

Sodium Hydroxide Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sodium Hydroxide

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-10325

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



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|------------------|------------|---------|----------------|---------------|
| Sodium hydroxide | 1310-73-2 | NaOH | 39.997 | |

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air 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 so. Continue rinsing (P305+P351+P338). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363).

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

SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible solid.

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

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

NFPA Code

H-3

F-0

R-1

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. Absorb spills to prevent material damage (P390). 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. Absorbs CO₂ and water from air. Keep container tightly closed. Keep only in original container (P234).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Exposure guidelines: PEL 2 mg/m³ (OSHA); Ceiling 2 mg/m³ (ACGIH); IDLH 10 mg/m³

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|------------------------|
| White pellets or flakes. Absorbs CO ₂ and water from air. | Boiling point: 1388 °C |
| Odorless. | Melting point: 323 °C |
| Soluble: Water and alcohol | pH: basic |
| | Specific gravity: 2.13 |

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 kept tightly closed. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

| | |
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| Acute effects: Eye and skin burns. Mucous membrane irritant. pneumonitis. | ORL-RBT LD ₀₁ : 500 mg/kg |
| Chronic effects: N.A. | IHL-RAT LC ₅₀ : N.A. |
| Target organs: Eyes, skin, respiratory system. | SKN-RBT LD ₅₀ : 50 mg/24H |

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.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (215-185-5), RCRA code D002, D003.

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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

Revision Date: March 25, 2014
