SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Ammonium Hydroxide 1.0N Solution
CAS number	See section 3
Synonyms	N/A

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

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin irritation Category 2
Serious eye damage Category 1
Acute aquatic toxicity Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word	Danger
Hazard statements	H315 Causes skin irritation. H280 Causes serious eye damage. H400 Very toxic to aquatic life.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Toxic by ingestion, Corrosive.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ammonium Hydroxide	-	1336-21-6	1.5-2.0%
Water	-	7732-18-5	98.0-98.5%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this sheet to a doctor if medical advice is needed.
If inhaled	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
In case of skin contact	mmediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
In case of eye contact	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
If swallowed	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. Causes serious eye damage.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.

Unsuitable extinguishing media None identified.

5.2 Specific hazards arising from the substance or mixture
Emits toxic fumes (nitrogen oxides, ammonia gas) under fire conditions. (See also Stability and Reactivity section).

5.3 Special protective equipment and precautions for firefighters
Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

5.4 Further information

Flash Point No data available.

Autoignition Temperature No data available.

Explosion limits

Upper No data available.
Lower No data available.
Sensitivity to Mechanical Impact No data available.
Sensitivity to Static Discharge No data available.
NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
See section 8 for recommendations on the use of personal protective equipment.

6.2 Environmental precautions
Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

6.3 Methods and materials for containment and cleaning up

Evacuate personnel to safe area and ventilate area. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

6.4 Reference to other sections

See section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in cool, dry well ventilated area. Keep away from incompatible materials.

Incompatibilities

Oxidizing agents, heavy metals and their salts, halogens, nitromethane, strong mineral acids, dimethyl sulfate, acrolein, acrylic acid, chlorosulfuric acid, propiolactone, propylene oxide.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Personal protective equipment

Eye/face protection

Wear chemical safety glasses or goggles.

Skin and body protection

Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

Control of environmental exposure
Prevent release into the environment. Maintain a clean workspace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odor of ammonia
Odor Threshold	5 - 50 ppm as ammonia gas
pH	6.0 - 8.0 at 25°C (77°F)
Melting Point/Range	No data available
Boiling Point/Range	100°C (212°F)
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	0.9 g/mL at 25°C (77°F)
Solubility	Completely miscible in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	No data available
Molecular Weight	No data available
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information
No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Not reactive in recommended storage conditions.

10.2 Chemical stability
Stable in recommended storage conditions.

10.3 Possibility of hazardous reactions
Will not occur.

10.4 Conditions to avoid
High temperatures, open flames, electric sparks.

10.5 Incompatible materials
Oxidizing agents, heavy metals and their salts, halogens, nitromethane, strong mineral acids, dimethyl sulfate, acrolein, acrylic acid, chlorosulfuric acid, propiolactone, propylene oxide.

10.6 Hazardous decomposition products
Nitric oxides and ammonia.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Hydroxide	Rat – 350 mg/kg	-	Rat – 3670 ppm – 1hr Mouse – 2420 ppm – 1hr

Skin corrosion/irritation
Causes severe irritation.

Serious eye damage/eye irritation
Severe burns and possible irreversible eye damage including corneal injury and cataracts.

Respiratory or skin sensitization
Coughing burns, breathing difficulty.

Germ cell mutagenicity
Mutagenic for bacteria and/or yeast.

Carcinogenicity
No components are listed as known or suspected carcinogens.

Specific target organ toxicity - single exposure
No data available.

Specific target organ toxicity - repeated exposure
No data available.

Reproductive toxicity
No data available.

Chronic effects
No data available.

11.2 Additional Information
No data available.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic Vertebrate Mortality NOEC - Oncorhynchus tshawytscha - 3.5 mg/l - 3.0 d.
Aquatic Invertebrate LC50 - Daphnia magna (Water flea) - 32 mg/l - 50 h.

12.2 Persistence and degradability
No information available.

12.3 Bio accumulative 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 Endocrine disrupting properties
No information available.

12.7 Other adverse effects
Very toxic to aquatic live.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods
Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues.

SECTION 14: Transport information

DOT (US)

UN Number	UN2672
Proper Shipping name	Ammonia solution
Hazard Class	8

Packaging Group	III

IMDG

UN Number	UN2672
Proper Shipping name	AMMONIA SOLUTION
Hazard Class	8
Packaging Group	III

IATA

UN Number	UN2672
Proper Shipping name	Ammonia solution
Hazard Class	8
Packaging Group	III

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Ammonium Hydroxide: 1,000 lb HS RQ

SARA 304 Emergency release notification
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
Acute Health Hazard.

SARA 313 (TRI reporting)
Ammonium Hydroxide: listed.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not listed.

Safe Drinking Water Act
Ammonium Hydroxide: 1,000,000 lb HS TQ

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List
Not listed.

US. New Jersey Worker and Community Right-to-Know Act
Ammonium Hydroxide: listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Ammonium Hydroxide: listed.

California Proposition 65
Not listed.

SECTION 16: Other information

Date of Issue: 6/5/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.