

Bromine Safety Data Sheet (SDS)

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

Signal Word
DANGER

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).

Pictograms



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.

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.

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

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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.

Revision Date: July 7, 2016