

**Sodium Bifluoride****SECTION 1. IDENTIFICATION**

<b>Product Identifier</b>	Sodium Bifluoride
<b>Other Means of Identification</b>	Hydrogen sodium fluoride, Sodium difluoride, Sodium hydrogen fluoride
<b>Product Code(s)</b>	SO1610
<b>Product Family</b>	Organic solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0645

**SECTION 2. HAZARD IDENTIFICATION****Classification**

Acute toxicity (Oral) - Category 3; Skin corrosion - Category 1B; Serious eye damage - Category 1

**Label Elements**

Signal Word:  
Danger

**Hazard Statement(s):**

Toxic if swallowed.  
Causes severe skin burns and eye damage.

**Precautionary Statement(s):**

Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash hands and skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

IF SWALLOWED: Immediately call a POISON CENTRE/doctor/  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN: Wash with plenty of water/  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a POISON CENTRE or doctor.  
Get medical advice or attention if you feel unwell.

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Storage:  
Store locked up.

Disposal:  
Dispose of contents and container in accordance with local, regional, national and international regulations.

**Other Hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance:

Chemical Name	CAS No.	%	Other Identifiers
Sodium bifluoride	1333-83-1	> 98	Hydrogen sodium fluoride, Sodium difluoride, Sodium hydrogen fluoride

**SECTION 4. FIRST-AID MEASURES**

**First-aid Measures**

**Inhalation**

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

**Skin Contact**

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Immediately call a Poison Centre or doctor.

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

**Ingestion**

Rinse mouth with water. Do not induce vomiting. Immediately call a Poison Centre or doctor.

**First-aid Comments**

All first aid procedures should be periodically reviewed by a doctor familiar with the material and its condition of use in the workplace. Some of the first-aid procedures recommended here require advanced first-aid training.

**Most Important Symptoms and Effects, Acute and Delayed**

If in eyes: may cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

**Immediate Medical Attention and Special Treatment**

**Special Instructions**

General advice

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

**SECTION 5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Use water to keep non-leaking, fire-exposed containers cool.

**Unsuitable Extinguishing Media**

None known.

**Specific Hazards Arising from the Product**

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Does not burn. Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: corrosive hydrogen fluoride.

#### **Special Protective Equipment and Precautions for Fire-fighters**

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

### **Methods and Materials for Containment and Cleaning Up**

Avoid generating dust. Stop or reduce leak if safe to do so. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Flush spill area. Dike and recover contaminated water for appropriate disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Avoid generating dusts. Only use where there is adequate ventilation. Wear personal protective equipment to avoid direct contact with this chemical. Never add water to a corrosive. Always add corrosives slowly to COLD water. Prevent accidental contact with incompatible chemicals. Avoid release to the environment. Keep containers tightly closed when not in use or empty. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

### **Conditions for Safe Storage**

Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in the original, labelled, shipping container. Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity).

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Sodium bifluoride	2.5 mg/m <sup>3</sup> A4		Not established			

A4 = Not classifiable as a human carcinogen.

### **Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

#### **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.

No specific guidelines are available. Contact chemical manufacturer/supplier for advice.

#### **Respiratory Protection**

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Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	White crystalline powder.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	Not available
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not applicable
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	Will not burn.
<b>Upper/Lower Flammability or Explosive Limit</b>	Not applicable (upper); Not applicable (lower)
<b>Vapour Pressure</b>	Not applicable
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	2.08
<b>Solubility</b>	Moderately soluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	> 160 °C (320 °F)
<b>Viscosity</b>	Not available (kinematic); Not applicable (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

None known.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

High temperatures. Generation of dust. Temperatures above 160.0 °C (320.0 °F)

### Incompatible Materials

None known.

### Hazardous Decomposition Products

Corrosive hydrogen fluoride.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
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Sodium bifluoride	Not available	80 mg/kg (rat)	Not available
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**Skin Corrosion/Irritation**

There is limited evidence of skin corrosion.

**Serious Eye Damage/Irritation**

Causes serious eye damage based on skin corrosion information.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

No information was located.

**Ingestion**

Harmful.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

**Respiratory and/or Skin Sensitization**

No information was located.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Sodium bifluoride	Not evaluated	A4	Not Listed	Not Listed

A4 – Not classifiable as a human carcinogen.

**Reproductive Toxicity**

**Development of Offspring**

No information was located.

**Sexual Function and Fertility**

No information was located.

**Effects on or via Lactation**

No information was located.

**Germ Cell Mutagenicity**

No information was located.

**Interactive Effects**

No information was located.

**SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

**SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN2439	SODIUM HYDROGEN DIFLUORIDE	8	II
Canadian TDG	UN2439	SODIUM HYDROGEN DIFLUORIDE	8	II

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**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

#### USA

**Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

**Date of Preparation** July 29, 2016

**Date of Last Revision** August 10, 2016

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.