

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 394.00

Revision Date: February 24, 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).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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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)

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**SECTION 10 — STABILITY AND REACTIVITY**

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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.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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

ORL-RAT LD<sub>50</sub>: N.A.  
IHL-RAT LC<sub>50</sub>: 2858 ppm/1H  
SKN-RBT LD<sub>50</sub>: N.A.

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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Data not yet available.

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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 #24b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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

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**SECTION 15 — REGULATORY INFORMATION**

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

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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.**