



# SAFETY DATA SHEET

Creation Date 29-Jan-2010

Revision Date 26-Dec-2014

Revision Number 1

## 1. Identification

**Product Name** Sodium borohydride

**Cat No. :** S678-10; S678-25

**Synonyms** SBH; Sodium tetrahydroborate (Powder)

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**  
Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number**  
CHEMTREC- , Inside the USA: 800-424-9300  
CHEMTREC-

## 2. Hazard(s) identification

### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### **Label Elements**

**Signal Word**  
Danger

### **Hazard Statements**

In contact with water releases flammable gases which may ignite spontaneously

Toxic if swallowed  
Causes severe skin burns and eye damage  
May damage fertility or the unborn child  
May cause respiratory irritation  
May cause drowsiness or dizziness



**Precautionary Statements**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep away from any possible contact with water, because of violent reaction and possible flash fire  
Handle under inert gas. Protect from moisture

**Response**

<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Most important symptoms/effects</b>	Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

**Unsuitable Extinguishing Media** DO NOT USE WATER

**Flash Point** No information available  
**Method -** No information available

**Autoignition Temperature** 220 °C / 428 °F

### Explosion Limits

**Upper** No data available  
**Lower** 3.02 vol %  
**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

Corrosive Material. Reacts violently with water. Contact with water liberates extremely flammable gases. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

### Hazardous Combustion Products

Oxides of boron Sodium oxides Hydrogen Thermal decomposition can lead to release of irritating gases and vapors

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

**Health**  
3

**Flammability**  
1

**Instability**  
2

**Physical hazards**  
W

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

**Environmental Precautions** Avoid release to the environment.

**Methods for Containment and Clean Up** Do not expose spill to water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

## 7. Handling and storage

**Handling** Use only under a chemical fume hood. Wear personal protective equipment. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not breathe vapors/dust. Do not allow contact with water.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from water. Do not store in aluminum containers.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits

**Product Information****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium borohydride	57 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	Not listed

**Toxicologically Synergistic Products**

No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Irritation**

Causes burns by all exposure routes

**Sensitization**

No information available

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium borohydride	16940-66-2	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Teratogenicity**

No information available.

**STOT - single exposure**

Respiratory system Central nervous system (CNS)

**STOT - repeated exposure**

None known

**Aspiration hazard**

No information available

**Symptoms / effects,both acute and delayed**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information**

No information available

**Other Adverse Effects**

See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

<b>Packing Group</b>	I
<b>IATA</b>	
<b>UN-No</b>	UN1426
<b>Proper Shipping Name</b>	Sodium borohydride
<b>Hazard Class</b>	4.3
<b>Packing Group</b>	I
<b>IMDG/IMO</b>	
<b>UN-No</b>	UN1426
<b>Proper Shipping Name</b>	Sodium borohydride
<b>Hazard Class</b>	4.3
<b>Packing Group</b>	I

## 15. Regulatory information

### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sodium borohydride	X	X	-	241-004-4	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

DOT Severe Marine Pollutant            N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade**                            Moderate risk, Grade 2