

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 94.00

Revision Date: May 27, 1998

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Barium Chloride 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 Chloride And Solutions: Barium chloride (10326-27-9) 2.5-24.0% and Water (7732-18-5) 76-97.5%

CAS#: 10326-27-9

SECTION 3 — HAZARDS IDENTIFICATION

White odorless powder or 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-1

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician, 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 15 minutes.

External: Wash continuously with fresh water for 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

Non-flammable solid or liquid.

Fire Fighting Instructions: Use 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 area and ventilate area. Contain spill with sand or absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

If solid: Restrict unprotected personnel from area. Sweep up, place in 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 #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Store in a Flinn Chem-Saf Bag.

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 (Ba) (OSHA, ACGIH)

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White odorless powder.

0.1M Barium Chloride 10326-27-9 2.5%

1.0M Barium Chloride 10326-27-9 24%

Solubility: Soluble in water. (39.3 grams/100 ml).

Formula: BaCl₂ · 2H₂O

Formula Weight: 244.28

Specific Gravity: 3.1

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.

Shelf life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: highly toxic, irritant, stomach pains, vomiting, diarrhea

Chronic effects: N.A.

Target organs: heart, nerves, kidneys, GI system, bone marrow,

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

ORL-RAT LD50: 118 mg/kg

IHL-RAT LC50: N.A.

SKN-RBT LD50: N.A.

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 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 Chemical Catalog/Reference Manual
for additional information about laboratory chemicals**