

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 119.00

Revision Date: March 7, 2001

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### Section 1 — Chemical Product and Company Identification

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#### Bismuth Trichloride

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### Section 2 — Composition, Information on Ingredients

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Bismuth Trichloride

Synonym: bismuth (III) chloride

CAS#: 7787-60-2

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### Section 3 — Hazards Identification

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White, odorless crystalline powder.

Dust is corrosive. Will form  $\text{BiOCl}$  and  $\text{HCl}$  when combined with water. Avoid inhalation. Slightly toxic by ingestion.

#### FLINN AT-A-GLANCE

Health-1  
Flammability-0  
Reactivity-0  
Exposure-1  
Storage-1

0 is low hazard, 3 is high hazard

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### Section 4 — First Aid Measures

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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: Give large quantities of water. Call a physician or poison control at once.

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### Section 5 — Fire Fighting Measures

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Non-flammable, non-combustible solid.

Heated to decomposition, emits toxic chloride fumes.

**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

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### Section 6 — Accidental Release Measures

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Restrict unprotected personnel from area. Remove all ignition sources and water. 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.

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### Section 7 — Handling and Storage

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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. Deliquescent, store in Flinn Chem-Saf Bag.

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### Section 8 — Exposure Controls, Personal Protection

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Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

### Section 9 — Physical and Chemical Properties

White, odorless crystalline powder  
Solubility: Decomposes in water. Soluble in acids.  
Formula: BiCl<sub>3</sub>  
Formula Weight: 315.34

Specific Gravity: 4.75  
Melting Point: 230 C  
Boiling Point: 447 C

### Section 10 — Stability and Reactivity

Shelf life: Poor; very deliquescent; volatilized by heat.

### Section 11 — Toxicological Information

Acute effects: Harmful dust, corrosive  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD50: 3334 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 #26a is one option.

### Section 14 — Transport Information

Shipping Name: Not regulated  
Hazard Class: N/A  
UN Number: N/A

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (232-123-2).

### 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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