

## Plant-Prod Solutions 15-3-15

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Plant-Prod Solutions 15-3-15
<b>Other Means of Identification</b>	12140
<b>Product Family</b>	Plant-Prod Solutions
<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, Canada
<b>Emergency Phone No.</b>	CANUTEC, 1-613-996-6666, 24 Hours
<b>Date of Preparation</b>	January 29, 2016

### SECTION 2. HAZARD IDENTIFICATION

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

#### Classification

Serious eye damage - Category 1; Carcinogenicity - Category 2; Reproductive toxicity - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

#### Label Elements



Signal Word:

Danger

Hazard Statement(s):

H318 Causes serious eye damage.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

P201 Obtain special instructions before use.

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

P260 Do not breathe dust.

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/attention.

P310 Immediately call a POISON CENTRE/doctor/

P314 Get medical advice/attention if you feel unwell.

Product Identifier: Plant-Prod Solutions 15-3-15 - Ver. 1

SDS No.: 00410056

Date of Preparation: January 29, 2016

Date of Last Revision: July 16, 2019

Page 01 of 07

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	Other Names
Potassium nitrate	7757-79-1	32		
Calcium nitrate	10124-37-5	27		
Magnesium nitrate	13446-18-9	20		
Ammonium nitrate	6484-52-2	15		
Boric acid	10043-35-3	<0.15		
Nitilotriacetic acid, trisodium salt	5064-31-3	<0.20		

### 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

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

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.

##### Unsuitable Extinguishing Media

DO NOT use water jet.

Product Identifier: Plant-Prod Solutions 15-3-15 - Ver. 1

SDS No.: 00410056

Date of Preparation: January 29, 2016

Date of Last Revision: July 16, 2019

Page 02 of 07

## Specific Hazards Arising from the Product

Mild oxidizer. May intensify fire.

In a fire, the following hazardous materials may be generated: corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; calcium oxides; magnesium oxides; potassium oxides; metal 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

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

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe in this product. Do not get in eyes, on skin or on clothing. Avoid exposure during pregnancy and while nursing. Only use where there is adequate ventilation. Avoid generating dusts.

### 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
Potassium nitrate	5 mg/m <sup>3</sup>					
Ammonium nitrate	10 mg/m <sup>3</sup>		15 mg/m <sup>3</sup>			
Boric acid	2 mg/m <sup>3</sup>	6 mg/m <sup>3</sup>				
Nitritotriacetic acid, trisodium salt			15 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

When handling diluted product: wear chemical safety goggles. When handling dry concentrated product: wear protective safety glasses.

#### Skin Protection

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

#### Respiratory Protection

Use an appropriate NIOSH approved particulate respirator. Monitor dust levels within working area and ensure adequate ventilation.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	prills intermixed with granules and powder. Particle Size: Not available
<b>Odour</b>	Slight ammonia odour
<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 available
<b>Flammability (solid, gas)</b>	Will not burn.
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	Not available
<b>Solubility</b>	Not available in water
<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

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In a fire, the following hazardous materials may be generated. Corrosive, oxidizing nitrogen oxides; corrosive phosphorous oxides; potassium oxides; magnesium oxides; calcium oxides; metal oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

Product Identifier: Plant-Prod Solutions 15-3-15 - Ver. 1  
Date of Preparation: January 29, 2016  
Date of Last Revision: July 16, 2019

SDS No.: 00410056

Page 04 of 07

**Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

**Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Potassium nitrate		>2000 mg/kg (rat)	>5000 mg/kg (rat)
Calcium nitrate		302 mg/kg (rat)	
Magnesium nitrate		5400 mg/kg (rat)	
Ammonium nitrate	> 88.8 mg/L (rat)	2800 mg/kg (rat)	> 5000 mg/kg (rat)
Boric acid		2660 mg/kg	
Nitritotriacetic acid, trisodium salt		1740 mg/kg (rat)	

**Skin Corrosion/Irritation**

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

**Serious Eye Damage/Irritation**

Irritation or burn could occur if fertilizer solution is splashed in eyes or dry product contacted.

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

May cause nose and throat irritation, lung injury. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

**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**

May cause damage to organs based on information for closely related chemicals.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid		A4		
Nitritotriacetic acid, trisodium salt	Group 2B	Not Listed		Not Listed

Nitritotriacetic 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.

Product Identifier: Plant-Prod Solutions 15-3-15 - Ver. 1

SDS No.: 00410056

Date of Preparation: January 29, 2016

Date of Last Revision: July 16, 2019

Page 05 of 07

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Potassium nitrate	1378 mg/L (96-hour)	490 mg/L (Daphnia magna (water flea); 24-hour)		
Calcium nitrate	447 mg/L (Labeo boga (fresh water); 48-hour; fresh water)			
Ammonium nitrate	6000 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)	555 mg/L (Daphnia magna (water flea); 24-hour; fresh water; static)		
Boric acid	11100 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)			

#### Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Potassium nitrate				900 mg/L (Daphnia magna (water flea); 4.2 days)

#### 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

Product Identifier: Plant-Prod Solutions 15-3-15 - Ver. 1

SDS No.: 00410056

Date of Preparation: January 29, 2016

Date of Last Revision: July 16, 2019

Page 06 of 07

**Canada**

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

All ingredients are listed on the DSL.

**CEPA - National Pollutant Release Inventory (NPRI)**

No ingredients are listed in the NPRI.

**SECTION 16. OTHER INFORMATION**

**SDS Prepared By** MPPI Technical Department

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

**Date of Preparation** January 29, 2016

**Date of Last Revision** July 16, 2019

**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.