

## Boric Acid

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Boric Acid
<b>Other Means of Identification</b>	Boracic Acid, Boron Trihydroxide
<b>Product Code(s)</b>	BO4010, BO4015, BO4020, BO4025, BO4030, BO4035, BO4045
<b>Product Family</b>	Inorganic Solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer</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 CHEMTREC, 800-424-9300, 24 Hours
<b>SDS No.</b>	0077

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Acute toxicity (Oral) - Category 5; Reproductive toxicity - Category 1B

#### Label Elements



Signal Word:  
Danger

Hazard Statement(s):  
May damage the unborn child.

Precautionary Statement(s):  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF exposed or concerned: Get medical advice/attention.  
Store locked up.  
Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Boric acid	10043-35-3	>99	Boracic Acid, Orthoboric Acid

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

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

Avoid direct contact. Wear chemical protective clothing if necessary. Immediately rinse with lukewarm, gently flowing water for 15-20 minutes.

##### Eye Contact

Immediately call a Poison Centre or doctor. Specific treatment is required. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

##### Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the Poison Centre or doctor.

##### First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

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

If inhaled: can cause severe irritation of the nose and throat. Can cause lung injury. May cause very mild irritation. May cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result. If swallowed: can cause a laxative effect. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

#### 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.

##### Unsuitable Extinguishing Media

Do not use a solid (straight) water stream as it may scatter and spread fire.

#### Specific Hazards Arising from the Product

Does not burn.

Irritating chemicals.

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

Evacuate area. Fight fire from a safe distance or a protected location. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

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

Product Identifier: Boric Acid

Date of Preparation: August 17, 2015

Page 02 of 06

Get expert advice. Emergency responders: use the personal protective equipment recommended in Section 8 of this safety data sheet. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. 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.

#### Environmental Precautions

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not allow into any sewer, on the ground or into any waterway.

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

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Contact emergency services and manufacturer/supplier for advice.

## SECTION 7. HANDLING AND STORAGE

#### Precautions for Safe Handling

Obtain special instructions before use. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Avoid heating that will increase the amount of vapours.

#### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated. Store in a closed container.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Boric acid	2 mg/m3	6 mg/m3				

#### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Exhaust directly to the outside, taking any necessary precautions for environmental protection. Provide eyewash in work area, if contact or splash hazard exists.

#### 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.

Suitable materials are: butyl rubber, neoprene rubber, nitrile rubber, Viton®.

##### Respiratory Protection

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Basic Physical and Chemical Properties

Appearance	White powder.
Odour	Not available
Odour Threshold	Not available
pH	5.1 (0.1 M solution)
Melting Point/Freezing Point	169 °C (melting); Not available (freezing)
Initial Boiling Point/Range	300 °C (572 °F)
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not available

Product Identifier: Boric Acid

Date of Preparation: August 17, 2015

Page 03 of 06

<b>Upper/Lower Flammability or Explosive Limit</b>	Not applicable (upper); Not applicable (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	Not available
<b>Solubility</b>	Moderately soluble in water; Soluble in all proportions in alcohols (e.g. ethanol).
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	100 °C
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

Sunlight. High temperatures.

### Incompatible Materials

Strong bases (e.g. sodium hydroxide).

### Hazardous Decomposition Products

Irritating chemicals.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Boric acid		2660 mg/kg (rat)	2000 mg/kg (rabbit)

LC50: No information was located.

LD50 (oral): No information was located.

LD50 (dermal): No information was located.

### Skin Corrosion/Irritation

No information was located.

### Serious Eye Damage/Irritation

No information was located.

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

#### Inhalation

Nose and throat irritation.

#### Skin Absorption

No information was located.

Product Identifier: Boric Acid

Date of Preparation: August 17, 2015

Page 04 of 06

**Ingestion**

May be harmful Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

**Aspiration Hazard**

No information was located.

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

No information was located.

**Respiratory and/or Skin Sensitization**

Not known to be a skin sensitizer.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid	Not Listed	Not Listed	Not Listed	Not Listed

**Reproductive Toxicity****Development of Offspring**

Studies in people show effects on the unborn child.

**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**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations.

**SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

**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.

Product Identifier: Boric Acid

Date of Preparation: August 17, 2015

Page 05 of 06

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Alphachem Limited

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

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**Date of Last Revision** November 27, 2015

**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.