Safety Data Sheet

BioStryke TPHenhanced (II)

SECTION 1. IDENTIFICATION

Product Identifier	BioStryke TPHenhanced (II)
Other Means of Identification	11820, 11821
Product Family	BioStryke
Recommended Use	Environmental Remediation.
Restrictions on Use	Not for human or animal use.
Manufacturer/Supplier Identifier	Master Plant-Prod Inc., 314 Orenda Rd., Brampton, Ontario, Canada, L6T 1G1, Canada
Emergency Phone No.	CANUTEC, 1-613-996-6666, 24 Hours

SECTION 2. HAZARD IDENTIFICATION

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

Classification Eye irritation - Category 2

Label Elements



 Signal Word:

 Warning

 Hazard Statement(s):

 H319
 Causes serious eye irritation.

 Precautionary Statement(s):

 Prevention:

 P264
 Wash hands and skin thoroughly after handling.

 P280
 Wear 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.

P337 + P313 If eye irritation persists: Get medical advice or attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:						
Chemical Name	CAS No.	%	Other Identifiers	Other Names		
Ammonium nitrate	6484-52-2	30-40				

Potassium nitrate	7757-79-1	10-15	
Boric acid	10043-35-3	<0.10	

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. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

Ingestion

Get medical advice or attention if you feel unwell or are concerned. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use flooding quantities of water spray or fog.

Unsuitable Extinguishing Media

DO NOT use water jet.

Specific Hazards Arising from the Product

Mild oxidizer. May intensify fire.

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides; corrosive phosphorous oxides; very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Wear SCBA and full protective clothing. Wear self-contained breathing apparatus in confined areas or when exposed to combustion products. Oxidizer. Prevent contact with flammable and combustible materials. Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

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.

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

Product Identifier: BioStryke TPHenhanced (II) - Ver. 1 Date of Preparation: Date of Last Revision: 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

	ACGI	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA	
Potassium nitrate	5 mg/m3						
Ammonium nitrate	10 mg/m3		15 mg/m3				
Boric acid	2 mg/m3	6 mg/m3					

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation and enclosure, if necessary, 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

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

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Appearance	fine powder. Particle Size: Not available
Odour	Not applicable
Odour Threshold	Not applicable
рН	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 applicable
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
Solubility	Not available in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Decomposition Temperature	Not available
Other Information	
Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use. Oxidizer. 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.

Incompatible Materials

Strong acids, strong alkaloids, oxidizers, organics.

Hazardous Decomposition Products

Corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides; corrosive phosphorous oxides; very toxic carbon monoxide, carbon dioxide; cyanuric acid.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Potassium nitrate		3750 mg/kg (rat)	
Ammonium nitrate	> 88.8 mg/L (rat)	2800 mg/kg (rat)	> 5000 mg/kg (rat)
Boric acid		2660 mg/kg	

Skin Corrosion/Irritation

May cause skin irritation.

Serious Eye Damage/Irritation

May cause moderate aggravation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Very low vapour activity. May cause nose and throat irritation.

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

No information was located.

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. Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

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

Environmental information was not located.

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Potassium nitrate		490 mg/L (Daphnia magna (water flea); 24-hour)		
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.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Product Identifier:BioStryke TPHenhanced (II) - Ver. 1Date of Preparation:Date of Last Revision:

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

WHMIS 1988 Classification

Not a WHMIS controlled product.

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

All ingredients are listed on the DSL/NDSL.

USA

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

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared ByMPPI Technical DepartmentPhone No.905-793-8000ReferencesCHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).DisclaimerTo 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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