

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 95.00

Revision Date: May 19, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Barium Hydroxide and 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 hydroxide and solutions: barium hydroxide (12230-71-6) 3% and water (7732-18-5) 97%

CAS#: 12230-71-6

SECTION 3 — HAZARDS IDENTIFICATION

White, crystalline powder or clear, colorless liquid.

Toxic by ingestion as barium. Ingestion could be fatal. All soluble barium compounds are poisonous if swallowed and cause nausea, vomiting, stomach pains, and diarrhea.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-0

Exposure-3

Storage-1

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

External: Wash continuously 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.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid or liquid.

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

If liquid: 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.

If solid: restrict unprotected personnel from the area. 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 #4. Store with hydroxides, oxides, silicates, and carbonates.

Use and dispense in a hood. Store in a cool, dry place.

Keep container tightly closed. Store in Flinn ChemSaf Bag.

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 (Ba) (OSHA, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, crystalline powder.

Specific Gravity: 2.2

0.1M barium hydroxide CAS# 12230-71-6 3.2%

Solubility: Soluble in water and alcohol.

Formula: Ba(OH)₂ 8H₂O

Formula Weight: 315.50

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids.

Shelf life: Poor; absorbs carbon dioxide from the air.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, corrosive.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: Heart, kidneys, GI system, bone marrow, spleen, and liver.

SKN-RBT LD₅₀: 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 consult with state and local regulations.

Flinn Suggested Disposal Method #27h is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Barium Compounds, n.o.s.

Hazard Class: 6.1, keep away from food

UN Number: UN1564

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (241-234-5), RCRA D002, 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.**