

## Plant-Prod 21-0-21

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Plant-Prod 21-0-21
<b>Other Means of Identification</b>	12236
<b>Product Family</b>	Plant-Prod
<b>Recommended Use</b>	Water Soluble Fertilizer for Plants.
<b>Restrictions on Use</b>	Not applicable.
<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>	February 23, 2017

### SECTION 2. HAZARD IDENTIFICATION

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

#### Classification

Serious eye damage - Category 1; Reproductive toxicity - Category 1

#### Label Elements



Signal Word:

Danger

Hazard Statement(s):

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child.

Precautionary Statement(s):

Prevention:

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

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

Response:

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

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

P310 Immediately call a POISON CENTRE or doctor.

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

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Potassium sulfate	7778-80-5	7	
Boric acid	10043-35-3	< 1	

## 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. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a Poison Centre or doctor.

#### Ingestion

For large amounts 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

May cause mild irritation.

### Immediate Medical Attention and Special Treatment

#### Special Instructions

Not applicable.

#### 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.

#### Unsuitable Extinguishing Media

DO NOT use water jet.

### Specific Hazards Arising from the Product

Mild oxidizer. May intensify fire.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; corrosive, flammable ammonia; magnesium oxides; corrosive sulfur oxides.

### 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

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Use the personal protective equipment recommended in Section 8 of this safety data sheet. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources. Use grounded, explosion-proof equipment.

#### 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 contact with combustibles, organics and ignition sources. Sweep up spilled material and use or dispose of in approved manner.

## SECTION 7. HANDLING AND STORAGE

#### Precautions for Safe Handling

Avoid repeated or prolonged skin contact. Do not get in eyes. Only use where there is adequate ventilation.

#### 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. Provide eyewash and safety shower if contact or splash hazard exists.

#### Individual Protection Measures

##### Eye/Face Protection

Wear chemical safety goggles.

##### Skin Protection

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

##### Respiratory Protection

Use an appropriate respirator or dust mask.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Basic Physical and Chemical Properties

Particle Size	Not available
Odour Threshold	Not applicable
pH	Not available
Melting Point/Freezing Point	Not available (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

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<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not available
<b>Bulk Density</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use. May intensify fire.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

Heat. Water, moisture or humidity. Open flames, sparks, static discharge, heat and other ignition sources.

### Incompatible Materials

Strong acids, strong alkaloids, oxidizers, organics.

### Hazardous Decomposition Products

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides; corrosive phosphorous oxides; potassium oxides; magnesium oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

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

### Skin Corrosion/Irritation

Irritation could occur with prolonged exposure to dry fertilizer or fertilizer solution.

### Serious Eye Damage/Irritation

May cause serious eye damage based on information for closely related materials. (Potassium sulfate)

### 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.

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

At high concentrations irritation of the respiratory system. May cause respiratory tract injury.

### Respiratory and/or Skin Sensitization

Mild skin sensitizer.

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid		A4		

Not known to cause cancer. Nitrilotriacetic Acid (NTA) and its salts were determined to be "possibly carcinogenic to humans by IARC, a compound which "may reasonably be anticipated to be a carcinogen" by NTP and a "select carcinogen" by OSHA.

### Reproductive Toxicity

#### Development of Offspring

Boric acid may cause birth defects, based on animal data.

#### Sexual Function and Fertility

Boric acid may impair male fertility, based on animal data.

#### 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
Potassium sulfate	680 mg/L (Pimephales promelas (fathead minnow); 96-hour)			
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.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** MPPI Technical Department

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

**Date of Preparation** February 23, 2017

**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).

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