

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 394.00

Revision Date: January 20, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hydrobromic Acid

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

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Hydrobromic acid (10035-10-6) and Water (7732-18-5)

Synonym: Hydrogen bromide solution, 47-49%

CAS#: 10035-10-6

SECTION 3 — HAZARDS IDENTIFICATION

Clear, colorless to pale yellow or pink liquid. Suffocating bromine odor.

Highly toxic by ingestion and inhalation. Corrosive to skin, eyes, and mucous membranes. Avoid all body contact.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-2

Exposure-3

Storage-3

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

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 or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Do NOT induce vomiting. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable liquid.

When heated to decomposition, emits toxic fumes of bromides.

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

H-3

F-0

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Ventilate area. Wear personal protective equipment including a respirator. Contain the spill with sand or other inert absorbent material neutralize with sodium bicarbonate or calcium hydroxide, and 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 #9. Store with inorganic acids.

Store in a cool, dry place. Store in a dedicated acid cabinet; if an acid cabinet is not available, store in Flinn Saf-Cube. Air and light sensitive. Only use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TLV-C 2 ppm, PEL 3 ppm, Immediately Dangerous to Life and Health 30 ppm (ACGIH, OSHA, NIOSH).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless to pale yellow or pink liquid with a suffocating odor like bromine.
Solubility: Soluble in water and alcohol.
Formula: HBr
Formula weight: 80.92

Boiling point: 126 °C
pH: acidic
Specific gravity: 1.5
Vapor density: 2.8 (Air=1)

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with bases, oxidizers, ammonia, ozone, and fluorine. Corrodes metal, including steel. Produces heat when diluted with water. Always add acid to water, never the reverse.
Shelf life: Fair, if stored safely.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Poison, corrosive.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: N.A.
IHL-RAT LC₅₀: 2858 ppm/1H
SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding.
Flinn Suggested Disposal Method #24b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Hydrobromic acid solution
Hazard class: 8, Corrosive
UN number: UN1788
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (233-113-0), RCRA code D002.

SECTION 16 — OTHER INFORMATION

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