INTERNATIONAL AG LABS
A BIOLOGICAL APPROACH TO AGRICULTURE

BUXOM GREEN TEE
Material Safety Data Sheet

Section 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Source: International Ag Labs, 800 W. Lake Ave., PO Box 788, Fairmont, Minnesota 56031

Product Name:	Buxom Green Tee	CAS #
Ingredients:	Calcium Nitrate	10124-37-5
	Phosphoric Acid	7664-38-2
	Potassium Nitrate	7757-79-1

Buxom Green Tee is an advanced turf product designed to regulate soil moisture and nitrogen while feeding soil biology.

Emergency Phone: 507-235-6909

Section 2 HAZARDOUS IDENTIFICATION

Emergency Overview: CAUTION! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Do not ingest. Wash thoroughly after handling.

Potential Acute Health Effects:

Ingestion Harmful if swallowed. Nitrates may cause cardiac arrest. Use IV magnesium to mitigate this danger.

Eye Contact Hazardous in case of eye contact (corrosive). Inflammation of the eye is characterized by redness, watering, and itching.

Skin Contact Hazardous in case of skin contact (corrosive, permeator). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation Slightly hazardous in case of inhalation (lung sensitizer). Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Potential Chronic Health Effects:

Chronic Exposure Repeated small oral doses of nitrates may cause weakness, depression, headache, and mental impairment. Chronic exposures may affect ability of blood to carry oxygen, causing the lips and skin to turn blue.

Carcinogenic Effects No known significant effects or critical hazards.

Mutagenic Effects No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental Effects No known significant effects or critical hazards.

Fertility Effects No known significant effects or critical hazards.

Toxicity: The substance may be toxic to blood, liver, skin, eyes, bone marrow.

Over-Exposure Signs/Symptoms:

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 3 FIRST AID MEASURES

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Protection of First-Aiders:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to Physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Section 4 FIRE FIGHTING AND EXPLOSIVE MEASURES

Flammability of the Product: May be combustible at high temperature.

Products of Combustion: These products are nitrogen oxides metal oxide/oxides .

Fire Fighting Media and Instructions:

Use an extinguishing agent suitable for the surrounding fire.

Special Protective Equipment for Fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special Remarks on Fire Hazards:

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptins, and sulfides.

Special Remarks on Explosion Hazards:

Mixtures with nitromethane are explosive. (Phosphoric Acid)

Section 5 ACCIDENTAL RELEASE MEASURES

Personal Precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 7).

Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods For Cleanup:

Small Spill Stop leak if without risk. Material free from contamination can be used for its original purpose. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 12). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 12 for waste disposal.

Section 6 HANDLING AND STORAGE

Precautions: Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapors,

spray or mists. Keep away from incompatibles such as oxidizing agents, combustible materials, metals, alkalis. May corrode metallic surfaces.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Store in original packaging as approved by manufacturer. Keep away from heat and direct sunlight. Avoid microbiological contamination.

Section 7 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures: Use only with adequate ventilation. If user operations generate fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure eyewash facilities are located close to the working environment.

Personal Protection:

Eyes Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes or mists. Recommended: splash goggles.

Skin Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Respiratory Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): butyl rubber, natural rubber (latex), nitrile rubber.

Personal Protective Equipment: Splash googles. Gloves.

Section 8 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Unknown	**Solubility in Water:**	Complete
Density:	1.33	**Vapor Pressure, mm Hg:**	Not applicable
Flashpoint:	N/A	**Reaction with Water:**	None
pH:	~4.0	**Appearance:**	Viscous black/brown liquid

Section 9 STABILITY AND REACTIVITY

Stability and Reactivity: Stable under recommended storage and handling conditions (see section 6).

Microbiological Stability: Stable unless diluted with >5% water when yeast, mould and some harmless bacterial (e.g. Lactobacillus spp.) growth may occur in warm temperatures. Pathogens will not grow in undiluted product due to its high osmotic pressure and low water activity.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Incompatibility with Various Substances: Reactive or incompatible with the following materials: Dimethyl formamide, combustible materials, acids, oxidizing agents and alkalis.

Corrosivity: Extremely corrosive in presence of copper, of stainless steel(304), of stainless steel(316). Highly corrosive in presence of aluminum. Minor corrosive effect on bronze. Severe corrosive effect on brass. Corrosive to ferrous metals and alloys. Non-corrosive in presence of glass.

Hazardous Polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Hazardous Decomposition Products: Burning can produce CO2 and water, N compounds. Oxides of nitrogen and toxic metal fumes may form when heated to decomposition.

Section 10 TOXICOLOGY INFORMATION

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects:

Ingestion May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia).

Eye Contact Corrosive. Liquid or vapor causes severe eye irritation and can cause severe eye burns leading to permanent corneal damage or chemical conjunctivitis.

Skin Contact Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin.

Inhalation Extremely hazardous in case of inhalation (lung corrosive).

Chronic Potential Health Effects: May cause damage to the following organs: blood, liver, skin, eyes, bone marrow.

Ingestion and Inhalation Repeated or prolonged exposure to small amounts may affect the blood, respiration and kidneys and produce anemia, Methenoglobinemia with attendant cyanosis and anoxia, hyperpnoea and later dyspnea, and nephritis.

Section 11 ECOLOGICAL INFORMATION

Environmental effects: No known significant effects or critical hazards.

Aquatic Ecotoxicity: Due to its high BOD, accidental discharge of large quantities into rivers or lakes will cause temporary algal growth ('bloom') and dissolved oxygen reduction with possible deleterious effects on fish.

Product/ Ingredient Name	Test	Result	Species	Exposure
Preparation	--	Acute LC50 >100 mg/L	Fish	96 hrs

Biodegradability:

Conclusion/Summary Most inorganic compounds are not biodegradable. The product does not show any bioaccumulation phenomena.

Toxicity of Products of Biodegradation The product itself and its products of degradation are not toxic.

Section 12 DISPOSAL CONSIDERATIONS

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Consult your local or regional authorities.

Refer to Section 6: HANDLING AND STORAGE and Section 7: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 13 TRANSPORT INFORMATION

Shipping Name:	Buxom Green Tee		
Hazard Class:	None	**C.A.S. Number:**	N/A
Reportable Quantity (RQ):	None	**D.O.T. Number:**	None
Labels Required:	None	**Haz Waste No:**	None
Placard:	None	**EPA Reqlst No:**	None

 June 29, 2014