

Barium Nitrate Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Barium Nitrate

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9459

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral and inhalation (Category 4). Harmful if swallowed or inhaled (H302+H332). Do not eat, drink or smoke when using this product (P270). Avoid breathing dust or fumes (P261).



Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Barium nitrate	10022-31-8	Ba(NO ₃) ₂	261.55	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water. **If skin irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. **Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).**

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

NFPA Code

Fire risk; strong oxidizer. When heated to decomposition, may emit toxic fumes. Substance decomposes on heating producing nitrogen oxides.

None established

In case of fire: Use a tri-class dry chemical fire extinguisher. Take any precautions to avoid mixing with combustibles (P221+P370+P378).

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides. Store in a cool, dry place. May explode when heated. Keep and store away from clothing and combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: (as barium) PEL/TLV 0.5 mg/m³ (OSHA/ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, crystalline powder. Odorless.	Boiling point: 590 °C (decomposes)
Soluble: Water. Insoluble in alcohol.	Specific gravity: 3.24

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, bases, acid anhydrides, reducing agents, organic compounds, moisture, and heat. Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant, diarrhea, nausea, vomiting.	ORL-RAT LD ₅₀ : 355 mg/kg
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: Heart, nerves, kidneys, GI system, bone marrow, spleen, liver, and blood.	SKN-RBT LD ₅₀ : N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #27h is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Barium Nitrate. Hazard class: 5.1, Oxidizer, Poison. UN number: UN1446.

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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