

MATERIAL SAFETY DATA SHEET

TRADE NAME: AMMONIUM THIO SULPHATE

1: Chemical Product and Company Identification

Product name: AMMONIUM THIO SULPHATE

2: Composition and Information on Ingredients

Details of ingredients	: Ammonium Thio Sulphate
Chemical Formula	: (NH ₂) ₂ S ₂ O ₃
CAS No.	: 7783-18-3
Index No. Hazard Code	
Hazard Symbols	: Not applicable
UN NO	: Not allocated

3: Hazards Identification

Potential Acute Health Effects:	Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation (lung irritant). Slightly hazardous in case of ingestion.
Eye contact:	Corrosive. Causes eye burns.
Skin contact:	Corrosive. Causes skin burns.
Inhalation:	Dust corrosive to respiratory tract.
Ingestion:	Corrosive. Causes burns to mouth, esophagus, and stomach.
Chronic hazards:	No known chronic hazards.
Physical hazards:	Can etch glass if not promptly removed.

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 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 and Explosion Data

Flammable Properties: Flash Point: Not flammable

Flammable Limits: LFL: N/A
Extinguishing Media: As appropriate for combustibles involved in fire.
Unusual Fire: Heating to dryness may cause the release of ammonia, Hydrogen sulfide & oxides of sulfur. Ammonia (16- 25%) and Hydrogen sulfide may form flammable mixtures with air.

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 breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

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.

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.

Exposure Limits: Not available.

9: Physical and Chemical Properties

Appearance: Colorless to pale yellow to green
Odor: May have a slight ammonia and /or organic odor
Boiling point: 210 F (98.9 C)---220 F(104.4C)
Vapor Density: Not determined
Vapor Pressure: 18mm Hg @ 70 F (21.1 C)
Solubility in Water: Complete

Specific Gravity: 1.32 – 1.35 (11.0—11.2lbs/gal)
PH: 7.0—8.5
Volatile: Not applicable

10: Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Incompatible materials, moisture, air
Incompatibility with various substances: Reactive with oxidizing agents, acids.
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Reactivity: Liberates sulfur dioxide in contact with acids. Air sensitive. Moisture sensitive. It oxidizes to in air to sulfate, more readily in presence of moisture.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals: LD50: Not available.
LC50: Not available.
Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Slightly hazardous in case of ingestion.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects based on animal test data. May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: May cause respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.
Ingestion: May cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting and diarrhea. May cause allergic/hypersensitivity/anaphylactoid reaction. Some asthmatics are said to be sensitive to minute amounts of sulfites in foods. It may cause a worsening of asthma in asthmatics. Individuals sensitive to sulfides may experience stomach upset , tightness in the chest, or wheezing. Extremely large concentrations may produce central nervous system, seizures, hypotension, tachycardia, and cardiovascular collapse.

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:
Special Remarks on the Products of Biodegradation:

The product itself and its products of degradation are not toxic.

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

Keep containers closed to avoid product oxidation – avoid powders forming. Store in a cool dry and well ventilated place- do not store near oxidants, acids or alkalis. Packing / labeling : Shipping Name AMMONIA THIO SULPHATE Hazard harmful risk phrases R 22 Harmful if swallowed. R 31 contact with acids liberates toxic gas. R 36/37 irritating to eyes and respiratory system. Safety phrases S8 keep dry S26 in case of contact with eyes, rinse container immediately with plenty of water and seek medical advice.

15: Other Regulatory Information

Other Regulations:

This product is on the Inventory of Existing Commercial Chemical Substances.

Protective Equipment:

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

16. OTHER INFORMATION:

THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH THE USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT. THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, SINCE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY THE USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS.