



LABORATORY CHEMICALS AND CONSUMABLES

# MATERIAL SAFETY DATA SHEET

## AMMONIUM THIOCYANATE

### 1. Chemical Product and Company information.

**Product name:** Ammonium Thiocyanate

**Contact Information:**

Radchem cc  
PO Box 166982  
Brackendowns  
Alberton 1454  
Telephone : **011 867 3726 / 2864**

**Emergency Telephone Numbers:**

### 2. Hazard Identification

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

### 3. Composition / information on ingredients

**CAS #:** 1762-95-4

**Synonym:**

**Chemical Name:** Ammonium Thiocyanate

**Chemical Formula:**  $\text{NH}_4\text{SCN}$

### 4. First Aid Measures

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.



**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

## **5. Fire-fighting measures**

**Flammability of the Product:** Non-flammable.

**Fire Hazards in Presence of Various Substances:** Not applicable

**Explosion Hazards in Presence of Various Substances:** Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available

**Special Remarks on Explosion Hazards:** Ammonium Thiocyanate + Lead Nitrate may cause explosion

## **6. Accidental release measures**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## **7. Handling and storage**

**Precautions:** Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## **8. Exposure controls/personal protection**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.



<p><b><u>9. Physical and chemical properties</u></b></p> <p><b>Physical state and appearance:</b> Solid (Crystals solid)</p> <p><b>Odour:</b> Odourless</p> <p><b>Taste:</b> Not available</p> <p><b>Colour:</b> Colourless</p> <p><b>Boiling Point:</b> Not available</p> <p><b>Melting Point:</b> 149.6°C</p> <p><b>Critical Temperature:</b> Not available</p> <p><b>Specific Gravity:</b> 1.305 (Water = 1)</p> <p><b>Vapour Density:</b> Not available</p> <p><b>Volatility:</b> Not available</p>	<p><b>Odour Threshold:</b> Not available</p> <p><b>Ionicity (in Water):</b> Not available.</p> <p><b>Dispersion Properties:</b> See solubility in water, acetone</p> <p><b>Solubility:</b> Easily soluble in cold water, hot water. Soluble in acetone. Soluble in ammonia, and alcohol. Practically insoluble in chloroform, and ethyl acetate</p>
<p><b><u>10. Stability and reactivity</u></b></p> <p><b>Stability:</b> The product is stable.</p> <p><b>Instability Temperature:</b> Not available.</p> <p><b>Conditions of Instability:</b> Incompatible materials</p> <p><b>Incompatibility with various substances:</b> Not available</p> <p><b>Corrosivity:</b> Extremely corrosive in presence of copper, brass, iron. Non-corrosive in presence of glass</p> <p><b>Special Remarks on Reactivity:</b> Incompatible with KClO<sub>3</sub> and mixtures with Pb(NO<sub>3</sub>)<sub>2</sub></p> <p><b>Special Remarks on Corrosivity:</b> Not available.</p> <p><b>Polymerization:</b> Will not occur.</p>	
<p><b><u>11. Toxicological information</u></b></p> <p><b>Routes of Entry:</b> Inhalation, Ingestion</p> <p><b>Toxicity to Animals:</b> Acute oral toxicity (LD<sub>50</sub>): 500 mg/kg [Guinea pig]</p> <p><b>Chronic Effects on Humans:</b> May cause damage to the following organs: blood, thyroid</p> <p><b>Other Toxic Effects on Humans:</b> Hazardous in case of skin contact (irritant), of ingestion, of inhalation</p> <p><b>Special Remarks on Toxicity to Animals:</b> Not available</p> <p><b>Special Remarks on Chronic Effects on Humans:</b> Not available.</p> <p><b>Special Remarks on other Toxic Effects on Humans:</b> Acute Potential Health Effects: Skin: Causes skin irritation Eyes: Causes eye irritation Inhalation: Causes respiratory tract and mucous membrane irritation. Ingestion: May cause gastrointestinal tract irritation with nausea and vomiting. May affect behaviour/Central Nervous System (hallucinations, distorted perceptions, personality and mood changes, mania, disorientation, weakness, seizures), metabolism. Chronic Potential Health Effects: Prolonged exposure may affect the thyroid gland and blood cells, and cause personality and mood changes.</p>	

## **12. Ecological information**

**Ecotoxicity:** Not available

**BOD5 and COD:** Not available

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself

**Special Remarks on the Products of Biodegradation:** Not available.

## **13. Disposal considerations**

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations

## **14. Transport information**

**DOT Classification:** Not a DOT controlled material

**Identification:** : Not applicable

**Special Provisions for Transport:** Not available.

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