



## Material Safety Data Sheet Ammonium Chloride Solutions

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Ammonium Chloride Solutions

**Catalog Numbers:**

LC10975, LC10980, LC10990, LC10986, LC11000, LC11010

**Synonyms:**

None

**Company Identification:**

LabChem Inc  
200 William Pitt Way  
Pittsburgh, PA 15238

**Company Phone Number:**

(412) 826-5230

**Emergency Phone Number:**

(800) 424-9300

**CHEMTREC Phone Number:**

(800) 424-9300 or  
011-703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	≥ 90
12125-02-9	Ammonium chloride	0.1 - 10

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** clear, colorless solution**Caution!** May cause irritation to eyes, skin, and gastrointestinal tract.**Target Organs:** eyes, heart, blood, spleen, kidney**Potential Health Effects****Eye:**

May cause eye irritation.

**Skin:**

May cause skin irritation.

**Ingestion:**

May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. Large doses (over 6g NH<sub>4</sub>Cl) may cause systemic ammonia toxicity including heavy breathing, blue skin, restlessness, convulsions, coma. Susceptibility increases with pre-existing liver function impairment.

**Inhalation:**

May cause respiratory tract irritation.



## Material Safety Data Sheet Ammonium Chloride Solutions

**Chronic:**

May cause adverse kidney effects.

### Section 4 - First Aid Measures

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid.

**Skin:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:**

Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

**Inhalation:**

Move victim to fresh air immediately. Get medical aid if irritation or other symptoms appear.

**Notes to Physician:**

Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:**

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**

Not available

**Flash Point:**

Not available

**NFPA Rating:**

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0

CAS# 12125-02-9: Health- 2, Flammability- , Instability- 1

**Explosion Limits:**

Lower: n/a Upper: n/a

### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.



## Material Safety Data Sheet Ammonium Chloride Solutions

### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.

**Storage:**

Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list	None of the components are on this list	None of the components are on this list
Ammonium chloride	10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL	10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL	None of the components are on this list

**OSHA Vacated PELs:**

Ammonium chloride: 10 mg/m<sup>3</sup> TWA; 20 mg/m<sup>3</sup> STEL

### Personal Protective Equipment

**Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>pH:</b>	5.0 (10% soln)
<b>Vapor Pressure:</b>	Not available
<b>Vapor Density:</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	Not available



## Material Safety Data Sheet Ammonium Chloride Solutions

<b>Freezing/Melting Point:</b>	Not available
<b>Decomposition Temperature:</b>	350°C (662°F)
<b>Solubility in water:</b>	Soluble
<b>Specific Gravity/Density:</b>	1.0-1.1
<b>Molecular Formula:</b>	Not available
<b>Molecular Weight:</b>	Not available

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Incompatible materials, excess heat.

**Incompatibilities with Other Materials:**

Strong oxidizers.

**Hazardous Decomposition Products:**

Ammonia.

**Hazardous Polymerization:**

Has not been reported

### Section 11 - Toxicological Information

**RTECS:**

CAS# 7732-18-5: ZC0110000

CAS# 12125-02-9: BP4550000

**LD50/LC50:**

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg

CAS# 12125-02-9:

Oral, rat: LD50 = 1410 mg/kg

**Carcinogenicity:**

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 12125-02-9: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

**Epidemiology:**

May cause eye irritation.

**Teratogenicity:**

No information found

**Reproductive:**

No information found

**Mutagenicity:**

Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:**

No information found



## Material Safety Data Sheet Ammonium Chloride Solutions

### Section 12 - Ecological Information

No information found.

### Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

### Section 14 - Transport Information

#### US DOT

**Shipping Name:** Not regulated

**Hazard Class:**

**UN Number:**

**Packing Group:**

### Section 15 - Regulatory Information

#### US Federal

##### TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 12125-02-9 is listed on the TSCA Inventory.

##### SARA Reportable Quantities (RQ):

CAS# 12125-02-9: final RQ = 5000 pounds (2270 kg)

##### CERCLA/SARA Section 313:

None of the components are on this list.

##### OSHA - Highly Hazardous:

None of the components are on this list.

#### US State

##### State Right to Know:

Ammonium chloride can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

##### California Regulations:

None

#### European/International Regulations

##### Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 12125-02-9 is listed on Canada's DSL List.

##### Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 12125-02-9 is listed on Canada's Ingredient Disclosure List.



## Material Safety Data Sheet Ammonium Chloride Solutions

### Section 16 - Other Information

MSDS Creation Date: April 11, 1999

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