

FLINN SCIENTIFIC

SDS #: 712.5

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Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sodium Borohydride

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-10295

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Substances and mixtures which, in contact with water, emit flammable gases (Category 1). In contact with water releases flammable gases which may ignite spontaneously (H260). Handle under inert gas. Protect from moisture (P231+P232). Keep away from any possible contact with water, because of violent reaction and possible flash fire (P223).



Hazard class: Acute toxicity, oral (Category 3). Toxic if swallowed (H301). Do not eat, drink or smoke when using this product (P270).



Hazard class: Acute toxicity, dermal (Category 3). Toxic in contact with skin (H311).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

Hazard class: Acute toxicity, inhalation (Category 3). Toxic if inhaled (H331). Avoid breathing dust or fumes (P261).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Sodium borohydride	16940-66-2	BH ₄ Na	37.8326	
Synonyms: Sodium tetrahydroborate				

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+P340).

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:** Brush off loose particles from skin (P335). Remove immediately all contaminated clothing (P361). Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth.

Immediately call a POISON CENTER or physician (P301+P310+P330).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

Flammable limits: Lower: 3.02%

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher. Do not use water, carbon dioxide, wet chemical or halocarbon fire extinguishers.

NFPA Code

H-3

F-4

R-2

No water

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Reacts with violently with water. Wipe up dust with a DRY paper towel to avoid generating dust. Place in a sealed bag or container and dispose. 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 #1. Store with metals and metal hydrides.

Store in a cool, dry place. Keep container tightly closed (P233). Use only in a hood or in a well ventilated area (P271).

NO WATER!

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Use only in a hood or in a well ventilated area (P271).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, granular solid. Odorless.

Melting point: 400 °C (decomposes)

Reacts violently with water.

Specific gravity: 1.074

SECTION 10 — STABILITY AND REACTIVITY

Avoid water, moisture, heat, and ignition sources. Reacts with water, active metals, oxidizing agents, acids, amines, and alcohols. Shelf life: Poor.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, mucous membrane, upper respiratory and gastrointestinal system corrosion and irritation. Readily absorbed through the skin. Damage may occur without sensation or pain.

ORL-RAT LD₅₀: 162 mg/kg

IHL-RAT LC₅₀: 36 mg/m³

SKN-RBT LD₅₀: 230 mg/kg

Chronic effects: N.A.

Target organs: All body tissues on contact.

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 #26c is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Sodium borohydride. Hazard class: 4.3. UN number: UN1426. Packing Group: I

SECTION 15 — REGULATORY INFORMATION

TSCA, EINECS listed.

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.

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