

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

1 Identification

- **Product identifier**
- **Trade name:** Ammonium Thiocyanate 30%
Solution ASTM E-200
- **Article number:** 0532
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Aqua Solutions, Inc.
6913 Highway 225
DEER PARK, TX 77536
USA
800-256-2586
- **Information department:**
Technical Coordinator
Sherman Nelson shermann@aquasolutions.org
- **Emergency telephone number:**
Chemtrec: 800-424-9300
Canutec: 613-996-6666



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **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-determining components of labeling:**
Ammonium Thiocyanate, Reagent ACS Grade
- **Hazard statements**
Harmful if inhaled.
- **Precautionary statements**
Avoid release to the environment.
Wear protective gloves / protective clothing.
If swallowed: Call a poison center/doctor if you feel unwell.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in accordance with local/regional/national/international regulations.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



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

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 1762-95-4	Ammonium Thiocyanate, Reagent ACS Grade	28.037%
----------------	---	---------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	71.963%
----------------	-------	---------

* 4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

**Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Dilute with plenty of water.
 - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Dispose contaminated material as waste according to item 13.
 - Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 1762-95-4	Ammonium Thiocyanate, Reagent ACS Grade	2.3 mg/m ³
----------------	---	-----------------------

- **PAC-2:**

CAS: 1762-95-4	Ammonium Thiocyanate, Reagent ACS Grade	25 mg/m ³
----------------	---	----------------------

- **PAC-3:**

CAS: 1762-95-4	Ammonium Thiocyanate, Reagent ACS Grade	150 mg/m ³
----------------	---	-----------------------

* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200

(Contd. of page 3)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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:** Goggles recommended during refilling.

- **Body protection:** Protective work clothing

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Clear
Odor:	Odorless
Odor threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200

(Contd. of page 4)

· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density at 20 °C (68 °F):	1.07 g/cm ³ (8.92915 lbs/gal)
· Relative density	Not determined.
· Vapor density	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.
· Solvent content:	
Water:	72.0 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	28.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	2,675 mg/kg (rat)
Dermal	LD50	3,923 mg/kg
Inhalative	LC50/4h	5.35 mg/l
CAS: 1762-95-4 Ammonium Thiocyanate, Reagent ACS Grade		
Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1,100 mg/kg (ATE)
Inhalative	LC50/4h	1.5 mg/l (ATE)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

**Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200**

(Contd. of page 5)

- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Harmful

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
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 further 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.
- **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, ADN, IMDG, IATA | Not regulated |
| · UN proper shipping name | |
| · DOT | Not regulated |
| | Not regulated |
| · ADN, IMDG, IATA | Not regulated |

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

**Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200**

(Contd. of page 6)

· Transport hazard class(es)	
· DOT	Not applicable
· Class	Not regulated
· ADN/R Class:	Not regulated

· Packing group	
· DOT, 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.
--	-----------------

· UN "Model Regulation":	Not regulated
---------------------------------	---------------

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

· **Sara**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

Water

ACTIVE

Ammonium Thiocyanate, Reagent ACS Grade

ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **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.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200

(Contd. of page 7)

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Ammonium Thiocyanate, Reagent ACS Grade
- **Hazard statements**
Harmful if inhaled.
- **Precautionary statements**
Avoid release to the environment.
Wear protective gloves / protective clothing.
If swallowed: Call a poison center/doctor if you feel unwell.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in accordance with local/regional/national/international regulations.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Department issuing SDS:** Environment protection department.
- **Contact:**
- **Date of preparation / last revision**
Revision 1.0 05-07-2021: updated hazard information. STN
Revision 0.1, 07-10-2019: updated first aid statements. STN
05/13/2021 / 1.0
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/13/2021

Reviewed on 05/13/2021

Trade name: Ammonium Thiocyanate 30%
Solution ASTM E-200

Acute Tox. 4: Acute toxicity – Category 4

· *** Data compared to the previous version altered.**

(Contd. of page 8)

US