



SDS #: 131

Revision Date: July 7, 2016

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Bromine Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Bromine

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-9503

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).



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

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, 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).

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 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

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. LC₅₀ (rainbow trout) 0.31 mg/L (24 hr). LC₅₀ (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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