

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 116.00

Revision Date: May 20, 2010

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Bismuth

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

CAS#: 7440-69-9

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### SECTION 3 — HAZARDS IDENTIFICATION

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Dark grey lumps or powder.  
Slightly toxic by inhalation or ingestion. Avoid inhalation of dust.

#### FLINN AT-A-GLANCE

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

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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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: 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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Flammable only in fine powder form.  
Moderately dangerous, can react with acid or acid fumes to emit toxic fumes.

**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

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

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### SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.  
Store in a cool, dry place.

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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.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Dark grey powder.

Solubility: Insoluble in water, soluble in dilute Nitric or HCl.

Formula: Bi

Formula Weight: 208.98

Melting Point: 570 °F

Specific Gravity: 9.78

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers, halogens, and acids; especially concentrated nitric acid, perchloric acid, fused ammonium nitrate, and gaseous chlorine.

Shelf life: Indefinite.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Harmful dust.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 5 g/kgIHL-RAT LC<sub>50</sub>: N.A.SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please consult with state and local regulations.

Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping Name: Not regulated

Hazard Class: N/A

UN Number: N/A

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-177-4), RCRA code D001.

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**