

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 698.00

Revision Date: September 27, 2010

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Sodium

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Sodium

CAS#: 7440-23-5

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### SECTION 3 — HAZARDS IDENTIFICATION

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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

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### SECTION 4 — FIRST AID MEASURES

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Call a physician, 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: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give no more than 1-2 cups of water for dilution. Do not induce vomiting. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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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

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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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.

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### SECTION 7 — HANDLING AND STORAGE

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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.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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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: TWA 15 mg/m<sup>3</sup> (as total dust) (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Soft, silvery-white solid. Wax-like at room temperature.

Oxidizes rapidly in air.

Formula: Na

Formula Weight: 22.9896

Specific Gravity: 0.9674

Melting Point: 97.82 C

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**SECTION 10 — STABILITY AND REACTIVITY**

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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 safely.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD50: N.A.

IHL-RAT LC50: N.A.

SKN-RBT LD50: 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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Aquatic toxicity: Sodium hydroxide (reaction product with water)

48-hour TLM, bluegill sunfish: 99 mg/L; 96-hour TLM, mosquito fish: 125mg/L

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please consult with state and local regulations.

Flinn Suggested Disposal Method #3 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping Name: Sodium

Hazard Class: 4.3, Dangerous when wet

UN Number: UN1428

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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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.**