

AMMONIUM CHLORIDE

Section 1: Chemical Product and Company Identification

1.1 Product identifier

Product Name: Ammonium Chloride

Material No. 9012XXXXXXXXXX

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

Relevant identified uses: Technical, Pharma, Food

1.3 Details of the supplier of the safety data sheet

CHEMICAL ELEMENTS UKRAINE, LLC
Khimikov avenue, 74, Cherkassy, 18028, Ukraine
+38 0472 59 02 28
hello@chemelements.life
www.chemelements.life

1.4 Emergency telephone number

+49 40 333 13 237

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Acute toxicity, Category 4, Oral, H302

Eye irritation, Category 2, H319

2.2 Label elements

Pictogram:



Signal Word:

WARNING

Hazard Statements:

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statements:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 3: Composition and Information on Ingredients

3.1 Substance

Chemical name: Ammonium Chloride

Formula: NH₄Cl

CAS No. 12125-02-09

EC No. 235-186-4

3.2 Hazardous components (REGULATION (EC) No 1272/2008)

Component	CAS No.	WP, %
Ammonium Chloride	12125-02-09	≥99,0

3.5 Mixture

Not applicable

Section 4: First Aid Measures

4.1 Description of first aid measures

Inhalation: Fresh air.

Ingestion: Immediately make victim drink water (two glasses at most). Consult a physician.

Skin: Take off immediately all contaminated clothing. Rinse skin with water/ shower

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Eye contact: Rinse out with plenty of water. Remove contact lenses.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Irritant effects.
The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea.
Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis.

4.3 Indication of any immediate medical attention and special treatment needed

No information available

Section 5: Fire fighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: nitrogen oxides, Hydrogen chloride gas.

5.3 Advice for firefighters

In a fire situation, wear self-contained positive pressure breathing apparatus and protective clothing from resistant materials.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and ingestion. Avoid contact with skin, eyes and clothing. Wear protective clothing specified for normal operations (see Section 8).

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

Substance collect in a closed identified container, using a dry method. Avoid dust. Rinse contaminated surface with detergent and water.

6.4 Reference to other sections

Disposal (see Section 13).

Section 7: Handling and Storage

7.1 Precautions for safe handling

Change contaminated clothing immediately; wash hands and face after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in covered, dry warehouses in original tightly closed packaging.

7.3 Specific end use(s)

No information available

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Provide adequate ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits. The level of protection and types of controls will vary depending upon potential exposure conditions.

8.2 Exposure controls

Eye/face protection: Safety glasses with side-shields.

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Skin and body protection:	Wear tightly fitting protective clothing (protective gloves, dustproof clothing and special footwear). Recommended Glove material: Nitrile rubber 0,11 mm.
Respiratory Protection:	Respiratory protection necessary at: Dust formation. Recommended Filter type: Filter P2.

Section 9: Physical and Chemical Properties

Form:	Solid
Appearance:	White fine crystalline powder
Odour:	Odourless.
Melting Point:	335°C (decomposition)
Boiling point:	Not applicable
Decomposition temperature:	>400°C
Solubility in Water:	372 g/l (20°C)
Solubility in Organic Solvents:	No information available
Specific Gravity:	1,53 g/cm ³ (25°C)
pH:	4,5-5,5 (5% solution, 20°C, H ₂ O)
Flammability:	Non-combustible material.
Molecular Weight:	53,49
Partition coefficient: n-octanol/water:	No information available
Vapor pressure:	No information available

Section 10: Stability and Reactivity Data

10.1 Reactivity

Violent reactions possible with alkali hydroxides, acids. Risk of ignition or formation of inflammable gases or vapours with halogen-halogen compounds, alkalines, alkaline substances. Risk of explosion with nitrates, chlorates, Heavy metal salts, nitrites, Hydrogen cyanide (hydrocyanic acid), Chlorine, silver salt, Strong oxidizing agents.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, ammonia, chlorine, nitrous vapours). Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) halogens compounds: (increased) risk of fire/explosion. Reacts with (some) acids: release of toxic and corrosive gases/vapours (hydrogen chloride). Reacts with (some) bases: release of corrosive gases/vapours (ammonia).

10.4 Conditions to avoid

Air contact. High temperature. Incompatible materials.

10.5 Incompatible materials

Oxidizing agent. Strong acids. silver nitrate. Strong reducing agent

10.6 Hazardous decomposition products

See 5.2

Section 11: Toxicological Information

Acute Toxicity:	LD ₅₀ =1410 mg/kg (rat, oral, irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract).
Inhalation:	Possible damages:, mucosal irritations.
Skin:	No (Rabbit, Draize Test)
Eye:	Causes serious eye irritation (rabbit, eye irritation, OECD Test Guideline 405)
Carcinogenicity:	No information available

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Mutagenicity:	No information available
Reproductive toxicity:	No information available
Specific target organ toxicity - single exposure:	No information available
Specific target organ toxicity - repeated exposure:	No information available
Aspiration hazard:	No information available
Systemic effects:	See 4.2

Section 12: Ecological Information

12.1 Acute toxicity

For fish: LC₅₀=42,91 mg/l (Oncorhynchus mykiss (rainbow trout),96 h).

For Daphnia magna: EC₅₀>100 mg/l (48 h).

For algae: No information available

12.2. Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4. Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

Discharge into the environment must be avoided

Section 13: Disposal Considerations

Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

Section 14: Transport Information

14.1 UN number

Not dangerous goods

14.2 UN proper shipping name

Not dangerous goods

14.3 Transport hazard class(es)

Land transport (ADR/RID): Not classified as dangerous in the meaning of transport regulations

Air transport (IATA): Not classified as dangerous in the meaning of transport regulations

Sea transport (IMDG): Not classified as dangerous in the meaning of transport regulations

14.4 Packaging group:

Not dangerous goods

Section 15: Other Regulatory Information

Chemical Safety Assessment: No information

Section 16: Other Information

Revision date: May, 2020

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