

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 698.00

Revision Date: September 28, 2011

---

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

#### Sodium

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

---

Sodium

CAS#: 7440-23-5

---

### SECTION 3 — HAZARDS IDENTIFICATION

---

Soft, silvery-white solid. Wax-like at room temperature. Oxidizes rapidly in air.  
Highly corrosive solid, avoid all body tissue contact. Will severely burn skin, eyes, or internal tissues.  
Reacts violently with water releasing hydrogen gas, which will ignite and explode in air.

#### FLINN AT-A-GLANCE

Health-3  
Flammability-3  
Reactivity-3  
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: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

---

### SECTION 5 — FIRE FIGHTING MEASURES

---

Flammable solid. Autoignition Temperature: 120-125 °C Severe fire risk. May ignite spontaneously in moist air. Reacts explosively with water producing very dangerous hydrogen gas.

**Fire Fighting Instructions:** Use Class D, Met-L-X, or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water. Firefighters should wear PPE and SCBA with full facepiece operating in positive mode.

#### NFPA CODE

H-3  
F-3  
R-2  
No Water

---

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

---

Restrict unprotected personnel from area. Remove all ignition sources and water. Pick up pieces of sodium and place in a container with clean, dry oil (kerosene or mineral oil). Ventilate area and wash site after material has been picked up. See Sections 8 and 13 for further information.

---

### SECTION 7 — HANDLING AND STORAGE

---

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.  
Store in a PVC coated glass bottle, under dry oil, and inside a Flinn Saf-Stor can.  
Sodium metal must always be stored under dry oil to prevent contact with moist air.

---

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

---

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and 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: PEL 15 mg/m<sup>3</sup> (as total dust) (OSHA)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Soft, silvery-white solid. Wax-like at room temperature.  
Oxidizes rapidly in air.  
Formula: Na  
Formula weight: 22.990

Boiling point: 883 °C  
Melting point: 97.794 °C  
Specific gravity: 0.97

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Decomposes water on contact evolving explosive hydrogen and producing a solution of corrosive sodium hydroxide. Avoid acids and oxidizing agents.  
Shelf life: Good, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Corrosive  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.  
IHL-RAT LC<sub>50</sub>: N.A.  
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**

---

Aquatic toxicity: Sodium hydroxide (reaction product with water)  
48-hour TLM, bluegill sunfish: 99 mg/L; 96-hour TLM, mosquito fish: 125mg/L

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #3 is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Sodium  
Hazard class: 4.3, Dangerous when wet  
UN number: UN1428  
N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (231-132-9), RCRA code D001, D002, D003.

---

**SECTION 16 — OTHER INFORMATION**

---

This Material Safety Data Sheet (MSDS) 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.**