Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 11.05.2014

Ammonium Hydroxide, 3M

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Ammonium Hydroxide, 3M

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25844

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education  Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:

- Environmentally Damaging
  Acute hazards to the aquatic environment, category 1

- Corrosive
  Serious eye damage, category 1
  Acute toxicity (oral, dermal, inhalation), category 1

Eye Damage. 1
Aquatic AcTox. 1
AcTox Oral. 4
Skin Corr. 1

Signal word: Danger

Hazard statements:
Causes severe skin burns and eye damage
Harmful if swallowed
Very toxic to aquatic life

Precautionary statements:
Wash ... thoroughly after handling
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
Do not eat, drink or smoke when using this product
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
Continue rinsing
Wash contaminated clothing before reuse
Collect spillage
Store locked up
Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified (HNOC) or not covered by GHS:**
Lachrymator

**Other Non-GHS Classification:**

**NFPA SCALE (0-4)**

**HMIS RATINGS (0-4)**

### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide, ACS</td>
<td>1336-21-6</td>
<td>20 %</td>
<td></td>
</tr>
<tr>
<td>DI Water</td>
<td>7732-18-5</td>
<td>80 %</td>
<td></td>
</tr>
</tbody>
</table>

Percentages are by weight

### SECTION 4: First aid measures

**Description of first aid measures**
- **After inhalation:** Get medical assistance.
- **After skin contact:** Get medical assistance.
- **After eye contact:** Continue rinsing eyes during transport to hospital.
- **After swallowing:** Get medical assistance.

**Most important symptoms and effects, both acute and delayed:**

**Indication of any immediate medical attention and special treatment needed:**
SECTION 5 : Firefighting measures
Extinguishing media
   Suitable extinguishing agents:
   For safety reasons unsuitable extinguishing agents:
Special hazards arising from the substance or mixture:
Advice for firefighters:
   Protective equipment:
   Additional information (precautions):

SECTION 6 : Accidental release measures
Personal precautions, protective equipment and emergency procedures:
Environmental precautions:
Methods and material for containment and cleaning up:
   Soak up with inert absorbent material.
Reference to other sections:

SECTION 7 : Handling and storage
Precautions for safe handling:
Conditions for safe storage, including any incompatibilities:
   Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 : Exposure controls/personal protection
Control Parameters:
   1336-21-6, Ammonium Hydroxide, TWA 25.000000 ppm USA. ACGIH
   1336-21-6, Ammonium Hydroxide , TWA 25.000000 ppm 18.000000 mg/m3 USA. NIOSH
Appropriate Engineering controls:
   Respiratory protection:
   Protection of skin:
   Eye protection:
   General hygienic measures:

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance (physical state,color):</th>
<th>Clear colorless liquid</th>
<th>Explosion limit lower:</th>
<th>Explosion limit upper:</th>
<th>Not Determined</th>
<th>Not Determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td>Vapor pressure:</td>
<td>115 at 20 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not Determined</td>
<td>Vapor density:</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH-value:</td>
<td>Alkaline</td>
<td>Relative density:</td>
<td>0.9 g/mL at 25 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting/Freezing point:</td>
<td>- 72 C</td>
<td>Solubilities:</td>
<td>Material is water soluble.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>36 C</td>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not Determined</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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SECTION 10: Stability and reactivity

Reactivity:
Chemical stability:
Possible hazardous reactions:
Conditions to avoid:
Incompatible materials: Copper, Iron, Zinc
Hazardous decomposition products: Nitrogen oxides.

SECTION 11: Toxicological information

Acute Toxicity: No additional information.
Chronic Toxicity: No additional information.
Corrosion Irritation: No additional information.

| Sensitization: | No additional information. |
| Single Target Organ (STOT): | No additional information. |
| Numerical Measures: | No additional information. |
| Carcinogenicity: | No additional information. |
| Mutagenicity: | No additional information. |
| Reproductive Toxicity: | No additional information. |

SECTION 12: Ecological information

Ecotoxicity Persistence and degradability:
Bioaccumulative potential:
Mobility in soil:
Other adverse effects:

SECTION 13: Disposal considerations

Waste disposal recommendations:
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

Created by Global Safety Management, Inc. - Tel: 1-813-435-5161 - www.gsmsds.com
UN-Number
2672

UN proper shipping name
Ammonia solution

Transport hazard class(es)
Class: 8 Corrosive substances

Packing group: III

Environmental hazard:
Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):
Acute
None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
1336-21-6 Ammonium hydroxide 1000 lbs

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed

Chemicals known to cause developmental toxicity:
None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):
1336-21-6 Ammonium hydroxide
SECTION 16 : Other information

GHS Full Text Phrases:

Abbreviations and acronyms:

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