



# AMMONIUM CHLORIDE, LAB GRADE, GRANULAR

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**Carolina Biological Supply Company**

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**CAROLINA**  
www.carolina.com

## Section 1 - Product Description

**Product Name:** Ammonium Chloride, Granular. Lab Grade.

**Product Code(s):** 84-3810, 84-3880, 84-0548, 84-3800

**Size:** 500g, 0.6g

**Chemical Name:** Ammonium Chloride

**CAS Number:** 12125-02-9

**Formula:** NH<sub>4</sub>Cl

**Synonyms:** Sal Ammoniac, Ammoneric, Ammonium Muriate

**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 - Composition / Information on Ingredients

**Principal Hazardous Components:** Ammonium Chloride (CAS#12125-02-9) 100%

**TLV units:** ACGIH-TLV 10 mg/m<sup>3</sup> (TWA) (fume); 20 mg/m<sup>3</sup> (STEL) (fume)

**PEL units:** OSHA-PEL 10 mg/m<sup>3</sup> (TWA); 20 mg/m<sup>3</sup> (STEL)

## Section 3 - Hazard Identification

**Emergency Overview:** Decomposition produces noxious fumes. Irritating to skin. Harmful if swallowed.

**Potential Health Effects:**

**Eyes:** May cause irritation.

**Skin:** May cause irritation to skin.

**Ingestion:** May cause gastrointestinal discomfort.

**Inhalation:** May cause irritation to respiratory tract.

## Section 4 - First Aid Measures

**Emergency and First Aid Procedures:**

**Eyes** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin** - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

**Ingestion** - If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Inhalation** - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## Section 5 - Firefighting Procedures

**Flash Point (Method Used):** N/A

**NFPA Rating:**

**Health:** 2

**Fire:** 0

**Reactivity:** 0

**Extinguisher Media:** Use media suitable to extinguish surrounding fire.

**Flammable Limits in Air % by Volume:** N/A

**Autoignition Temperature:** >400 °C

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Thermal decomposition produces highly toxic fumes. Explosive reaction with potassium chlorate or bromine trifluoride. Violent reaction (ignition) with bromine pentafluoride, NH<sub>4</sub>, NO<sub>3</sub>, and IF<sub>7</sub>.

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Keep away from ... (incompatible materials to be indicated by the manufacturer). Keep container tightly closed in a cool, well-ventilated place.

## Section 8 - Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:**

**Local Exhaust:** Yes

**Mechanical(General):** Yes

**Special:** No

**Other:** No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent.

**Eye Protection:** Splash proof chemical safety goggles should be worn.

**Other Protective Clothing or Equipment:** Lab coat, apron, eye wash, safety shower.

## Section 9 - Physical Data

**Molecular Weight:** 53.50

**Boiling Point:** 520 °C

**Vapor Density(Air=1):** N/A

**Percent Volatile by Volume:** N/A

**Solubility in Water:** Soluble

**Melting Point:** 338 °C (sublimes)

**Vapor Pressure:** .97 mmHg at 30 °C

**Specific Gravity (H<sub>2</sub>O=1):** 1.53

**Evaporation Rate (BuAc=1):** N/A

**Appearance and Odor:** White, odorless crystals.

## Section 10 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** Avoid dusting.

Heat and sources of ignition.

**Incompatibility (Materials to Avoid):** BrF<sub>3</sub>, Metals, Cyanides, Alkalis, Oxidizers, Acids,

**Hazardous Decomposition Products:** NH<sub>3</sub>, HCl,

**Hazardous Polymerization:** Will not occur

## Section 11 - Toxicity Data

**Toxicity Data:** orl-rat LD50 1410 mg/kg

**Effects of Overexposure:**

**Acute:** See section 3

**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA. Mutation data cited.

**Conditions Aggravated by Overexposure:** Eye disorders, Skin disorders,

**Target Organs:** Eyes, Skin,

**Primary Route(s) of Entry:** Inhalation and ingestion.

## Section 12 - Ecological Data

**EPA Waste Numbers:** N/A

## Section 13 - Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

## Section 14 - Transport Information

**DOT Proper Shipping Name:** Not regulated in quantities less than 5000 lbs.

## Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Chronic Acute

**Name List:**

Ammonium Chloride - No

**Chemical Category:**

Ammonium Chloride - No

**CERCLA Section 103 RQ(lb.):** Ammonium Chloride - 5000

**RCRA Section 261.33:** Ammonium Chloride - No

## Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists

CAS Number Chemical Services Abstract Number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DOT U.S. Department of Transportation

IARC International Agency of Research on Cancer

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N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act