline powder.

Solubility

10% solution in water is clear and colourless.

Minimum assay (Argentometric; ex Cl)

99.0%

MAXIMUM LIMIT OF IMPURITIES

Loss on drying (at 100°C)

1.0%

Residue on ignition

0.3%

Phosphate (PO₄)

0.002%

Sulphate (SO₄)

0.025%

Iron (Fe)

0.0005%

Lead (Pb)

0.001%

Note(s) : Assay (if applicable) method mentioned.

WARNING

Hazard statements :Harmful if swallowed. Causes serious eye irritation .

Precautionary statements

Prevention: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wear eye/face protection. If eye irritation persists, get medical advice/ attention. Specific treatment: refer to Label or MSDS.

Disposal: Dissolve the chemical to be disposed, in water and allow it to run to waste, diluting with large quantities of water.

Hazard Pictogram(s) :



GHS07

Ammonium Chloride
CAS No 12125-02-9

MATERIAL SAFETY DATA SHEET
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : **Ammonium Chloride**

CAS-No. : 12125-02-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Redstone international

Telephone : +96567751003

Email : Redstonekuwait@gmail.com

1.4 Emergency telephone number

Emergency Phone # : +96567751003

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful R22

Xi Irritant R36

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H319

Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

none

2.3 Other hazards - none**SECTION 3: Composition/information on ingredients****3.1 Substances**

Molecular Weight : 53,49 g/mol

CAS-No. : 12125-02-9

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
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Ammonium chloride

CAS-No.	12125-02-9	Acute Tox. 4; Eye Irrit. 2;	<= 100 %
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Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
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Ammonium chloride

CAS-No.	12125-02-9	Xn, R22 - R36	<= 100 %
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For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

nitrogen oxides (NO_x), Hydrogen chloride gas

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

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

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|--------------------------------------|
| a) Appearance | Form: crystalline powder |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | 4,5 - 5,5 at 50,00000 g/l at 20,0 °C |
| e) Melting point/freezing point | 340,0 °C |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | not applicable |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure | 1,3 hPa at 160,4 °C |
| l) Vapour density | no data available |
| m) Relative density | no data available |
| n) Water solubility | soluble |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties | no data available |
| t) Oxidizing properties | no data available |

9.2 Other safety information

- | | |
|--------------|-----------------------|
| Bulk density | 500 kg/m ³ |
|--------------|-----------------------|

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 1.650 mg/kg

Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Eyes - rabbit

Result: Eye irritation

Respiratory or skin sensitisation

Will not occur

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

Additional Information

RTECS: Not available

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

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

LC50 - Cyprinus carpio (Carp) - 209,00 mg/l - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 3,98 mg/l - 96 h
 NOEC - Oncorhynchus mykiss (rainbow trout) - 57 mg/l - 96 h
 Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 161 mg/l - 48 h
 Growth inhibition NOEC - Daphnia magna (Water flea) - 0,1 mg/l - 216 h

12.2 Persistence and degradability
 no data available

12.3 Bioaccumulative potential
 no data available

124 Mobility in soil
 no data available

125 Results of PBT and vPvB assessment
 PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

126 Other adverse effects
 Toxic to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
 Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
 Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
 ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name
 ADR/RID: Not dangerous goods
 IMDG: Not dangerous goods
 IATA: Not dangerous goods

143 Transport hazard class(es)
 ADR/RID: - IMDG: - IATA: -

144 Packaging group
 ADR/RID: - IMDG: - IATA: -

145 Environmental hazards
 ADR/RID: no IMDG Marine pollutant: no IATA: no

146 Special precautions for user
 no data available

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

151 Safety, health and environmental regulations/legislation specific for the substance or mixture
 no data available

15.2 Chemical Safety Assessment
 For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Full text of R-phrases referred to under sections 2 and 3

Xn	Harmful
R22	Harmful if swallowed.
R36	Irritating to eyes.