

## Plant-Prod Boric Acid

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Plant-Prod Boric Acid
<b>Other Means of Identification</b>	12336
<b>Product Family</b>	Plant-Prod Micronutrient
<b>Recommended Use</b>	Water Soluble Fertilizer for Plants.
<b>Manufacturer/Supplier Identifier</b>	Master Plant-Prod Inc., 314 Orenda Rd. , Brampton, Ontario, Canada, L6T 1G1
<b>Emergency Phone No.</b>	CANUTEC, 1-613-996-6666, 24 Hours
<b>Date of Preparation</b>	January 12, 2018

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

#### Classification

Reproductive toxicity - Category 1B

#### Label Elements



Signal Word:

Danger

Hazard Statement(s):

H360 May damage fertility or the unborn child.

Precautionary Statement(s):

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Boric acid	10043-35-3	> 99.9	

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Move to fresh air. If breathing has stopped, trained personnel should begin rescue breathing. Call a Poison Centre or doctor.

#### Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Call a Poison Centre or doctor if you feel unwell.

#### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor.

#### Ingestion

Immediately call a Poison Centre or doctor. Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting.

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

If inhaled and/or swallowed: may be harmful. If in eyes: may cause irritation.

### Immediate Medical Attention and Special Treatment

#### Special Instructions

See first aid information above. Note to Physicians: Provide general supportive measures and treat symptomatically.

#### Medical Conditions Aggravated by Exposure

None known.

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Use flooding quantities of water or other suitable extinguishing agent.

### Specific Hazards Arising from the Product

Boric acid is not flammable, combustible, or explosive.

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

Wear SCBA and full protective clothing. Oxidizer. Prevent contact with flammable and combustible materials.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

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. Avoid dust formation.

### Environmental Precautions

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

### Methods and Materials for Containment and Cleaning Up

Contain the spill. Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

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## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not get in eyes. Do not breathe in this product. Only use where there is adequate ventilation. Avoid repeated or prolonged skin contact. Keep out of reach of children. 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: cool, dry, well-ventilated. Keep out of reach of children. Store in a closed container. Keep separate from acids, alkalis, reducing agents and combustibles.

## 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/m <sup>3</sup>	6 mg/m <sup>3</sup>				

### Appropriate Engineering Controls

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

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Skin Protection

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

#### Respiratory Protection

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	White powder. Particle Size: Not available
Odour Threshold	Not applicable
pH	5.2 (1% solution)
Melting Point/Freezing Point	169 °C (melting); Not available (freezing)
Initial Boiling Point/Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Will not burn.
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	Not available
Solubility	Not available in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

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<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not available
<b>Bulk Density</b>	801 - 961 kg/m <sup>3</sup> (50 - 60 lb/ft <sup>3</sup> )

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

Incompatible materials. Generation of dust. Heat.

### Incompatible Materials

Reducing agents.

### Hazardous Decomposition Products

Not known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; eye contact; ingestion.

### Acute Toxicity

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

### Skin Corrosion/Irritation

Not a skin irritant.

### Serious Eye Damage/Irritation

Not an eye irritant.

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

#### Inhalation

May cause nose and throat irritation, lung injury.

#### Skin Absorption

Not absorbed through skin.

#### Ingestion

If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

### Aspiration Hazard

No information was located.

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid		A4		

Not known to cause cancer.

### Reproductive Toxicity

#### Development of Offspring

May harm the unborn child.

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### Sexual Function and Fertility

May cause effects on sexual function and/or fertility. A human study of occupationally exposed Borate worker population showed no adverse reproductive effects. Animal studies indicate that Boric Acid reduces or inhibits sperm production, causes testicular atrophy, and, when given to pregnant animals during gestation, may cause developmental changes. These feed studies were conducted under chronic exposure conditions leading to doses many times in excess of those that could occur through inhalation of dust in the occupational setting.

### 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

### Ecotoxicity

#### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Boric acid	11100 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)			

### Persistence and Degradability

No information was located.

### Bioaccumulative Potential

No information was located.

### Mobility in Soil

No information was located.

### Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## SECTION 14. TRANSPORT INFORMATION

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

All ingredients are listed on the DSL.

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## SECTION 16. OTHER INFORMATION

**SDS Prepared By** MPPI Technical Department

**Phone No.** 905-793-8000

**Date of Preparation** January 12, 2018

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** To the best of our knowledge, the information contained herein is accurate. However, neither Master Plant-Prod Inc., nor any of its distributors, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of any product is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.

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