

Safety data sheet according to U.S.A. Federal Hazcom 2012

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code:	A0092
Product name	Ammonium Thiocyanate, ACS
INDEX number	615-004-00-3
EC number	217-175-6
CAS number	1762-95-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use For Laboratory Use Only.

1.3. Details of the supplier of the safety data sheet

Name	EXAXOL CHEMICAL CORPORATION
Full address	14325 60 TH ST N
District and Country	33760 CLEARWATER - FLORIDA US
	Tel. 1-727-524-7732
	Fax 1-727-532-8221

e-mail address

info@exaxol.com

1.4. Emergency telephone number

For urgent inquiries refer to	1-800-255-3924 ChemTel Inc.
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SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement.

Acute toxicity, category 4
Acute toxicity, category 4
Acute toxicity, category 4
Serious eye damage, category 1

Harmful if swallowed.
Harmful in contact with skin.
Harmful if inhaled.
Causes serious eye damage.



Signal words:

Danger

Hazard statements:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H318	Causes serious eye damage.

Precautionary statements:

Prevention:

P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / protective clothing / eye protection / face protection.

Response:

P301+P312	IF SWALLOWED: call a POISON CENTER / doctor if you feel unwell.
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.
P321	Specific treatment (see label).
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse.

Storage:

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Disposal:

P501	Dispose of contents / container to an approved waste disposal plant.
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2.2. Other hazards.

Environmental classification as for Reg. (EU) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

Classification and Hazard Statement.

Hazardous to the aquatic environment, chronic toxicity, category 3 Harmful to aquatic life with long lasting effects.

Hazard statements:

H412	Harmful to aquatic life with long lasting effects.
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Precautionary statements:

Prevention:

P273	Avoid release to the environment.
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Response:

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Storage:

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Disposal:

P501	Dispose of contents / container to an approved waste disposal plant.
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Additional hazards.

Additional hazards.

SECTION 3. Composition/information on ingredients.**3.1. Substances.**

Contains:

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Identification.	Conc. %.	Classification:
AMMONIUM THIOCYANATE		
CAS. 1762-95-4	100	Acute toxicity, category 4 H302, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Serious eye damage, category 1 H318, Hazardous to the aquatic environment, chronic toxicity, category 3 H412

3.2. Mixtures.

3.2. Mixtures.

Information not relevant.

SECTION 4. First aid measures.**4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.

SECTION 5. Firefighting measures.**5.1. Extinguishing media.**

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3. Advice for firefighters.**GENERAL INFORMATION**

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.**6.1. Personal precautions, protective equipment and emergency procedures.**

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.**7.1. Precautions for safe handling.**

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

USA	OSHA-PEL	Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).

AMMONIUM THIOCYANATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
OSHA	USA	5				SKIN.
CAL/OSHA	USA	5				SKIN.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must comply with current regulations.

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (OSHA 29 CFR 1910.138).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	Not available.
Colour	Not available.
Odour	Not available.
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not applicable.
Boiling range.	Not available.
Flash point.	Not applicable.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1.300 Kg/l
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

Information not available.

10.2. Chemical stability.

Information not available.

10.3. Possibility of hazardous reactions.

Contact with strong acids causes the development of toxic gases.

10.4. Conditions to avoid.

Avoid overheating.

10.5. Incompatible materials.

Strong acids.

10.6. Hazardous decomposition products.

Information not available.

SECTION 11. Toxicological information.**11.1. Information on toxicological effects.**

Acute effects: ingestion of this product is harmful. Even small amounts of product may cause serious health problems (stomach pain, nausea, sickness, diarrhoea).

Acute effects: cutaneous absorption of this product is harmful. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness.

Acute effects: inhalation of this product is harmful.

Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

This product generates highly toxic harmful gases upon contact with acids.

AMMONIUM THIOCYANATE

LD50 (Oral).750 mg/kg Rat

SECTION 12. Ecological information.

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.

AMMONIUM
THIOCYANATE

Solubility in water.

> 10000 mg/l

Rapidly biodegradable.

12.3. Bioaccumulative potential.

AMMONIUM

THIOCYANATE

Partition coefficient: n-octanol/water.

-2.29

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.**13.1. Waste treatment methods.**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.**14.1. UN number.**

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**U.S. Federal Regulations.TSCA:

All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

Clean Air Act Section 602 Class I Substances:

No component(s) listed.

Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act –
Priority Pollutants:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

Clean Water Act –
Toxic Pollutants:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

EPCRA 313 TRI:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

RCRA Code:

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations.

Massachussetts:

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AMMONIUM THIOCYANATE
(Cyanides)

Minnesota:

No component(s) listed.

New Jersey:

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AMMONIUM THIOCYANATE
(Cyanides)

New York:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

Pennsylvania:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)

California:

1762-95-4

AMMONIUM THIOCYANATE
(Cyanides)Proposition 65:International Regulations.Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Canadian WHMIS.

Information not available.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 @ RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112@)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)

- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.