# FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

**SDS #:** 394.00

DANGER

**Revision Date:** December 13, 2013

# 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 Signal Word

Pictograms

# **SECTION 2 — HAZARDS IDENTIFICATION**

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe mist, vapors or spray (P260).

Hazard class: Acute toxicity, inhalation (Category 3). Toxic if inhaled (H331). Avoid breathing mist, vapors or spray (P261).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Hydrobromic acid	10035-10-6	HBr	80.91	47-49%
Water	7732-18-5	$H_2O$	18.00	51-53%

#### **SECTION 4 — FIRST AID MEASURES**

Call a POISON CENTER or physician if you feel unwell (P312).

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 contact lenses if present and easy to do. Continue rinsing (P305+P351+P338).

If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

#### **SECTION 5 — FIRE FIGHTING MEASURES**

Nonflammable, noncombustible solution. **In case of fire:** Use a tri-class dry chemical fire extinguisher.

NFPA CODE

H-3

F-0

R-0

## **SECTION 6 — ACCIDENTAL RELEASE MEASURES**

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.

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#### **SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Inorganic #9. Store with acids, except nitric acid.

Air and light sensitive. Store in a dedicated acid cabinet; if an acid cabinet is not available, Store in a Flinn Chem-Saf<sup>TM</sup> bag, in a Flinn Saf-Stor<sup>TM</sup> can in a Flinn Saf-Cube<sup>TM</sup>. Place in a cool, dry place away from light. Keep container tightly closed (P233). Use only in a hood or in a well-ventilated area (P271).

# SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Use only in a hood or in a well-ventilated area (P271).

Exposure guidelines: PEL 3 ppm (OSHA), Ceiling 2 ppm (ACGIH), Immediately dangerous 30 ppm (IDLH-NIOSH)

# SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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

odor.

Soluble: Water and alcohol

Boiling point: 126 °C

pH: acidic

Specific gravity: 1.5 Vapor density: 2.8 (Air=1)

Technical Note: Concentrated HBr is 9M

#### **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. See Section 7 for further information.

# **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Poison, corrosive. ORL-RAT LD<sub>50</sub>: N.A.

Chronic effects: N.A. IHL-RAT LC $_{50}$ : 2858 ppm/1H Target organs: N.A. SKN-RBT LD $_{50}$ : 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.