

## Material Safety Data Sheet

Version 4.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sodium hydride

Product Number : 452912

Brand : Aldrich

Company : Sigma-Aldrich Canada, Ltd  
2149 Winston Park Drive  
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CANADA

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2. HAZARDS IDENTIFICATION

## Emergency Overview

## WHMIS Classification

B6 Reactive Flammable Material

D2B

Water Reactive

Moderate eye irritant

## GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H260 In contact with water releases flammable gases which may ignite spontaneously.

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231 + P232 Handle under inert gas. Protect from moisture.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370 + P378 In case of fire: Use carbon dioxide for extinction.

## HMIS Classification

Health hazard: 2

Flammability: 3

Physical hazards: 2

## Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : HNa

CAS-No.	EC-No.	Index-No.	Concentration
<b>Paraffin oils</b>			
8012-95-1	232-384-2	-	>= 35 - <= 45 %
<b>Sodium hydride</b>			
7646-69-7	231-587-3	001-003-00-X	>= 55 - <= 65 %

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#### 4. FIRST AID MEASURES

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>) Dry powder

##### **Extinguishing media which shall not be used for safety reasons**

Water

##### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

##### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

##### **Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Do not flush with water. Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

##### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

##### **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage.

Keep in a dry place. Handle and store under inert gas. Keep in a dry place.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### **Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Paraffin oils	8012-95-1	TWAE V	5 mg/m3	2005-02-03	Canada. Ontario OELs
		STEV	10 mg/m3	2005-02-03	Canada. Ontario OELs
		TWA	5 mg/m3	2004-04-30	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	10 mg/m3	2004-04-30	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	5 mg/m3	2000-01-12	Canada. Quebec OELs
		STEL	10 mg/m3	2000-01-12	Canada. Quebec OELs
		TWAE V	5 mg/m3	2005-02-03	Canada. Ontario OELs
		STEV	10 mg/m3	2005-02-03	Canada. Ontario OELs

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Safety glasses with side-shields conforming to EN166

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	powder
Colour	light grey, off-white

### Safety data

pH	no data available
Melting point	800 °C (1,472 °F) - dec.
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	0.920 g/cm3 at 20 °C (68 °F)
Water solubility	no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Heat, flames and sparks. Exposure to moisture.

### Materials to avoid

Alcohols, Carbon dioxide (CO<sub>2</sub>)

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides

Reacts with water to form: - Hydrogen gas

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

Eyes: no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure (GHS)

no data available

### Specific target organ toxicity - repeated exposure (GHS)

no data available

### Aspiration hazard

no data available

### Potential health effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

### Additional Information

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## 12. ECOLOGICAL INFORMATION

### Toxicity

no data available

### Persistence and degradability

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****DOT (US)**

UN-Number: 1427 Class: 4.3 Packing group: I  
Proper shipping name: Sodium hydride  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 1427 Class: 4.3 Packing group: I EMS-No: F-G, S-O  
Proper shipping name: SODIUM HYDRIDE  
Marine pollutant: No

**IATA**

UN-Number: 1427 Class: 4.3 Packing group: I  
Proper shipping name: Sodium hydride  
IATA Passenger: Not permitted for transport

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**15. REGULATORY INFORMATION****DSL Status**

All components of this product are on the Canadian DSL list.

**WHMIS Classification**

B6	Reactive Flammable Material	Water Reactive
D2B		Moderate eye irritant

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**16. OTHER INFORMATION****Further information**

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