

AMMONIUM THIOCYANATE, EXTRA PURE

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: AMMONIUM THIOCYANATE, EXTRA PURE
Product Code: 921
CAS#: 1762-95-4
Synonym: Ammonium Sulphocyanate, Amonium Rhodanide
Chemical Formula: CH₄N₂S
Molecular weight: 76.12

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:
Name: AMMONIUM THIOCYANATE, EXTRA PURE
Synonym: Ammonium Sulphocyanate, Amonium Rhodanide
Chemical Formula: CH₄N₂S
Molecular weight: 76.12

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Acute toxicity Oral (Category 4), H302
Acute toxicity Inhalation (Category 4), H332
Acute toxicity Dermal (Category 4), H312
Serious eye damage (Category 1), H318
Long-term (chronic) Aquatic hazard (Category 3), H412
Potential Chronic Health Effects:
Carcinogenic Effects: Not available
Mutagenic Effects: Not available
Teratogenic Effects: Not available
Developmental Toxicity: Not available

SECTION 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. Get medical attention.
Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.
Serious Skin Contact: Not available.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
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. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media:
Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.



Unsuitable extinguishing media: For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture: Sulfur oxides Sodium oxides Not combustible. Ambient fire may liberate hazardous vapours

Advice for firefighters: In the event of fire, wear self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert

Environmental precautions Do not let product enter drains.

Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Advice on safe handling: Work under hood. Do not inhale substance/mixture.

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Conditions for safe storage: Including any incompatibilities

Storage conditions Tightly closed. Dry. Do not store near acids. hygroscopic Air sensitive. Handle and store under inert gas.

Storage class Storage class (TRGS 510): 13: Non Combustible Solids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls:

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Colorless crystalline powder
Colour	: Not available
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: Not available
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evapouration rate	: Not available



Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: Not available
Water solubility	: Not available
Partition coefficient	: Not available
Auto-ignition temperature	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Contact with acids liberates very toxic gas.

Instability Temperature: Not available

Chemical stability: The product is chemically stable under standard ambient conditions.

Incompatibility with various substances: Not available

Conditions to avoid Avoid: moisture. Exposure to air may affect product quality

Corrosively: Not available

Special Remarks on Reactivity: Not available

Special Remarks on Corrosively: Not available

Polymerization: Not available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:

LD50 Oral - Rat - 750 mg/kg Remarks: (RTECS) Symptoms: Nausea, Vomiting, Diarrhea Acute toxicity estimate Inhalation - 4 h - 1,6 mg/l - dust/mist SIGALD- 221988 Page 8 of 13 The life science business of Merck operates as Millipore Sigma in the US and Canada (Expert judgment) Acute toxicity estimate Dermal - 1.100,1 mg/kg (Expert judgment).

Skin corrosion/irritation: Skin - Rabbit

Skin - EPISKIN Human Skin Model Test Result: No skin irritation - 5 min (Regulation (EC) No. 440/2008

Respiratory or skin sensitization: Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

Remarks: (in analogy to similar products) The value is given in analogy to the following substances: sodium thiocyanate

Specific target organ toxicity - single exposure: Not available

Specific target organ toxicity - repeated exposure: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 510 mg/l - 96 h Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: diammonium thiosulphate

Toxicity to bacteria static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: SIGALD-217263 Page 9 of 12 The life science business of Merck operates as MilliporeSigma in the US and Canada diammonium thiosulphate

Results of PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

BOD5 and COD: Not available

Bio accumulative potential: Not available

Mobility in soil: Not available



SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es):

ADR/RID:

IMDG:

IATA:

Packaging group:

ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

SECTION 15: OTHER REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture: This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:

EUH032 Contact with acids liberates very toxic gas.

H302 Harmful if swallowed.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H312 Harmful if swallowed, in contact with skin or if inhaled.

H318 Causes serious eye damage.

H332 Harmful to aquatic life with long lasting effects.

H412 Harmful in contact with skin

Other Special Considerations: Not available

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