

# Safety Data Sheet


according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: December 03, 2020

## 1 Identification

- **Product identifier**
- **Trade name: Ammonium Chloride 2M**
- **Product code:** AC8312SS
- **Recommended use and restriction on use**
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331 USA  
Tel +1 (717)632-1291  
Toll-Free: (866)632-1291  
info@aquaphoenixsci.com
- **Distributor:**  
AquaPhoenix Scientific  
860 Gitts Run Road,  
Hanover, PA 17331  
(717) 632-1291
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Eye Irrit. 2A H319 Causes serious eye irritation.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**  
  
GHS07
- **Signal word:** Warning
- **Hazard statements:**  
H319 Causes serious eye irritation.
- **Precautionary statements:**  
P264 Wash thoroughly after handling.  
P280 Wear eye 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.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

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## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

7732-18-5	Water	90%
12125-02-9	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	10%

· **Additional information:** For the wording of the listed Hazard Statements, refer to section 16.

## 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

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

Gastric or intestinal disorders when ingested.

Causes eye irritation.

· **Indication of any immediate medical attention and special treatment needed:**

If medical advice is needed, have product container or label at hand.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

The product is not flammable.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** No relevant information available.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

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Ensure adequate ventilation.

Use personal protective equipment as required.

· **Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

· **Handling**

· **Precautions for safe handling:**

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

· **Conditions for safe storage, including any incompatibilities**

· **Requirements to be met by storerooms and receptacles:**

Store in cool, dry conditions in well sealed receptacles.

Use only receptacles specifically permitted for this substance/product.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from metals.

Do not store together with oxidizing and acidic materials.

· **Specific end use(s)** No relevant information available.

## 8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

**12125-02-9 ammonium chloride**

REL (USA)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
TLV (USA)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
EL (Canada)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup> fume
EV (Canada)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup> fume

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LMPE (Mexico)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup>
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- **Exposure controls**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:** For large spills, respiratory protection may be advisable.
- **Protection of hands:**  
Gloves are advised for repeated or prolonged contact.  
Wear protective gloves to handle contents of damaged or leaking units.  
Protection may be required for spills.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · Appearance:

Form: Liquid

Color: Clear

· Odor: Ammonia-like

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: The product is not flammable.

· Flammability (solid, gaseous): Not applicable.

· Auto-ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

#### · Explosion limits

Lower: Not determined.

Upper: Not determined.

· Oxidizing properties: Non-oxidizing.

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- |   |                                    |
|---|------------------------------------|
| · <b>Vapor pressure:</b>                          | Not determined.                    |
| · <b>Density:</b>                                 |                                    |
| <b>Relative density:</b>                          | Not determined.                    |
| <b>Vapor density:</b>                             | Not determined.                    |
| <b>Evaporation rate:</b>                          | Not determined.                    |
| · <b>Solubility in / Miscibility with Water:</b>  | Fully miscible.                    |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                    |
| · <b>Viscosity</b>                                |                                    |
| <b>Dynamic:</b>                                   | Not determined.                    |
| <b>Kinematic:</b>                                 | Not determined.                    |
| · <b>Other information</b>                        | No relevant information available. |

## 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with strong acids and oxidizing agents.  
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials**  
Oxidizers  
Strong acids
- **Hazardous decomposition products**  
Under fire conditions only:  
Ammonia  
Chlorine

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:** Based on available data, the classification criteria are not met.
  - **LD/LC50 values that are relevant for classification:**
- |                                     |      |                  |
|-------------------------------------|------|------------------|
| <b>12125-02-9 ammonium chloride</b> |      |                  |
| Oral                                | LD50 | 1650 mg/kg (rat) |
- **Primary irritant effect:**
  - **On the skin:** Based on available data, the classification criteria are not met.
  - **On the eye:** Causes serious eye irritation.
  - **Sensitization:** Based on available data, the classification criteria are not met.
  - **IARC (International Agency for Research on Cancer):**

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None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Based on available data, the classification criteria are not met.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity** No relevant information available.

· **Persistence and degradability** No relevant information available.

· **Bioaccumulative potential:** No relevant information available.

· **Mobility in soil:** No relevant information available.

· **Other adverse effects** No relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· DOT, ADR/RID/ADN, IMDG, IATA

Not regulated.

· **UN proper shipping name**

· DOT, ADR/RID/ADN, IMDG, IATA

Not regulated.

· **Transport hazard class(es)**

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· DOT, ADR/RID/ADN, IMDG, IATA	
· Class	Not regulated.
· Packing group	
· DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

### · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

### · Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

### · TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

### · Proposition 65 (California)

#### · Chemicals known to cause cancer:

None of the ingredients are listed.

#### · Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

#### · Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

#### · Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

### · EPA (Environmental Protection Agency):

None of the ingredients are listed.

### · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

### · Canadian Domestic Substances List (DSL):

All ingredients are listed or exempt.

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## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

### · Sources

Website, European Chemicals Agency ([echa.europa.eu](http://echa.europa.eu))

Website, US EPA Substance Registry Services ([ofmpub.epa.gov/sor\\_internet/registry/substreg/home/overview/home.do](http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do))

Website, Chemical Abstracts Registry, American Chemical Society ([www.cas.org](http://www.cas.org))

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers