

SAFETY DATA SHEET

FILE NO.: BPTTS8165-2020Q1

NAME OF PRODUCT: **Turf Starter™ 8-16-5**

Preparation Date: 12/13/2016

Revision: 03/20/2020

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODES: BPT-TS8165
PRODUCT NAME: Turf Starter 8-16-5
SYNONYMS: plant nutrient blend (8-16-5)

MANUFACTURER: BioPro Technologies, LLC
ADDRESS: 4060 SE 45th Court, Ocala, FL 34480



EMERGENCY PHONE: (888) 545-6307
CHEMTREC PHONE:
OTHER CALLS: (352) 620-2020
FAX PHONE: (352) 620-0312

PRODUCT USE: Turf management
PREPARED BY: E.F. Wilson III

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health: Eye Effects: Category 2(b) Respiratory Irritation: Category 3 Skin Irritation: Category 3	Environmental: Acute Aquatic Toxicity: Unknown	Physical: No Physical Hazards Present
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GHS Pictogram: 	ANSI/Old Pictogram: 	Signal Word: Warning
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Hazard Statements: H302 - Harmful if swallowed. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.	Precautionary Statements: P101: If medical advice is needed, have product container or label at hand P102: Keep out of reach of children P103: Read label before use P261: Avoid breathing dust/fume/gas/mist/vapors/spray P262: Do not get in eyes, on skin, or on clothing P271: Use only outdoors or in a well ventilated area P280: Wear protective gloves/protective clothing/eye protection/face protection P281: Use personal protective equipment as required P353: Rinse skin with water/shower If swallowed: Give 2 or 3 glasses of water to drink. Induce vomiting by touching back of throat with finger. Get immediate medical attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists or develops.
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SECTION 2 NOTES:

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Physical Description (also see Section 9): Greenish-brown liquid

Medical Conditions Aggravated by Long-Term Exposure: Persons with existing skin lesions should exercise caution when using or handling this product. These individuals should also avoid all contact with possible spray mist.

Chronic Effects: Prolonged or repeated skin contact may cause dermatitis. Ingestion may irritate gastrointestinal tract.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS*:

Ammonium Hydroxide – CAS# 1336-21-6
Phosphoric Acid - CAS# 7664-38-2
Potassium Hydroxide - CAS# 1310-58-3
Urea Ammonium Nitrate - CAS# 15978-77-5
Humic Acid – CAS# 1415-93-6
Fulvic Acid – CAS# 479-66-3

Seaweed extract – Ascophyllum Nodosum – CAS# 84775-78-0

*AS PER 29 CFR §1910.1200, THE SPECIFIC CHEMICAL IDENTITY AND/OR EXACT PERCENTAGE (CONCENTRATION) OF COMPOSITION HAS BEEN WITHHELD AS A TRADE SECRET.

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

IF INHALED: Remove to fresh air.

IF ON SKIN (OR HAIR): Remove any contaminated clothing. Wash affected area with mild soap and water. Get medical attention if irritation persists or develops. Launder contaminated clothing before reuse.

IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists or develops.

IF SWALLOWED: Give 2 or 3 glasses of water to drink. Induce vomiting by touching back of throat with finger. Get immediate medical attention.

SECTION 4 NOTES: Provide general supportive measures and treat symptomatically. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). No specific antidote; treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES: Non-flammable

FLASH POINT: Sample begins to boil but no flash is observed.

AUTOIGNITION TEMPERATURE: Not applicable; mixture will not auto-ignite.

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0 OTHER: 0

EXTINGUISHING MEDIA: Water spray, dry chemical, carbon dioxide, or foam.

SPECIAL FIRE FIGHTING PROCEDURES: Prevent runoff from entering water systems. Keep non-essential personnel out of fire area. Cool sealed containers to prevent rupture due to excessive heat. Move container from fire area if possible without risk.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS: Fire fighters should wear full protective equipment and self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers exposed to fire may rupture violently. Keep containers cool with water spray.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and phosphorus

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SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

ENVIRONMENTAL PRECAUTIONS: Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

CONTAINMENT METHODS AND CLEANUP: Stop the flow of material, if this is without risk.
Large Spills: Dike the spilled material, where this is possible. If spill is of major proportions, soil may need to be excavated.
Small Spills: Wear protective equipment. Prevent spill from entering water systems. Absorb spill on inert material such as clay, vermiculite or kitty litter. Place absorbed material into labeled container for proper disposal. Dispose of in accordance with local, State, and Federal laws and regulations; see Section 13.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid contact with skin, eyes and clothing. Do not take internally. Wash after handling. Do not contaminate water by disposal of equipment wash waters. Store in a cool, dry, locked area out of reach of children and animals.

