



Infosafe No™	1CH17	Issue Date : December 2018	RE-ISSUED by CHEMSUPP
--------------	-------	----------------------------	-----------------------


Product Name : **AMMONIUM THIOCYANATE**

Classified as hazardous

**1. Identification**

<b>GHS Product Identifier</b>	AMMONIUM THIOCYANATE	
<b>Company Name</b>	CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)	
<b>Address</b>	38 - 50 Bedford Street GILLMAN SA 5013 Australia	
<b>Telephone/Fax Number</b>	Tel: (08) 8440-2000 Fax: (08) 8440-2001	
<b>(24 hour a day available)</b>	CHEMCALL: 1800 127 406 (Australia) / +64-4-917-9888 (International)	
<b>Recommended use of the chemical and restrictions on use</b>	Analytical chemistry; manufacture of transparent artificial resins and thiourea; fertilisers; ingredients of freezing solutions; especially liquid rocket propellants; matches; double-dyeing fabrics; photography; zinc coating; improving and increasing strength of silks weighted with tin salts; weed killer and defoliant; adhesives; curing resins; pickling iron and steel; electroplating; temporary soil steriliser; polymerisation catalyst; separator of zirconium and hafnium; separator of gold and iron; detection and determination of small quantities of iron; laboratory reagent.	
<b>Other Names</b>	<b>Name</b>	<b>Product Code</b>
	AMMONIUM THIOCYANATE AR Ammonium sulfocyanide, Ammonium rhodanide, Ammonium sulfocyanate, Thiocyanic acid ammonium salt	AA010
<b>Other Information</b>	Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.	

**2. Hazard Identification**

<b>GHS classification of the substance/mixture</b>	Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3 Acute Toxicity - Dermal: Category 4 Acute Toxicity - Inhalation: Category 4 Acute Toxicity - Oral: Category 4 Eye Damage/Irritation: Category 2A
<b>Signal Word (s)</b>	WARNING
<b>Hazard Statement (s)</b>	H302 Harmful if swallowed. H312 Harmful in contact with skin. H332 Harmful if inhaled. H319 Causes serious eye irritation. AUH032 Contact with acids liberates very toxic gas
<b>Pictogram (s)</b>	Exclamation mark 
<b>Precautionary statement – Prevention</b>	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection.
<b>Precautionary statement – Response</b>	P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P363 Wash contaminated clothing before reuse.



Infosafe No™	1CH17	Issue Date : December 2018	RE-ISSUED by CHEMSUPP
--------------	-------	----------------------------	-----------------------

Product Name : **AMMONIUM THIOCYANATE**

Classified as hazardous

**Precautionary statement – Disposal**

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
P501 Dispose of contents/container to an approved waste disposal plant.

**3. Composition/information on ingredients**

Chemical Characterization	Ingredients				
Ingredients	Name	CAS	Proportion	Hazard Symbol	Risk Phrase
Solid	Ammonium thiocyanate	1762-95-4	100 %		

**4. First-aid measures**

**Inhalation** If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.

**Ingestion** Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

**Skin** Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.

**Eye contact** Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**First Aid Facilities** Maintain eyewash fountain and safety shower in work area.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of the patient.

**Other Information** For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

**5. Fire-fighting measures**

**Hazards from Combustion Products** Highly toxic cyanide fumes, carbon oxides, sulfur oxides, ammonia.

**Specific Methods** Use extinguishing media most appropriate for the surrounding fire.

**Specific hazards arising from the chemical** Material does not burn. Fire or heat may produce irritating, toxic, poisonous and/or corrosive gases. Runoff may pollute waterways.

**Decomposition Temp.** 170 °C (anhydrous).

**Precautions in connection with Fire** Use suitable protective equipment for surrounding fire.

**6. Accidental release measures**

**Personal Precautions** Avoid inhalation and ingestion. Avoid contact with skin, eyes and clothing. Use in ventilated areas or in fumehood.

**Personal Protection** Wear protective clothing specified for normal operations (see Section 8)

**Clean-up Methods - Small Spillages** Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

**Environmental Precautions** Prevent further leakage or spillage and prevent from entering drains

**7. Handling and storage**

**Precautions for Safe Handling** Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. If ingested, seek medical advice immediately. In case of insufficient ventilation, wear suitable respiratory equipment. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet



Infosafe No™	1CH17	Issue Date : December 2018	RE-ISSUED by CHEMSUPP
--------------	-------	----------------------------	-----------------------

Product Name : **AMMONIUM THIOCYANATE**

Classified as hazardous

**Conditions for safe storage, including any incompatibilities** Store away from acids. Store in a cool, dry place. Store in well ventilated area. Keep containers securely sealed and protected against physical damage. Store in cool place and out of direct sunlight. Store in light resistant containers.

**Corrosiveness** Highly corrosive to metals including iron, copper, and brass.

**8. Exposure controls/personal protection**

**Other Exposure Information** No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts/mists not otherwise specified is 10 mg/m<sup>3</sup>. All atmospheric contamination should be kept to as low a level as is workable. These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls** In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. These methods should be used in preference to personal protective equipment.

