

Safety Data Sheet

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


Printing date: March 01, 2019

Revision: March 01, 2019

1 Identification

- **Product identifier**
- **Trade name:** Ammonium Thiocyanate, ACS
- **Product code:** AT1100
- **CAS Number:**
1762-95-4
- **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
Phone: (717)632-1291
Toll-Free: (866)632-1291
info@aquaphoenixsci.com
- **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**
Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Eye Dam. 1 H318 Causes serious eye damage.
- **Additional information:** Contact with acids liberates very toxic gas.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS05 GHS07
- **Signal word:** Danger
- **Hazard statements:**
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H318 Causes serious eye damage.
- **Precautionary statements:**
P261 Avoid breathing dust.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

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- P280 Wear protective gloves and eye protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.
- P302+P352 If on skin: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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/doctor.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:** Contact with acids liberates very toxic gas.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
1762-95-4 ammonium thiocyanate

4 First-aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Brush off loose particles from skin.
Rinse with warm 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. Then 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:**
Breathing difficulty
Coughing
Strong irritant with the danger of severe eye injury.
Causes mild skin irritation.
- **Danger:**
Causes serious eye damage.
Harmful if swallowed, in contact with skin or if inhaled.
- **Indication of any immediate medical attention and special treatment needed:**
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.

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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**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **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**
Pick up mechanically.
Sweep up and place into an appropriate container.
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:**
Any deposit of dust which cannot be avoided must be regularly removed.
Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
Use only in well ventilated 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:** No special requirements.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from foodstuffs.
Store away from oxidizing agents.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

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8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:**
Not required under normal conditions of use.
Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
Nitrile rubber, NBR
Neoprene gloves
Laminated film gloves.
Natural rubber, NR
Sensibilization by the components in the glove materials is possible.
- **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.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **Appearance:**

Form:	Powder
Color:	White
Odor:	Characteristic
Odor threshold:	Not determined.

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· pH-value:	Not applicable.
· Melting point/Melting range:	150 °C (302 °F)
· Boiling point/Boiling range:	Not determined.
· Flash point:	The product is not flammable.
· Flammability (solid, gaseous):	Product is not flammable.
· 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.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.31 g/cm ³ (10.93 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not applicable.
· Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity Dynamic:	Not applicable.
Kinematic:	Not applicable.
· 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**
Contact with acids liberates very toxic gas.
Toxic fumes may be released if heated above the decomposition point.
Reacts with oxidizing agents.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products**
Nitrogen oxides
Hydrogen cyanide (prussic acid)

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11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	750 mg/kg (rat)
Dermal	LD50	300 mg/kg
Inhalative	LC50/4h	1.5 mg/l

1762-95-4 ammonium thiocyanate

Oral	LD50	750 mg/kg (rat)
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- **Primary irritant effect:**

- **On the skin:**

Causes mild skin irritation.

Based on available data, the classification criteria are not met.

- **On the eye:** Strong irritant with the danger of severe eye injury.

- **Sensitization:** Based on available data, the classification criteria are not met.

- **IARC (International Agency for Research on Cancer):**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

- **Probable route(s) of exposure:**

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):**

Harmful if swallowed, in contact with skin or if inhaled.

Causes serious eye damage.

Causes mild skin irritation.

- **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

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- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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.

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) | |
| · 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 II of MARPOL73/78 and the IBC Code | Not applicable. |

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15 Regulatory information

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

- **Section 302 (extremely hazardous substances):**

Substance is not listed.

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act)**

Substance is listed.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity for females:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **EPA (Environmental Protection Agency):**

Substance is not listed.

- **IARC (International Agency for Research on Cancer):**

Substance is not listed.

- **Canadian Domestic Substances List (DSL) (Substances not listed.):**

Substance is listed.

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

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

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OSHA: Occupational Safety & Health Administration

Acute Tox. 4: Acute toxicity – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

• **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

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