

24 HR. EMERGENCY PHONE NO. CHEM-TREC 1-800-424-9300

MATERIAL SAFETY DATA SHEET

Manufacturer:

PROCHEM, INC.
826 ROOSEVELT RD.
ROCKFORD, IL 61109

PHONE 815-398-1788
FAX 815-398-1810

SECTION 1 Product Identification**CHEMICAL NAME:** Barium nitrate**CAS REGISTRY NUMBER:** 10022-31-8**FORMULA:** Ba(NO₃)₂**EINECS NUMBER:** 233-020-5**CHEMICAL FAMILY:** metal nitrate salts**SYNONYM:** Barium dinitrate, Nitric acid, barium salt**SECTION 2 Composition and Information on Ingredients**

INGREDIENT:	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	10022-31-8	100	0.5mg/m ³ (as Ba-soluble)	0.5mg/m ³ (as Ba-soluble)

SECTION 3 Hazards Identification**EMERGENCY OVERVIEW:** Water soluble barium compounds are generally poisonous when taken by mouth.**PRIMARY ROUTES OF EXPOSURE:** Ingestion**EYE CONTACT:** May cause slight to mild irritation of the eyes**SKIN CONTACT:** May cause slight to mild irritation of the skin**INHALATION:** May be irritating to the nose, mucous membranes and respiratory tract.**INGESTION:** Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.**ACUTE HEALTH EFFECTS:** May be irritating to skin, eyes and respiratory tract.**CHRONIC HEALTH EFFECTS:** No information available on long-term chronic effects.**NTP:** No**IARC:** No**OSHA:** No**SECTION 4 First Aid Measures****EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.**SKIN EXPOSURE:** Wash the 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 attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 Fire Fighting Measures

FLASH POINT: not applicable

AUTOIGNITION TEMPERATURE: none

EXPLOSION LIMITS: none

EXTINGUISHING MEDIUM: carbon dioxide, foam or dry powder

SPECIAL FIRE FIGHTING PROCEDURES: If this product is 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 irritating fumes.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Metal nitrates can be oxidizers. Contact with strong reducing agents could lead to fires and/or explosions.

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 in a tightly sealed container. Keep away from heat and direct sunlight.

SECTION 8 Exposure Controls and Personal Protection

EYE PROTECTION: Always wear approved safety glasses when handling a chemical substance in the laboratory.

SKIN PROTECTION: Wear protective gloves.

VENTILATION: If possible, handle the material in an efficient fume hood.

RESPIRATOR: No respirator required.

ADDITIONAL PROTECTION: No additional protection required.

SECTION 9 Physical and Chemical Properties

COLOR AND FORM: white xtl.

MOLECULAR WEIGHT: 261.35

MELTING POINT (°C): none

BOILING POINT (°C): no data

VAPOR PRESSURE: no data

SPECIFIC GRAVITY: 3.230

ODOR: none

SOLUBILITY IN WATER: 8.7g/100cc (20°)

SECTION 10 Stability and Reactivity

STABILITY: hygroscopic

HAZARDOUS POLYMERIZATION: no hazardous polymerization

CONDITIONS TO AVOID: Contact with strong reducing agents or organic matter. Some nitrates can explode if heated to high temperatures.

INCOMPATIBILITY: reducing agents, organic matter, phosphorus and sulfur

DECOMPOSITION PRODUCTS: nitrogen oxides and barium salts

SECTION 11 Toxicological Information

RTECS DATA: Administration onto the skin (rabbit); Standard Draize test: 500 mg/24H. Oral (rat); LD50: 355 mg/kg. Intraperitoneal (mouse); LD50: 293 mg/kg. Subcutaneous (mouse); LDLo: 10 mg/kg. Intravenous (mouse); LD50: 16 mg/kg. Intravenous (mouse); LD50: 16 mg/kg. Oral (dog); LDLo: 800 mg/kg. Oral (Rabbit); LDLo: 150 mg/kg. Parenteral (rabbit); LDLo: 30 mg/kg.

CARCINOGENIC EFFECTS: No data available

MUTAGENIC EFFECTS: No data available

TETRATOGENIC EFFECTS: No data available

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No data available

SECTION 13 Disposal Considerations

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

SECTION 14 Transportation Information

SHIPPING NAME (CFR): Barium nitrate

HAZARD CLASS (CFR): 5.1

ADDITIONAL HAZARD CLASS (CFR): 6.1

PACKING GROUP (CFR): III

UN ID NUMBER (CFR): UN# 1446

SHIPPING NAME (IATA): Barium nitrate

HAZARD CLASS (IATA): 5.1

ADDITIONAL HAZARD CLASS (IATA): 6.1

PACKING GROUP (IATA): II

UN ID NUMBER (IATA): UN# 1446

SECTION 15 Regulatory Information

TSCA: Listed in the TSCA inventory

SARA (TITLE 313): Title compound: See Category Code N040 and N511 for reporting.

SECOND INGREDIENT: none

THIRD INGREDIENT: none

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 contained in this document or any use of the product based on this information.

PREPARATION DATE:

MAY 2005