

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Catalog #: 66298, 66298-1, 66298-2 and 66298-3
Product Name: Sodium borohydride
CAS No.: 16940-66-2

Company Identification

Cepharm Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

GHS Classification

Substances and Mixtures Which, In Contact with Water, Emit Flammable Gases (Category 1)
Acute toxicity, oral (Category 3)
Acute toxicity, dermal (Category 3)
Skin corrosion/irritation (Category 1B)
Serious eye damage/eye irritation (Category 1)

GHS Label elements, including precautionary statements



Pictograms

Signal Word Danger

Hazard Statement(s)

H260	In contact with water releases flammable gases which may ignite spontaneously
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
EUH014	Reacts violently with water

Precautionary Statement(s)

P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231	Handle under inert gas.
P232	Protect from moisture.
P310	Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition / Information on Ingredients

Synonyms: Sodium tetrahydroborate
Formula: NaBH₄
Molecular Weight: 37.83 g/mol

Component	CAS-No	Concentration
Sodium borohydride	16940-66-2	98 %

SECTION 4: First Aid Measures

In case of eye contact

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

In case of skin contact

Wash thoroughly with soap and plenty of water. Seek medical attention.

If inhaled

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

If swallowed

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

SECTION 5: Firefighting Measures

Suitable extinguishing media

Use carbon dioxide, dry chemical powder, alcohol resistant or polymer foam.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product

Emits toxic fumes under fire conditions.

SECTION 6: Accidental Release Measures

Personal precautions

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

Environmental precautions

Prevent further leakage if safe to do so.

Methods and materials for containment and clean up

Absorb spills on sand or vermiculite and place in closed container for disposal.

SECTION 7: Handling & Storage

Precautions for safe handling

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling. Reacts violently with water.

Precautions for safe storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

SECTION 8: Exposure Controls / Personal Protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection

Avoid all direct contact with product.

Wear chemical resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

Respiratory protection

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

SECTION 9: Physical and Chemical Properties

Appearance	White crystal granular
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	no data available
Boiling Point	no data available
Flash Point	no data available
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	1.074
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Refractive Index	no data available

SECTION 10: Stability & Reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts violently with water

Conditions to avoid no data available

Incompatible materials

Strong oxidizing agents, strong acids, water, and chemically active metals.

Hazardous decomposition products

May evolve boron oxides, and nitrogen oxides.

SECTION 11: Toxicological Information

Acute toxicity

Oral LD50

Rat - 162 mg/kg

Dermal LD50

Rabbit - 230 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage

Serious eye damage/eye irritation Causes serious eye damage

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity no data available

Reproductive toxicity no data available

STOT- single exposure no data available

STOT- repeated exposure
no data available

Aspiration hazard no data available

Exposure Routes

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Signs and Symptoms of Exposure

Spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting.

Additional Information RTECS: ED3325000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

SECTION 12: Ecological Information

Toxicity

Toxicity to fish:

Mortality LC50 - *Gambusia affinis* (Mosquito fish) - 5,600 mg/l - 96 h

Persistence and degradability no data available

Bio-accumulative potential no data available

Mobility in soil no data available

PBT and vPvB assessment

no data available

Other adverse effects no data available

SECTION 13: Disposal Considerations

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

SECTION 14: Transport Information

DOT

Sodium borohydride

4.3

UN1426 I

IMDG

Sodium borohydride

4.3

UN1426 I

EMS- No: F-G, S-O

Marine Pollutant: No

IATA

Sodium borohydride

4.3

UN1426 I

IATA Passenger: Forbidden for transport

SECTION 15: Regulatory Information

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

New Jersey Right to Know Components

This product contains a chemical on the New Jersey Right to Know Components List.

CAS

Sodium Borohydride

16940-66-2

California Prop. 65 Components

This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

SECTION 16: Other Information

Revision Date: 12/19/2018

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.