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

Revision: April 05, 2021

1 Identification

- · Product identifier
- · Trade name: Ammonium Chloride, 1.15g/L
- · Product code: AC8200SS
- · 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

· Emergency telephone number:

ChemTel Inc.

(800) 255-3924 (North America)

(801) 1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not regulated.
- · Hazard pictograms: None.
- · Signal word: None.
- · Hazard statements: None.
- · Precautionary statements: None.
- Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Component	s:	
12125-02-9	ammonium chloride	0.115%
	♦ Acute Tox. 4, H302; Eye Irrit. 2A, H319	
7732-18-5	Water	99.885%

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 1)

4 First-aid measures

- Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

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.

- · Danger: No relevant information available.
- · 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: 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 Ensure adequate ventilation.

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). Dispose of the collected material according to regulations.

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.

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 2)

7 Handling and storage

- Handling
- · Precautions for safe handling:

Prevent formation of aerosols.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizers, strong acids, strong bases.

- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 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 amr	monium chloride
REL (USA)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³
TLV (USA)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³
EL (Canada)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³ fume
EV (Canada)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³ fume
LMPE (Mexico)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³

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 and skin.

- Engineering controls: Provide adequate ventilation.
- · Breathing equipment:

Not required under normal conditions of use.

For large spills, respiratory protection may be advisable.

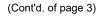
(Cont'd. on page 4)

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

· Protection of hands:





Protective gloves

· Material of gloves

Butyl rubber, BR

Natural rubber, NR

Nitrile rubber, NBR

Neoprene gloves

Sensibilization by the components in the glove materials is possible.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- Limitation and supervision of exposure into the environment

No relevant information available.

Physical and chemical properties				
Information on basic physical	and chemical properties			
· Appearance:				
Form:	Liquid			
Color:	Colorless			
· Odor:	Odorless			
· Odor threshold:	Not determined.			
· pH-value:	Not determined.			
Melting point/Melting range:	Not determined.			
Boiling point/Boiling range:	100 °C (212 °F)			
· 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.			
		(Cont'd. on page		

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 4)

· Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

· Density:

Relative density:

Vapor density:

Not determined.

Not determined.

Evaporation rate:

Not determined.

· Solubility in / Miscibility with

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined. **Kinematic:** Not determined.

• Other information 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

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong acids.

· Conditions to avoid

Excessive heat.

Keep ignition sources away - Do not smoke.

Incompatible materials

Oxidizers

Strong acids

Hazardous decomposition products

Under fire conditions only:

Chlorine compounds

Ammonia

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: None.
- · Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- · IARC (International Agency for Research on Cancer):

(Cont'd. on page 6)

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 5)

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.

- · Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.
- · Repeated dose toxicity: No relevant information available.
- · 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.
- · Additional ecological information
- · General notes:

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

· Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

(Cont'd. on page 7)

Page: 7/8

Safety Data Sheet

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 6)

·		
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)		
DOT, ADR/RID/ADN, IMDG, IATA Class	Not regulated.	
Packing group DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
Environmental hazards	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of 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.

(Cont'd. on page 8)

Page: 8/8

Safety Data Sheet

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

Revision: April 05, 2021

Trade name: Ammonium Chloride, 1.15g/L

(Cont'd. of page 7)

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

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)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (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