**Respiratory Protection** Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

**Eye Protection** The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Hand Protection** Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

**Personal Protective Equipment** Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

**Body Protection** Wear suitable protective clothing and gloves to prevent skin contact. Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

**Hygiene Measures** Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**9. Physical and chemical properties**

**Form** Solid

**Appearance** Colourless, hygroscopic, deliquescent crystals.

**Odour** Odourless.

**Decomposition Temperature** 170 °C (anhydrous).

**Melting Point** 149.6 °C

**Boiling Point** 170 °C

**Solubility in Water** Soluble in cold & hot water (1600 g/L @ 20 °C).

**Solubility in Organic Solvents** Soluble in alcohol, acetone and ammonia. Practically insoluble in trichloromethane and ethyl acetate.

**Specific Gravity** 1.31

**pH** 4.8 - 5.8 (50 g/l H<sub>2</sub>O, 20 °C)

**Flammability** Non flammable.

**Molecular Weight** 76.12

**10. Stability and reactivity**

**Chemical Stability** Stable under ordinary conditions of use and storage. May decompose on exposure to light.



Infosafe No™	1CH17	Issue Date : December 2018	RE-ISSUED by CHEMSUPP
--------------	-------	----------------------------	-----------------------

Product Name : **AMMONIUM THIOCYANATE**

Classified as hazardous

**Conditions to Avoid** Light, heat, incompatibles.  
Hygroscopic.

**Incompatible Materials** Strong oxidizing agents, strong acids, lead nitrate, alkalis, aluminium and magnesium, chlorates, nitrates, nitric acid, organic peroxides, peroxides, sodium chlorate and potassium chlorate.

**Hazardous Decomposition Products** Highly toxic cyanide fumes, carbon oxides, sulfur oxides, ammonia.

**Possibility of hazardous reactions** Contact with acids may result in the liberation of highly toxic hydrogen cyanide. Mixtures with Pb(NO<sub>3</sub>)<sub>2</sub> may explode.

**Hazardous Polymerization** Will not occur.

**11. Toxicological Information**

**Acute Toxicity - Oral** LD50 (rat): 500 mg/kg.

**Ingestion** Harmful if swallowed. May cause gastrointestinal tract irritation with diarrhea, affect behaviour/central nervous system, respiration, kidneys and blood. Symptoms of poisoning by ingestion may include skin eruptions, running nose, occasional dizziness, disorientation, weakness, cramp, nausea, vomiting, mild or severe disturbance of the nervous system and even death. The probable lethal dose is between 15 - 30 grams (ingested at one time).

**Inhalation** Harmful by inhalation. Causes irritation to mucous membranes and upper respiratory tract irritation. Symptoms may include coughing, shortness of breath.

**Skin** Harmful in contact with skin. May cause skin irritation. Symptoms include redness, itching, scaling, pain and occasional blistering. May experience similar symptoms as to poisoning by ingestion. Non-sensitizer for skin.

**Eye** Causes serious eye irritation, with symptoms including redness and pain.

**Carcinogenicity** No evidence of carcinogenic properties.

**Chronic Effects** Symptoms of chronic poisoning by skin contact may include skin eruptions and other symptoms associated with ingestion of the substance. Repeated ingestion of small amounts may cause hives, abnormal bleeding, weight loss, mental effects, and an enlarged thyroid.

**Mutagenicity** No evidence of mutagenic properties.

**12. Ecological information**

**Ecotoxicity** No ecological data available for this product.

**Persistence and degradability** Readily biodegradable.

**Mobility** Not available.

**Environmental Protection** Avoid release into the environment, may cause long-term adverse effects in the aquatic environment.

**Acute Toxicity - Fish** LC50 - Oncorhynchus mykiss (rainbow trout) - 65 mg/l - 96 h (static test)

**Acute Toxicity - Daphnia** EC50 - Daphnia magna (Water flea) - 3.56 mg/l - 48 h (static test) (OECD Test Guideline 202)

**Acute Toxicity - Algae** EC50 - Selenastrum capricornutum (green algae) - 116 mg/l - 72 h (static test) (OECD Test Guideline 201)

**13. Disposal considerations**

**Disposal Considerations** Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.

**14. Transport information**

**Transport Information** Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG); by the IATA Air Transport Dangerous Goods Regulations; or by the IMDG (International Maritime Dangerous Goods) Code.

**15. Regulatory information**

**Regulatory Information** Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

**Poisons Schedule** S5



chem-supply

# Safety Data Sheet

infosafe  
CS: 1.7.2

Page: 5 of 5

Infosafe No™ 1CH17 Issue Date : December 2018 RE-ISSUED by CHEMSUPP

Product Name : **AMMONIUM THIOCYANATE**

Classified as hazardous

## 16. Other Information

**Literature** 'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.  
**References** Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997.  
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.  
Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011.  
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.  
Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.  
Safe Work Australia, 'Hazardous Chemical Information System, 2005'.  
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'.  
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'.  
**Contact** Paul McCarthy Ph. (08) 8440 2000  
**Person/Point** **DISCLAIMER STATEMENT:**  
All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Chem-Supply accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

**Empirical Formula & Structural Formula** NH<sub>4</sub> SCN

...End Of MSDS...

© Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.  
The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.