Plant-Prod Chelated Micronutrient Mix

SECTION 1. IDENTIFICATION

Product Identifier	Plant-Prod Chelated Micronutrient Mix
Other Means of Identification	10046, 10047, 12429
Product Family	Plant-Prod
Recommended Use	Water Soluble Fertilizer for Plants.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	Master Plant-Prod Inc., 314 Orenda Rd. , Brampton, Ontario, Canada, L6T 1G1
Emergency Phone No.	CANUTEC, 1-613-996-6666, 24 Hours
Date of Preparation	May 27, 2016

SECTION 2. HAZARD IDENTIFICATION

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

Classification

Eye irritation - Category 2A; Reproductive toxicity - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements

Signal Word:
Danger
Hazard Statement(s):
H319 Causes serious eye irritation.
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/fume/gas/mist/vapours/spray.
P264 Wash hands and skin thoroughly after handling.
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.
P314 Get medical advice/attention if you feel unwell.
P337 + P313 If eye irritation persists: 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

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Boric acid	10043-35-3	8	
Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	< 3	
Nitrilotriacetic acid, trisodium salt	5064-31-3	< 0.1	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If breathing has stopped, trained personnel should begin rescue breathing. Get immediate medical advice or attention.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse skin with lukewarm, gently flowing water for at least 30 minutes. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. If exposed or concerned, get medical advice or attention.

Eye Contact

Remove contact lenses, if present and easy to do. 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. Immediately call a Poison Centre or doctor. 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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

DO NOT use water jet.

Specific Hazards Arising from the Product

Does not burn. May intensify fire.
In a fire, the following hazardous materials may be generated: corrosive, oxidizing nitrogen oxides; very toxic carbon monoxide, carbon dioxide; iron oxides. boron oxide;
metal oxides.

Special Protective Equipment and Precautions for Fire-fighters

Wear SCBA and full protective clothing.
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

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Remove or isolate incompatible materials as well as other hazardous materials. Avoid dust formation. Ensure adequate ventilation.

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. Review Section 13 (Disposal Considerations) of this safety data sheet.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Prevent accidental contact with incompatible chemicals. Prevent skin contact. Do not breathe in this product. Do not get in eyes, on skin or on clothing. Do not swallow. Avoid exposure during pregnancy and while nursing. Only use where there is adequate ventilation. Avoid generating dusts. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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 the original, labelled, shipping container. Store in a closed container. Store in an area that is: cool, dry, separate from incompatible materials (see Section 10: Stability and Reactivity). Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Boric acid	2 mg/m3	6 mg/m3				
Ethylenediaminetetraacetic acid, tetrasodium salt			15 mg/m3			

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash in work area, if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Protect exposed skin using insulated gloves suitable for low temperatures, long sleeves, protective apron and trousers worn outside boots or over shoes.

Respiratory Protection

Use an appropriate respirator or dust mask, or, if handling operations generate dust, half mask with a particle filter P2 (EN 143).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	fine powder. Particle Size: Not available
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
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
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available

Other Information

Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not available
Critical Temperature	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. Open flames, sparks, static discharge, heat and other ignition sources. Water, moisture or humidity.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), strong reducing agents (e.g. hydrides).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; iron oxides; metal oxides; boron oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation.

Acute Toxicity

Chemical Name	LD50 (oral)	

Boric acid	2660 mg/kg	
Ethylenediaminetetraacetic acid, tetrasodium salt	890 mg/kg (rat)	

Skin Corrosion/Irritation

Repeated or prolonged exposure can irritate or burn the skin.

Serious Eye Damage/Irritation

May cause very mild irritation based on information for closely related chemicals.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on information for closely related materials.

Skin Absorption

Not absorbed through skin.

Ingestion

May be harmful based on information for closely related materials.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Boric acid		A4		

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

May cause effects on sexual function and/or fertility. (Boric acid)

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. Generation of waste should be avoided or minimized. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water.

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 or are not required to be listed.

CEPA - National Pollutant Release Inventory (NPRI)

No ingredients are listed in the NPRI.

USA

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

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By	MPPI Technical Department
Phone No.	905-793-8000
Date of Preparation	May 27, 2016
Date of Last Revision	October 12, 2018
Revision Indicators	The following SDS content was changed on August 25, 2016: Section 11 - Toxicological Information; LC50/LD50 values.
References	CHEMINFO database. 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.