

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 131.00

Revision Date: January 26, 2016

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Bromine

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, inhalation (Category 1). Fatal if inhaled (H330).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Bromine	7726-95-6	Br <sub>2</sub>	159.83	

### SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P311).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contacts if present and easy to do so. Continue rinsing (P305+P351+P338). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

Wash contaminated clothing before reuse (P363).

**If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible liquid. Will react with water or steam to produce toxic and corrosive fumes.

Strong oxidizer; heat of reaction may ignite combustibles on contact.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

NFPA CODE

H-3

F-0

R-0

OX

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and cover spill with a reducing material such as sodium thiosulfate. Deposit in a sealed bag or container. 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. Store in a Flinn Chem-Saf™ bag inside a Flinn Saf-Stor™ can. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271). Do not breathe vapors (P260).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Wear respiratory protection (P284).

Exposure guidelines: PEL 0.1 ppm (OSHA) TLV 0.1 ppm Ceiling 0.2 ppm (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Dark, reddish-brown, fuming liquid. Pungent suffocating odor.  
Soluble: Most common organic solvents. Slightly in water.

Boiling point: 58.8 °C

Relative density: 3.1

Vapor density: 5.5

Vapor pressure: 172 mmHg

Melting point: -7.2 °C

Partition coefficient: No data available

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**SECTION 10 — STABILITY AND REACTIVITY**

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Very strong oxidizing agent; heat of reaction may ignite combustible materials on contact. Avoid contact with all other laboratory chemicals. Will react with water or steam to produce toxic and corrosive fumes.

Shelf life: As packaged, excellent. This is meant to be a one time use product.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic, harmful vapor, lachrymator, and corrosive.

ORL-RAT LD<sub>50</sub>: 2600 mg/kg

IHL-RAT LC<sub>50</sub>: 2700 mg/m<sup>3</sup>

Chronic effects: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Respiratory system, eyes & central nervous system.

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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Toxic to fish and other aquatic organisms. LC<sub>50</sub> (rainbow trout) 0.31 mg/L (24 hr). LC<sub>50</sub> (water flea) 1.07 mg/L (48 hr).

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #12a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Bromine. Hazard class: 8, Corrosive, Poison. UN number: UN1744.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-778-1), RCRA code D002, D003.

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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.

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