

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 734.00

Revision Date: September 16, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sodium Hydroxide

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 Hydroxide

CAS#: 1310-73-2

SECTION 3 — HAZARDS IDENTIFICATION

White pellets or flakes. Odorless.

Highly toxic by ingestion, inhalation, or skin absorption. Extremely corrosive to body tissues.

Causes severe eye burns. Avoid all body tissue contact.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-2

Exposure-3

Storage-0

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. Give large quantities of water for dilution. If vomiting occurs, ensure vomit is not aspirated into the lungs. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Hot molten sodium hydroxide can react violently with water. Contact with aluminum, tin, and zinc liberates hydrogen gas. When heated to decomposition, emits toxic fumes of Na_2O .

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive mode.

NFPA CODE

H-3

F-0

R-1

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates.

Store in a cool dry place. Absorbs CO_2 and water from air, keep container tightly closed. 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 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 2 mg/m^3 , Ceiling 2 mg/m^3 (OSHA, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White pellets or flakes. Absorbs CO₂ and water from air. Boiling point: 1388 °C
Odorless. Melting point: 323 °C
Solubility: Soluble in water, alcohol and glycerol. pH: basic
Formula: NaOH Specific gravity: 2.13
Formula weight: 39.997

SECTION 10 — STABILITY AND REACTIVITY

Contact with aluminum, tin, and zinc liberates, hydrogen gas. Avoid contact with strong oxidizers, strong acids, organic material, chlorinated solvents.
Shelf life: Good, if stored properly

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive ORL-RAT LD₅₀: N.A.
Chronic effects: N.A. IHL-RAT LC₅₀: N.A.
Target organs: N.A. SKN-RBT LD₅₀: 50 mg/24H

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 #10 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Sodium hydroxide, solid
Hazard class: 8, Corrosive
UN number: UN1823
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (215-185-5), RCRA code 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.**