

MATERIAL SAFETY DATA SHEET

24HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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SECTION 1 Product Identification

CHEMICAL NAME: Barium thiocyanate trihydrate
CAS#: 68016-36-4
FORMULA: Ba(SCN)₂·3H₂O
SYNONYM: none

SECTION 2 Composition and Information on Ingredients

INGREDIENT:	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	68016-36-4	100	0.5mg/m ³ as Ba	0.5mg/m ³ as Ba

SECTION 3 Hazards Identification

EMERGENCY OVERVIEW: Water soluble barium compounds are generally poisonous when taken by mouth. Thiocyanates are also poisonous and may cause psychosis, vomiting, disorientation, weakness, low blood pressure, convulsions and death

PRIMARY ROUTES OF EXPOSURE: Contact with skin and eyes. Inhalation of dust.

EYE CONTACT: May be a moderate irritant to the eyes causing redness and pain.

SKIN CONTACT: May cause moderate irritation of the skin causing redness, swelling and itching.

INHALATION: May cause difficulty in breathing, irritation of the respiratory tract, tightness of the muscles of the face and neck.

INGESTION: Soluble barium and Thiocyanates may cause vomiting, irregular heartbeat, pain, disorientation, convulsions and cardiac arrest.

CHRONIC HEALTH EFFECTS: Prolonged or repeated skin exposure to thiocyanates may cause dermatitis. Repeated ingestion of small amounts may cause weakness, confusion, central nervous system effects, nausea and skin eruptions.

ACUTE HEALTH EFFECTS: Barium may cause difficulty in breathing, vomiting, tremors, weakness, and death. Thiocyanates may cause psychosis, vomiting, disorientation, weakness, low blood pressure, convulsions and death

SECTION 4 First Aid Measures

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 Firefighting Measures

FLASH POINT: no data
AUTO IGNITION TEMPERATURE: none
EXPLOSION LIMITS: none
EXTINGUISHING MEDIUM: Carbon dioxide or dry powder
SPECIAL FIREFIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: If involved in a fire this material may emit toxic organic fumes.
UNUSUAL FIRE OR EXPLOSION HAZARDS: No unusual fire or explosion hazards.

SECTION 6 Accidental Release Measures

SPILL AND LEAK PROCEDURES: Small spills can be mixed with vermiculite or sodium carbonate and swept up.

SECTION 7 Handling and Storage

HANDLING AND STORAGE: Store material in a tightly sealed container . Keep away from heat and moisture

SECTION 8 Exposure Controls and Personal Protection

EYE PROTECTION: Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.
SKIN PROTECTION: Chemical-resistant.
VENTILATION: If possible, handle the material in an efficient fume hood.
RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

SECTION 9 Physical and Chemical Properties

COLOR AND FORM: white xtl.
MOLECULAR WEIGHT: 253.50
MELTING POINT (DEG. C.): none
BOILING POINT: no data
VAPOR PRESSURE: no data
SPECIFIC GRAVITY: 2.286
SOLUBILITY IN WATER: 4.3g/100cc

SECTION 10 Stability and Reactivity

STABILITY: air and moisture stable

HAZARDOUS POLYMERIZATION: no hazardous polymerization

CONDITIONS TO AVOID: none

INCOMPATIBILITY: oxidizing agents and active metals.

DECOMPOSITION PRODUCTS: nitrogen oxides, sulfur dioxide and barium salts.

SECTION 11 Toxicological Information

RTECS DATA: No specific information available on this product.

MUTAGENIC EFFECTS: no data

TETRATOGENIC EFFECTS: no data

CARCINOGENIC EFFECTS: no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No information available

SECTION 13 Disposal Considerations

DISPOSAL: Dispose of in according to local state and federal regulations.

SECTION 14 Transportation Information

Barium compounds, n.o.s., Class 6.1, UN 1564, PG III

SECTION 15 Regulatory Information

TSCA: Not listed in the TSCA inventory

SARA (TITLE 313): Title compound: see category code N040 for reporting.

SECTION 16 Other Information

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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