



# SAFETY DATA SHEET

Version 1

## 1. Identification of the Substance / Preparation and of the Company / Undertaking

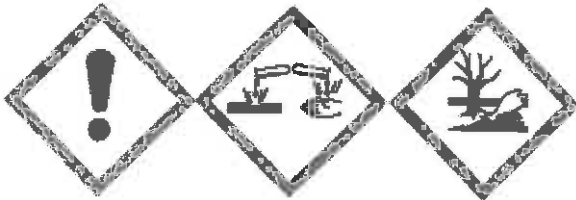
**Product Name:** Ammonium Hydroxide 3%  
**UN/ID No** UN2672  
**Formula:** Mixture  
**Company Name:**  
 Hawkins, Inc. 3100 E. Hennepin Avenue Minneapolis, MN 55413 (612-331-6910)

**Emergency Telephone:**  
 CHEMTREC (US): 1-800-424-9300

## 2. Hazards Identification

### GHS - Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1



**Signal Word:**

**Danger**

**Hazard Statements:**

- Harmful if swallowed
- Causes skin irritation
- Causes serious eye damage
- Very toxic to aquatic life with long lasting effects

**Physical Hazards**

Corrosive to metals	Category 1
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- May be corrosive to metals



**Precautionary Statements:**

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- P270 - Do not eat, drink or smoke when using this product
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P330 - Rinse mouth
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P321 - Specific treatment (see supplemental first aid instructions on this label)
- P332 + P313 - If skin irritation occurs: Get medical advice/attention
- P362 - Take off contaminated clothing and wash before reuse
- 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
- P310 - Immediately call a POISON CENTER or doctor/physician
- P501 - Dispose of contents/container to industrial incineration plant
- P273 - Avoid release to the environment
- P501 - Dispose of contents/ container to an approved waste disposal plant
- P334 - Immerse in cool water/wrap in wet bandages
- P390 - Absorb spillage to prevent material damage
- P406 - Store in corrosive resistant aluminum container with a resistant inliner

### 3. Composition / Information on Ingredients

#### Hazardous

Chemical Name	CAS No	Weight %	EC No
Ammonium hydroxide	1336-21-6	2-4	215-647-6

### 4. First Aid Measures

- Eye Contact:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Obtain medical attention.
- Skin Contact:** Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek immediate medical attention/advice.
- Ingestion:** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
- Note to Physicians:** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

### 5. Fire-fighting Measures

**Flammable Properties:**  
No information available

**Explosive Properties:**  
No information available

**Suitable Extinguishing Media:**  
Water spray (fog)

**Unsuitable Extinguishing Media:**  
No information available

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### Specific Hazards Arising from the Chemical:

Thermal decomposition can lead to release of irritating and toxic gases and vapors; Releases Ammonia when heated. Oxidation of Ammonia can cause formation of Nitrogen Oxides

### Protective Equipment and Precautions for Firefighters:

In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode

## 6. Accidental Release Measures

<b>Personal Precautions:</b>	Use only with adequate ventilation.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up:</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
<b>Other Information:</b>	Not applicable.

## 7. Handling and Storage

<b>Advice on Safe Handling:</b>	Avoid contact with skin, eyes or clothing. Use only with adequate ventilation.
<b>Storage Conditions:</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from any source of heat or ignition. Keep away from incompatible substances.
<b>Incompatible Materials:</b>	Strong acids and bases; Oxidizing agents; Halogens; Metals

## 8. Exposure Controls / Personal Protection

<b>Exposure Guidelines</b>	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)
<b>Engineering Controls:</b>	Ensure adequate ventilation, especially in confined areas

### Personal protective equipment (PPE)

<b>Eye/Face Protection:</b>	Tight sealing safety goggles.
<b>Body Protection:</b>	Suitable protective clothing.

### General Hygiene Considerations:

Do not eat, drink or smoke when using this product.

