SDS #: 131 **Revision Date:** July 7, 2016

Bromine Safety Data Sheet (SDS)

FLINN

SCIENTIFIC

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

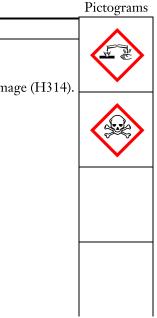
Bromine

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261 Chemtrec Emergency Phone Number: (800) 424-9503

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).



Signal Word

DANGER

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Bromine	7726-95-6	Br ₂	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.	NFPA Code
Strong oxidizer; heat of reaction may ignite combustibles on contact.	H-3
When heated to decomposition, may emit toxic fumes.	F-0
In case of fire: Use a tri-class dry chemical fire extinguisher.	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.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfates, 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).

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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)

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Dark, reddish-brown, fuming liquid. Pungent	Boiling point: 58.8 °C
suffocating odor.	Relative density: 3.1
Soluble: Most common organic solvents. Slightly in	Vapor density: 5.5 Vapor pressure: 172 mmHg
water.	Melting point: -7.2°C
	Partition coefficient: No data available

SECTION 10 - STABILITY AND REACTIVITY

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.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, harmful vapor, lachrymator, and corrosive. Chronic effects: N.A. Target organs: Respiratory system, eyes and central nervous system. ORL-RAT LD₅₀: 2600 mg/kg IHL-RAT LC₅₀: 2700 mg/m³ SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Toxic to fish and other aquatic organisms. LC_{50} (rainbow trout) 0.31 mg/L (24 hr). LC_{50} (water flea) 1.07 mg/L (48 hr).

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #12a is one option.

SECTION 14 - TRANSPORT INFORMATION

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

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 - OTHER INFORMATION

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

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

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