



Registered Off. : 101-A, Deep Enclave, Pocket 'D', Ashok Vihar, Phase-III, Delhi-110 052 (India)
Corporate Off. : 152, Vardhman City Centre, Near Shakti Nagar Underbridge, Delhi-110052 (India)
Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)
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BARIUM NITRATE

1. Product Identification

Synonyms: Barium dinitrate; nitric acid, barium salt; nitrobarite

CAS No.: 10022-31-8

Molecular Weight: 261.34

Chemical Formula: $Ba(NO_3)_2$

Product Codes: 30300 , 38302

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Barium Nitrate	10022-31-8	99 - 100%

3. Hazards Identification

Potential Health Effects

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Systemic poisoning may occur with symptoms similar to those of ingestion.

Ingestion: Toxic! May cause tightness of the muscles of the face and neck, vomiting, diarrhea, abdominal pain, muscular tremors, anxiety, weakness, labored breathing, cardiac irregularity, convulsions, and death from cardiac and respiratory failure.

Skin Contact: Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact: Causes irritation, redness, and pain.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin and nervous system disorders or impaired respiratory or kidney function may be more susceptible to the effects of this substance.

4. First Aid Measures

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

Ingestion: Get medical attention immediately. Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. After vomiting, a mixture of 1 tablespoon of sodium or magnesium sulfate (Epsom salts) dissolved in 8 oz. of water to drink maybe indicated to precipitate the barium as the nontoxic and insoluble barium sulfate.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire: Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

Explosion: Contact with oxidizable substances may cause extremely violent combustion. See section 10.

Sensitive to mechanical impact.



Fire Extinguishing Media: Use flooding amounts of water in early stages of fire. Foam, dry chemical, or carbon dioxide may also be used. Do not use water on molten material. Emits nitrogen oxides when heated to decomposition.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Do not release runoff from fire control methods to sewers or waterways.

6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Separate from combustibles, organic or other readily oxidizable materials. Avoid storage on wood floors. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, a full facepiece respirator with dust/mist filter may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: White crystals.

Odor: Odorless.

Solubility: 8.7 grams/100 g water @ 20C (68F).

Density: 3.24 @ 23C (73F)

pH: No information found.

% Volatiles by volume @ 21C (70F): 0

Boiling Point: Decomposes.

Melting Point: 592C (1098F)

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.



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10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Oxides of nitrogen and toxic metal fumes may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Magnesium plus barium oxide plus zinc, aluminum and magnesium alloys, combustibles (paper, oil, wood), acids, and oxidizers. Mixtures with finely divided aluminum-magnesium alloys are easily ignitable and extremely sensitive to friction or impact.

Conditions to Avoid: Heat, dusting, contact with combustibles and incompatibles.

11. Toxicological Information

For Barium Nitrate: Oral rat LD50: 355 mg/kg. Irritation Data: Skin rabbit 500 mg/24H mild. Eye rabbit 100 mg/24H moderate.

12. Ecological Information

Environmental Fate: This material may bioaccumulate to some extent.

Environmental Toxicity: No information found.

13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Land

Proper Shipping Name: BARIUM NITRATE

Hazard Class: 5.1, 6.1

UN/NA: UN1446

Packing Group: II

Information reported for product/size: 100LB

International (Water, I.M.O.)

Proper Shipping Name: BARIUM NITRATE

Hazard Class: 5.1, 6.1

UN/NA: UN1446

Packing Group: II

Information reported for product/size: 100LB

15. Regulatory Information

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No

Reactivity: No (Pure / Solid)

16. Other Information

Product Use:

Laboratory Reagent.