



Material Safety Data Sheet
Ammonia Standard Solutions, 50ppm - 1000ppm

Section 1 - Chemical Product and Company Identification

MSDS Name:

Ammonia Standard Solutions, 50ppm - 1000ppm

Catalog Numbers:

LC10900, LC17940

Synonyms:

Ammonia reference solutions, 1ml - .05mg to 1mg

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

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
12125-02-9	Ammonium chloride	.016-0.314

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

*Appearance: Colorless**Caution! May cause skin irritation. May cause eye irritation. This is expected to be a low hazard for usual industrial handling.**Target Organs: None.***Potential Health Effects****Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.



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Ingestion:

Ingestion can result in nausea, vomiting, gastric irritation. Large doses (over 6g ammonium chloride) may cause systemic ammonia toxicity including heavy breathing, blue skin, dullness, restlessness, convulsions, coma. Susceptibility increases with pre-existing liver function impairment.

Inhalation:

Low hazard for usual industrial handling.

Chronic:

May cause dermatitis and conjunctivitis.

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 soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation:

Move victim to fresh air immediately. Get medical aid if cough 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. Move container if possible, avoid breathing vapors or dust.

Extinguishing Media:

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

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 12125-02-9: Not published.

Explosion Limits:

Lower: No information Upper: No information

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



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Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Area may be washed down with water.

Section 7 - Handling and Storage

Handling:

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:

Store capped at room temperature. Protect from heat and water reactive substance (sodium, oleum).

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

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 ³ TWA; 20 mg/m ³ STEL	10 mg/m ³ TWA	None of the components are on this list.

OSHA Vacated PELs

Ammonium chloride: 10 mg/m³ TWA

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Not required for normal use.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: Colorless

Odor: Odorless to slight ammonia

pH: No information found.

Vapor Pressure: 14 mm Hg @20C



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Vapor Density: 0.7
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: 212°F (100.00°C)
Freezing/Melting Point: 32°F (0.00°C)
Decomposition Temperature: No information found.
Solubility in water: No information found.
Specific Gravity/Density: 1.0
Molecular Formula: Solution
Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Ammonium nitrate, bromine trifluoride, potassium chlorates, iodine heptafluoride.

Hazardous Decomposition Products

Dry crystal sublimates at 644F.

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, mouse: LD50 = 1300 mg/kg
Oral, rat: LD50 = 1650 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:

Ammonium chloride is a mild skin and respiratory irritant, and a severe eye irritant.



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Teratogenicity:

Reproductive:

Mutagenicity:

Neurotoxicity:

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

European/International Regulations



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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.

Section 16 - Other Information

MSDS Creation Date: November 15, 1997

Revision Date: August 15, 2007

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