

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 94.01

Revision Date: October 12, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Barium Chloride Solution (<1M)

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

0.1 M - 1 M Barium chloride solutions:
Barium chloride (10326-27-9) 2.5-24.0% & Water (7732-18-5) 76-97.5%
CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Clear, colorless solution.
Highly toxic by ingestion and inhalation. 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-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.

SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible liquid.
When heated to decomposition, emits toxic fumes of chlorine and barium.

NFPA CODE

None
established

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

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.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates. Store in a cool, dry place.
Use and dispense in a hood.

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 liquid. pH: ~5
Concentrations: 0.1M = 2.5%; 1.0M = 24%
Formula: BaCl₂ 2H₂O
Formula weight: 244.28

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, irritant, stomach pains, vomiting, and diarrhea. ORL-RAT LD₅₀: 118 mg/kg
Chronic effects: N.A. IHL-RAT LC₅₀: N.A.
Target organs: heart, nerves, kidneys, GI system, bone marrow, SKN-RBT LD₅₀: N.A.
spleen, and liver.

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 Compounds, n.o.s.
Hazard class: 6.1, keep away from foods.
UN number: UN1564
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (233-788-1), RCRA 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.**