

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixtures  
Product name : Ammonium Hydroxide, 5% v/v  
Product code : PAS66028

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.  
Recommended use : Laboratory chemicals  
Restrictions on use : Not for food, drug or household use

#### 1.3. Supplier

Poseidon Analytical  
3901 Crestone Dr.  
Loveland, CO 80537  
T 800.597.1450  
[sales@poseidonanalytical.com](mailto:sales@poseidonanalytical.com)

#### 1.4. Emergency telephone number

Emergency number : 800-597-1450

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 2 H315 Causes skin irritation  
Serious eye damage/eye irritation Category 2A H319 Causes serious eye irritation  
Hazardous to the aquatic environment - Acute Hazard Category 3 H402 Harmful to aquatic life  
Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H402 - Harmful to aquatic life

Precautionary statements (GHS US) : P264 - Wash exposed skin thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, eye protection.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P501 - Dispose of contents/container to comply with local, state and federal regulations.

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	98.76	Not classified
Ammonium Hydroxide, ACS	(CAS-No.) 1336-21-6	1.24	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

#### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

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### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash exposed skin thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep cool. Keep container closed when not in use.

Incompatible products : Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ammonium Hydroxide, 5% v/v	
No additional information available	
Ammonium Hydroxide, ACS (1336-21-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m <sup>3</sup> )	17 mg/m <sup>3</sup>
ACGIH STEL (mg/m <sup>3</sup> )	24 mg/m <sup>3</sup>
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	35 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	50 ppm
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	300 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m <sup>3</sup> )	18 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	25 ppm
NIOSH REL (STEL) (mg/m <sup>3</sup> )	27 mg/m <sup>3</sup>
NIOSH REL STEL [ppm]	35 ppm
Water (7732-18-5)	
No additional information available	

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Gloves. Safety glasses.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

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### Respiratory protection:

Respiratory protection not required in normal conditions

### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: Ammonia odour
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.99 g/ml
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 1.03 mm²/s
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On heating: release of toxic/corrosive/combustible gases/vapours (ammonia).

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

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### 10.5. Incompatible materials

Strong acids.

### 10.6. Hazardous decomposition products

Gaseous ammonia.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Ammonium Hydroxide, ACS (1336-21-6)	
LD50 oral rat	350 mg/kg
ATE US (oral)	350 mg/kg body weight

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Ammonium Hydroxide, ACS (1336-21-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : 1.03 mm<sup>2</sup>/s

Likely routes of exposure : Inhalation. Skin and eye contact.

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Harmful to aquatic life.

### 12.2. Persistence and degradability

Ammonium Hydroxide, 5% v/v	
Persistence and degradability	Not established.

Ammonium Hydroxide, ACS (1336-21-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

Water (7732-18-5)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Ammonium Hydroxide, 5% v/v	
Bioaccumulative potential	Not established.

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Ammonium Hydroxide, ACS (1336-21-6)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).
Water (7732-18-5)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

Ammonium Hydroxide, ACS (1336-21-6)	
Ecology - soil	No (test)data on mobility of the components available.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Ammonium Hydroxide, 5% v/v		
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory		
Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
Ammonium Hydroxide, ACS	CAS-No. 1336-21-6	1.24%
Ammonium Hydroxide, ACS (1336-21-6)		
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb	
SARA Section 311/312 Hazard Classes	Health hazard - Acute toxicity (any route of exposure) Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation	

### 15.2. International regulations

#### CANADA

Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

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Revision date : 11/16/2016

Other information : None.

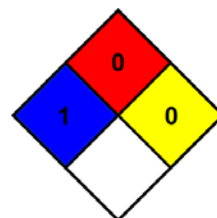
Full text of H-phrases: see section 16:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B  
B - Safety glasses, Gloves

SDS US LabChem

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*