

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 94.01

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Barium Chloride Solution

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

1 M and 0.1 M Barium Chloride Solutions: Barium chloride (10326-27-9) 2.5-24.0% and 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, 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-combustible 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.

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 (Ba) (OSHA, ACGIH)

Section 9 — Physical and Chemical Properties

Clear colorless liquid.

0.1M Barium Chloride 10326-27-9 2.5%

1.0M Barium Chloride 10326-27-9 24%

Formula: BaCl₂ 2H₂O

Formula Weight: 244.28

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, spleen, liver

ORL-RAT LD50: 118 mg/kg

IHL-RAT LC50: N.A.

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 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

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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