## 9. Physical and Chemical Properties

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

<b>Physical State:</b>	Liquid	<b>Odor:</b>	Slight odor of ammonia
<b>Appearance:</b>	No information available	<b>Odor Threshold:</b>	No information available
<b>Color:</b>	Clear Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH:</b>		Basic solution
<b>"Salt Out" Point (°F):</b>		No information available
<b>Melting Point/Freezing Point:</b>		
<b>Boiling Point/Boiling Range:</b>		
<b>Flash Point:</b>		
<b>Evaporation Rate (BuAc=1):</b>		No information available
<b>Flammability (solid, gas):</b>		No information available
<b>Flammability Limits in Air:</b>		No information available
<b>Upper Flammability Limit:</b>		

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<b>Lower Flammability Limit:</b>		
<b>Vapor Pressure (mm Hg) :</b>		No information available
<b>Vapor density (Air =1)</b>	>1	
<b>Specific Gravity (H2O=1):</b>	0.9940	
<b>Specific Gravity (2nd value):</b>		
<b>Water Solubility:</b>	Completely soluble	
<b>Solubility(ies):</b>		No information available
<b>Partition Coefficient (n-octanol/water)</b>		No information available
<b>Autoignition Temperature:</b>		
<b>Decomposition Temperature:</b>		No information available
<b>Kinematic Viscosity:</b>		No information available
<b>Dynamic Viscosity:</b>		No information available
<b>Oxidizing Properties:</b>	No information available	
<b>Explosive Properties:</b>	No information available	

### 9.2. Other information

<b>Softening Point:</b>	No information available
<b>Molecular Weight:</b>	No information available
<b>VOC Content(%):</b>	No information available
<b>Density:</b>	No information available
<b>Bulk Density:</b>	No information available

## 10. Stability and Reactivity

<b>Stability:</b>	Stable under normal conditions of use and storage
<b>Conditions to Avoid:</b>	Extremes of temperature and direct sunlight; Incompatibles; Ignition sources; Heat
<b>Incompatible Materials:</b>	Strong acids and bases; Oxidizing agents; Halogens; Metals
<b>Hazardous Decomposition Products:</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapors; Nitrogen oxides (NO <sub>x</sub> ); Ammonia
<b>Possibility of Hazardous Reactions:</b>	None under normal processing

## 11. Toxicological Information

### Product Information

**Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

Chemical Name	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	LC <sub>50</sub> (Lethal Concentration)
Ammonium hydroxide	350 mg/kg ( Rat )		

### Chronic Toxicity:

**Carcinogenicity:** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

**Target Organ Effects:** Eyes, Respiratory system, Skin

## 12. Ecological Information

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### Ecotoxicity

97% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Toxic to aquatic life with long lasting effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Ammonium hydroxide		8.2: 96 h <i>Pimephales promelas</i> mg/L LC50	0.66: 48 h water flea mg/L EC50 0.66: 48 h <i>Daphnia pulex</i> mg/L EC50

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Mobility:** No information available.

### **13. Disposal Considerations**

**Waste from Residues/Unused Products:** Disposal should be in accordance with applicable regional, national and local laws and regulations

### **14. Transport Information**

#### IATA

#### DOT

Proper shipping name	AMMONIUM HYDROXIDE
Hazard Class	8
UN/ID No	UN2672
Packing Group	III
Reportable Quantity (RQ)	1000 lbs
Description	NA



#### TDG

#### MEX

### **15. Regulatory Information**

#### International Inventories

All of the components in the product are on the following inventory lists: TSCA (United States);, Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL);, China (IECSC), ENCS (Japan);, Philippines (PICCS), This product contains a substance not listed on international inventories - it is for research and development use only.

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<b>AICS</b>	Complies
<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies

Chemical Name	AICS	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Ammonium hydroxide	Listed	Listed	Listed	-	Listed	-	(1)-314	Listed	KE-01688	Present

**Inventory Legend**

- AICS - Australian Inventory of Chemical Substances
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances

**RESTRICTIONS - REACH TITLE VII** No information available

**US Federal Regulations**

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	CERCLA Hazardous Substances and the Reportable Quantities	SARA Extremely Hazardous Substances EPCRA RQ	SARA Extremely Hazardous Substances TPQ
Ammonium hydroxide	1000 lb 454 kg	-	-

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Ammonium hydroxide	1.0

**SARA 311/312 Hazard Categories**

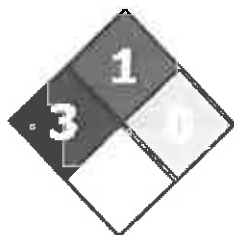
<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**U.S. State Right-to-Know Regulations**

**California Proposition 65:**  
This product does not contain any Proposition 65 chemicals

**16. Other information**

**National Fire Protection Association (NFPA) Ratings**



**Prepared By:** Adam Peterson, Rob Kelley, Andrew Morabu and Todd Bain from the HSE department.  
**Issue Date:** 10-Oct-2012  
**Revision Date:** 10-Oct-2012  
**Revision Note:** MSDS converted to GHS SDS Format.

**Disclaimer:**

Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the consumer. No suggestions are intended as, and should not be constructed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.

End of Safety Data Sheet

