

Ammonium Chloride Granular

Safety Data Sheet

SECTION 1: Identification

1.1. Product identifier

Product name : Ammonium Chloride Granular (G, C Grades)

1.2. Recommended use and restrictions on use

Manufacturing

1.3. Supplier

Zaclon LLC
2981 Independence Road
Cleveland, OH 44115
T 800-356-7327

1.4. Emergency telephone number

Emergency number : Chemtrec 1 800 424 9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS-US/CAN Classification

Acute toxicity (oral) Category 4 H302

Serious eye damage/eye irritation Category 2A H319

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US/CAN labeling

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 - Harmful if swallowed
H319 - Causes serious eye irritation

Precautionary statements : P264 - Wash thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P330 - Rinse mouth
P337+P313 - If eye irritation persists: Get medical advice/attention
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-CAN classification	GHS-US classification
Ammonium chloride	(CAS No) 12125-02-9	99.5-100	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Comb. Dust	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Comb. Dust

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove to fresh air immediately. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.
First-aid measures after skin contact	: Immediately wash the affected area with plenty of soap and water for a minimum of 15 minutes. Remove any contaminated clothing. Get immediate medical attention. Redness and sores may develop if contaminated area was not attended to immediately or improper washing was not thorough.
First-aid measures after eye contact	: Flush eyes immediately with copious amounts of water for at least 15 minutes. Keep eyelids apart while irrigating the eyes. Get medical attention immediately.
First-aid measures after ingestion	: Do not induce vomiting. Give large quantities of water or milk. Call a physician. Never give anything by mouth to an unconscious person.

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

Symptoms/injuries after inhalation	: Inhalation of excessive concentrations of vapor, fumes, and/or dust produces irritation of the upper respiratory tract resulting in coughing, excessive spitting and choking sensation. Reactions in humans have usually been limited to mild irritation or inflammation of the nose and throat.
Symptoms/injuries after skin contact	: Ammonium chloride may cause skin irritation, or dermatitis on skin exposed for prolonged periods.
Symptoms/injuries after eye contact	: Ammonium Chloride, including vapor, can cause irritation and inflammation of the eyes. Permanent damage to the eye can occur if substance is not immediately flushed from the eye.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water, water fog, carbon dioxide (CO ₂), dry chemical.
Unsuitable extinguishing media	: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Fumes of nitrogen oxides, hydrogen chloride and possibly ammonia gas may be evolved during a fire.
Explosion hazard	: None known.

5.3. Advice for firefighters

Protection during firefighting	: Firefighters should wear full protective gear.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Stop the flow of material, if this is without risk.
Methods for cleaning up	: Sweep up and recycle into process if contamination does not present a problem. Use appropriate protective equipment if dust is generated or contact with eyes or skin is expected. Flush residues and liquid to holding area for neutralization before discharge.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation/exhaustion at the workplace. Avoid dust generation. Avoid contact with skin and eyes. Do not allow product to enter sewage system or water bodies.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container tightly sealed and in the original container.
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7.3. Specific end use(s)

Manufacturing

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ammonium chloride (12125-02-9)		
USA - ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (fume)
USA - ACGIH	ACGIH STEL (mg/m ³)	20 mg/m ³ (fume)
Canada (Quebec)	VECD (mg/m ³)	20 mg/m ³ (fume)
Canada (Quebec)	VEMP (mg/m ³)	10 mg/m ³ (fume)
Alberta	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Manitoba	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
New Brunswick	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
New Foundland & Labrador	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
New Foundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Nova Scotia	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Ontario	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Prince Edward Island	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Yukon	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (fume)

8.2. Exposure controls

Appropriate engineering controls	: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Hand protection	: Wear impervious gloves to minimize skin contact.
Eye protection	: Where chemical safety goggles or equivalent.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular nuggets, prills or rods.
Color	: No data available
Odor	: Odorless.
Odor threshold	: No data available
pH	: 4.0 - 6.0
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 642 °F (339°C)
Freezing point	: No data available
Boiling point	: > 212 °F (decomposes at 968°F/520°C)
Flash point	: No data available
Self ignition temperature	: No data available

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Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

Aluminum, zinc, tin and their alloys.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Oral: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

ATE CA (oral)	500 mg/kg body weight
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Ammonium chloride (12125-02-9)

LD50 oral rat	1650 mg/kg
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Skin corrosion/irritation	: Not classified pH: 4.0 - 6.0
Serious eye damage/irritation	: Causes serious eye irritation. pH: 4.0 - 6.0
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Aquatic acute : Not classified
Aquatic chronic : Not classified

Ammonium chloride (12125-02-9)

LC50 fish 1	209 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

Not regulated for transport

14.2. Transport information/DOT

DOT

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. Canada National regulations

Ammonium chloride (12125-02-9)

Listed on the Canadian DSL (Domestic Substances List)

15.2. US Federal regulations

Ammonium chloride (12125-02-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

Ammonium chloride (12125-02-9)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other information

Full text of H-phrases:

H302	Harmful if swallowed
H319	Causes serious eye irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product