OTHER PRECAUTIONS: THIS PRODUCT IS FOR AGRICULTURAL AND HORTICULTURAL USE ONLY AND IS NOT INTENDED FOR OTHER APPLICATIONS. USE NORMAL SAFE HANDLING PROCEDURES AS WITH ALL CHEMICALS. SEE LABEL FOR APPLICATION INSTRUCTIONS AND DIRECTIONS FOR USE.

SECTION 7 NOTES: Store locked up. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use in open, outdoor areas only.

VENTILATION : Not normally needed.

RESPIRATORY PROTECTION: In confined areas, NIOSH/MSMA approved respirator.

EYE PROTECTION: Safety glasses/goggles/face shield suggested.

SKIN PROTECTION: Rubber/impervious gloves and boots suggested.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear suitable protective clothing. Wash contaminated clothing prior to reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

WORK HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

EXPOSURE GUIDELINES:

{Numbers represent mg/M₃ unless otherwise indicated}.

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Phosphoric Acid	1	NA	1	3	1	3	1,000
Potassium Hydroxide	NA	NA	Ceiling=2		2	NA	NA
Ammonium Nitrate	5*	NA	NA	NA	NA	NA	NA

*as respirable dust, if generated; also CA OSHA limit.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Dark brown liquid

ODOR: Slight odor

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 5.5 – 5.7

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WEIGHT: 10.94 lbs. per gal.

BOILING POINT:

F: 212
C: 100

MELTING POINT/FREEZING POINT:

F: 32
C: 0

VAPOR PRESSURE (mmHg): Unknown

VAPOR DENSITY (AIR = 1): Unknown

DENSITY (g/cm3): 1.3

SPECIFIC GRAVITY (H2O = 1): 1.310

EVAPORATION RATE: Not determined.

BASIS (=1):

SOLUBILITY IN WATER: Soluble

PERCENT VOLATILE: NO VOLATILITY PRESENT

VOLATILE ORGANIC COMPOUNDS (VOC): NONE

MOLECULAR WEIGHT: NO DATA PRESENT

VISCOSITY: NO DATA PRESENT

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): Avoid extreme heat. Do not freeze.

INCOMPATIBILITY (MATERIAL TO AVOID): None known.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Oxides of nitrogen and phosphorus

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Temperatures above 120°F (49°C) and below 32°F (0°C).

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Not determined; no data available.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Accidental spills of undiluted product may cause vegetation kills. Keep out of any body of water; may harm aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

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HAZARDOUS WASTE CODE: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

RCRA HAZARD CLASS: NOT APPLICABLE

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: TurfStarter 8-16-5

HAZARD CLASS: Not regulated

OCEAN/WATER TRANSPORTATION

PROPER SHIPPING NAME: TurfStarter 8-16-5

AIR TRANSPORTATION

PROPER SHIPPING NAME: TurfStarter 8-16-5

Cargo Aircraft only

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

EPA Regulations: Not regulated by EPA under FIFRA or FQPA.

OSHA Regulations: Refer to Sections 2 & 8.

State Regulations: The following appear on state RTK Chemical Lists: Phosphoric acid, potassium hydroxide and elemental manganese: CA, FL, NJ & MN; elemental zinc: CA, FL & NJ; elemental iron & urea: CA & MN; ammonium nitrate: FL & NJ; ammonium sulfate: NJ. Check with specific state authorities since regulations vary within states.

Other Regulations: Phosphoric acid is a Section 313 chemical. Section 304 chemicals: potassium hydroxide (CERCLA RQ=1,000 lbs.); phosphoric acid (CERCLA RQ=5,000 lbs.).

SARA Title III; Sections 311/312: Sudden Release of Pressure (N), Reactivity (N), Fire (N), Immediate (Acute) Health (Y), Delayed (Chronic) Health (N).

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION:

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