

# Material Safety Data Sheet / Safety Data sheet

## Barium Nitrate

### Section 1: Chemical Product Identifier and Synonyms

Product Name: Barium Nitrate

UN Number: 1446

CAS Number: 10022-31-8

Synonym: Barium Nitrate

Chemical Formula: Ba(NO<sub>3</sub>)<sub>2</sub>

### Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Barium Nitrate	10022-31-8	>95

**Toxicology Data On Ingredients:** Barium Nitrate LD50: Not Available. LC50: Not Available

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Toxic if swallowed

Harmful if inhaled

**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:**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact:**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation:**

Move to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.

**Ingestion:**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Substance is nonflammable.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:** Not available.

**Risks of explosion of the product in presence of mechanical impact:** Not available.

**Risks of explosion of the product in presence of static discharge:** Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:**

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

**Large Spill:**

Keep combustibles (wood, paper, oil, etc) away from spilled material. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

## Section 7: Handling and Storage

### **Precautions:**

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest. Keep away from clothing and other combustible materials.

### **Storage:**

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials.

## Section 8: Exposure Controls / Personal Protection

### **Engineering Controls:**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Personal Protection:**

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

### **Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### **Exposure Limits:**

Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid.

**Odour:** Odourless.

**Taste:** Not available.

**Molecular Weight:** 261.34 g/mole

**Colour:** White

**pH (1% soln/water):** 5.0-8.0 5% aq.sol. (20°C)

**Boiling Point:** Not available.

**Melting Point:** 592 °C / 1097.6 °F

**Critical Temperature:** Not available.

**Specific Gravity:** Not available.

**Vapour Pressure:** Not available.

**Vapour Density:** Not applicable.

**Volatility:** Not available.

**Odour Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:** Not available.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Avoid dust formation. Incompatible products. Excess heat.  
Combustible material.

**Incompatibility with various substances:** Organic materials, Acids, Bases, Acid anhydrides, Metals, Reducing agents, Strong reducing agents, Combustible material

**Corrosivity:** Not available.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Hazardous polymerization does not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Inhalation; Skin and eye contact

**Toxicity to Animals:** LD50: Not available. LC50: Not available.

**Chronic Effects on Humans:** EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat.  
Coughing.

Redness of the eye tissue.

**Other Toxic Effects on Humans:** Vomiting. Nausea. Abdominal pain. Blood in stool. Bleeding of the gastrointestinal tract. Increased salivation. Myasthenia. Cramps/uncontrolled muscular contractions. Paralysis. Disturbances of heart rate. High arterial pressure

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Do not empty into drains.

**BOD5 and COD:** Not available.

**Products of Biodegradation:** Not applicable.

**Toxicity of the Products of Biodegradation:** Not available.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Information

**Waste Disposal:** Dispose of in accordance with local regulations

## Section 14: Transport Information

**DOT Classification:** CLASS 5.1: Poisonous material.

**Identification:** Barium Nitrate UN Number: UN1446 PG: II

**Special Provisions for Transport:** Not available.

## Section 15: Regulatory Information

**Regulations:** Labelling according to Regulation (EC) No 1272/2008.

## Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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