MATERIAL SAFETY DATA SHEET

80 Northwest Blvd.
Nashua, NH 03063
(800) 225-3739

MSDS No.: BB0055
Revision Date: January 15, 2009
Approved by: James A. Bertsch

MSDS No.: BB0055

Section 1 Chemical Product and Company Information

Product	**BARIUM NITRATE**
Synonyms	Barium Dinitrate

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

Section 2 Hazards Identification

Emergency Overview

DANGER! STRONG OXIDIZER! POISON ☠
CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE OR EXPLOSION. MAY BE FATAL IF SWALLOWED.
Keep from contact with clothing and other combustible materials. Keep in a cool, dry place. Avoid contact with skin and eyes. Wash thoroughly after handling.
Target organs: Central nervous system, kidneys.

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Health	3
Fire	0
Reactivity	3
Contact	2

HMIS *

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	TLV Units
Barium nitrate	10022-31-8	100%	TWA: 0.5 mg/m^3 *(as Barium)* (ACGIH 2001)

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Containers may rupture when involved in fire. Use water spray to keep fire-exposed containers cool. Although not flammable, substance is a strong oxidizer which releases oxygen on heating, increasing the burning rate of any material.

Extinguishing Media: Water spray, carbon dioxide, dry chemical.

Flash Point: Non-flammable.

Autoignition temperature: N/A

Explosion Limits: Lower: N/A **Upper:** N/A

NFPA

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Section 6 Accidental Release Measures

Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

(2008 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2008), GUIDE PAGE NO. 141)

Section 7 Handling & Storage OXIDIZER STORAGE CODE YELLOW

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts. Wash thoroughly after handling. Remove and wash clothing before reuse.

Storage: Store in a cool, dry, well-ventilated area away from easily oxidizable substances.

Section 8 Exposure Controls / Personal Protection

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Physical state: Solid.
Appearance: White crystalline powder.
Odor: No odor.
pH: N/A
Vapor pressure (mm Hg): Negligible.
Vapor Density (Air = 1): N/A
Evaporation rate (Butyl acetate = 1): N/A
Viscosity: N/A
Boiling point: Decomposes.
Freezing / Melting point: 592°C (1097°F)
Decomposition temperature: N/A
Solubility: 8.7 g/100ml water @ 20°C
Specific gravity (H_2O = 1): 3.24 @ 23°C
Percent volatile (%): Negligible.
Molecular formula: $Ba(NO_3)_2$
Molecular weight: 261.35

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Do not heat or rub with organic matter or other oxidizable substance. e.g. sulfur, sulfides, phosphides, hypophosphites, etc.
Incompatibilities with other materials: Barium oxides, magnesium and zinc, reducing agents and combustible materials.
Hazardous decomposition products: Nitrogen oxides, barium oxide, barium dust and/or fume.

Section 11 Toxicological Information

Effects of overexposure: Contact with skin and eyes may cause irritation, redness and/or pain. Ingestion may cause weakness, salivation and nausea, followed by vomiting and diarrhea. Patient may become cold and experience varying degrees of paralysis. May be harmful by inhalation, with symptoms similar to those of ingestion. Exercise appropriate procedures to minimize potential hazards.

RTECS #: CQ9625000
ORAL-RAT LD50: 355 mg/kg

Section 12 Ecological Information

Data not yet available.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: UN1446
Shipping name: Barium nitrate
Hazard class: 5.1, (6.1)
Packing group: II
Exceptions: Limited quantity equal to or less than 0.5 Kg (1.1 lb).

Section 15 Regulatory Information

TSCA-listed, EINECS-listed (233-020-5), RCRA-Code D001,D005, DSL-listed.

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards.