

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 506.00

Revision Date: December 13, 2013

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Mercury

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Corrosive to metals (Category 1). May be corrosive to metals (H290).

Hazard class: Acute toxicity, inhalation (Category 1). Fatal if inhaled (H330). Do not breathe fumes (P260).

Hazard class: Reproductive toxicity (Category 1B). May damage fertility of the unborn child (H360). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).

Hazard class: Specific target organ toxicity, repeated exposure (Category 1). Causes damage to the kidneys and central nervous system through prolonged or repeated exposure if inhaled or absorbed through the skin (H372). Do not eat, drink or smoke when using this product (P270).

Hazard class: Hazardous to the aquatic environment, acute and chronic toxicity (Category 1). Very toxic to aquatic life with long lasting effects (H410).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|----------------|------------|---------|----------------|---------------|
| Mercury        | 7439-97-6  | Hg      | 200.59         |               |

Synonyms: Quicksilver, Hydragyrum

### SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P330).

**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:** Wash with plenty of water.

**If swallowed:** Immediately call a POISON CENTER or physician if you feel unwell (P301 + P310).

### SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible liquid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Absorb spills to prevent material damage (P390). Spillage may be a toxic hazard due to proliferation of droplets. Cleanup requires special care. Immediately ventilate the area and clean up large droplets. Transfer to a safe container and use zinc dust to amalgamate remaining mercury. Never use a brush, broom or vacuum to clean up mercury as this will disperse toxic mercury.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Keep only in original container (P234). Keep container tightly closed (P233). Enclose glass or plastic container with mercury in a Flinn Chem-Saf™ bag to prevent spills. Dispense mercury in a plastic tray to contain spills. 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. Wash thoroughly after handling (P264). Use only in a hood or in a well ventilated area (P271). Wear respiratory protection (P284).

Exposure guidelines: PEL 0.1 mg/m<sup>3</sup> (OSHA), TLV 0.025 mg/m<sup>3</sup> (ACGIH) Readily absorbed through the skin.

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Silver color, very heavy liquid metal. Odorless.

Boiling point: 356.72 °C

Soluble: Soluble in liquids and nitric acid. Insoluble in water, alcohol, and ether.

Melting point: -38.85 °C

Specific gravity: 13.59

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid ammonia, aluminum, potassium, lithium, sodium, bromine, halogens, sulfuric acid, oxidizing agents, and nitric acid.

Shelf life: Good, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Corrosive bronchitis and CNS effects such as tremors and excitability.

ORL-MAN TDLo: 43 mg/kg

Chronic effects: Tremors, depression and delirium; thyroid enlargement, tachycardia, and hematologic changes.

IHL-RAT LCL<sub>o</sub>: 0.15 mg/m<sup>3</sup>

Target organs: Respiratory system, CNS, kidneys, eyes

SKN-RBT LD<sub>50</sub>: N.A.

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

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Very toxic to aquatic life with long lasting effects.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.

Returning mercury to a mercury recycler is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Mercury. Hazard class: 8, Corrosive. UN number: UN2809.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed. EINECS-listed, RCRA U151.

---

**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).

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