

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 96.10

Revision Date: February 24, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Barium Nitrate Aqueous Solutions

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Barium nitrate (10022-31-8) 2.5-8.0% and Water (7732-18-5) 92-97.5%.

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Clear, colorless aqueous solution. Odorless.

Moderately toxic by ingestion or inhalation; irritant. Avoid contact with eyes, skin, and mucous membranes. Strong oxidizer and may explode when heated. All soluble barium compounds are poisonous if swallowed and cause nausea, vomiting, stomach pains, and diarrhea.

FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-3

Exposure-2

Storage-0

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Induce vomiting. After vomiting, give a mixture of 1 Tbs. magnesium sulfate in one cup of water. Call a physician or poison control at once. Magnesium sulfate precipitates barium as insoluble barium sulfate in stomach thus reducing toxicity.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid or solution.

Fire risk; strong oxidizer. When heated to decomposition, may emit toxic fumes of NO_x.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, and nitrites.

Use and dispense in a hood.

Store in a cool, dry place. May explode when heated.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 0.5 mg/m³ (as Ba) (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless solution.
0.1M Barium Nitrate: 2.6%
0.2M Barium Nitrate: 5.2%
0.3M Barium Nitrate: 7.5-8.0%

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.	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.

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

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
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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