

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ammonium Hydroxide 5% ACS Grade  
**Synonyms:** azanium hydroxide, Ammonium Hydroxide  
**CAS Number:** 1336-21-6  
**Grade/Purity:** ACS Reagent Grade  
**Product Type:** Bases  
**Product Use:** Industrial, Manufacturing or Laboratory use  
**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574  
**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)  
**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

**Precautionary Statements:**

P234	Keep only in original packaging.
P260	Do not breathe dust, fume, gas, mist, vapours or spray.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P264	Wash hands and face thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, and eye/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.
P321	Specific treatment (see first-aid information on this label).
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	WEIGHT %	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Ammonium Hydroxide	5%	1336-21-6	215-647-6	NH <sub>4</sub> OH	35.05 g/mol
Water	95%	7732-18-5	231-791-2	H <sub>2</sub> O	18.02 g/mol

### 4. FIRST-AID MEASURES

<b>Eyes</b>	Refer to the "General First Aid" section. Specific First Aid: For corrosives, in case of contact, immediately flush skin or eyes with running water for at least 30 minutes. Additional flushing may be required. (ERG, 2024)
<b>Skin</b>	Remove contaminated clothes. Rinse skin with plenty of water or shower for at least 15 minutes. Refer immediately for medical attention .
<b>Inhalation</b>	· Administer oxygen if breathing is difficult.
<b>Ingestion</b>	-- DO NOT perform mouth-to-mouth resuscitation; the victim may have ingested or inhaled the substance.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Use water spray, alcohol-resistant foam, dry chemical, or CO <sub>2</sub> . Use measures appropriate to local circumstances.
<b>Unsuitable Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

### 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

No established occupational exposure limits.

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use a NIOSH-approved respirator (N95/P100 for particulate, organic vapor or acid gas cartridge as appropriate to the substance) when exposure limits may be exceeded or visible mist or dust is generated.

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with mild ammonia odor
Odor	Characteristic
pH	Not Available
Melting Point	-57.5°C
Boiling Point	38°C
Flash Point	Not Available
Vapor Pressure	Not Available
Specific Gravity	0.979
Solubility	Fully soluble in water
Molecular Formula	NH <sub>4</sub> OH
Molecular Weight	35.05 g/mol

## 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases.
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

US DOT	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
IATA/ICAO	Not regulated as dangerous goods.
Marine Pollutant	No
Note	Hazard communication note: Product may meet GHS hazard criteria for workplace handling, while not being regulated as dangerous goods for transport.

## 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	All ingredients are listed on the TSCA Active inventory.
<b>California Prop 65</b>	Refer to California Proposition 65 list for current status.
<b>SARA 311/312</b>	See Section 2 for hazard classifications.
<b>SARA 313</b>	Refer to EPA Toxic Release Inventory for current listing status.

## 16. OTHER INFORMATION

**Revision Date:** 04/29/2026

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