

732975

732977

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER		Vegetative Growth Booster		WHMIS CLASSIFICATION		Not Regulated	
PRODUCT USE Fertilizer							
Manufacturers Name		Greenstar Plant Products Inc.		Suppliers Name		Greenstar Plant Products Inc.	
Street Address		9850-201 st Street		Street Address		9850-201 st Street	
City	Langley	Province	British Columbia	City	Langley	Province	British Columbia
Postal Code	V1M 4A3	Emergency Telephone	(604) 882-7686	Postal Code	V1M 4A3	Emergency Telephone	(604) 882-7686
Date MSDS Prepared	August 23, 2007	Prepared By	Greenstar Plant Products Inc.		Phone Number	(604) 882-7686	

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Non-Hazardous Ingredients (<i>Specific</i>)	%	CAS	LD ₅₀ of Ingredient (<i>species and route</i>)	LC ₅₀ of Ingredient (<i>specify species</i>)
Diammonium Phosphate	90-100	7783-28-0	LD ₅₀ 6500 mg/kg oral rat	NAV

SECTION 3 – HAZARDS IDENTIFICATION

Route of Entry	<input checked="" type="checkbox"/> Skin contact	<input checked="" type="checkbox"/> Eye Contact	<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Ingestion
Emergency Overview				
WHMIS Symbols: NAP				
EFFECTS OF ACUTE EXPOSURE TO PRODUCT:				
Eye Contact: Irritation, redness and pain. Possible burns to eye.				
Skin Contact: Irritation. Symptoms include redness, itching and pain. No harmful effects from skin absorption have been reported.				
Inhalation: Irritation to the respiratory tract. Symptoms include coughing and shortness of breath.				
Ingestion: Irritation to the gastrointestinal tract. Symptoms include nausea, vomiting, diarrhea, dizziness, abdominal pain, convulsions, collapse, unconsciousness, cardiac effects and central nervous system effects.				
EFFECTS OF CHRONIC EXPOSURE : No adverse effects are known.				

SECTION 4 – FIRST AID MEASURES

Skin Contact Wash skin thoroughly with soap and water. Remove contaminated clothing. If victim is not breathing clear airway immediately and begin artificial respiration. Get medical attention if irritation develops or persists.
Eye Contact Immediately flush eyes with a gentle but large stream of water (cold water may be used) for at least 15 minutes holding both the upper and lower eye lids open. Get medical attention if irritation develops or persists.
Inhalation Move victim to fresh air away from source of exposure to dust. Allow the victim to rest in a well ventilated area. Obtain medical attention if the effects occur. Persons who have inhaled decomposition gases (e.g. in a fire) should obtain immediate medical attention.
Ingestion Do not induce vomiting. Do not attempt to give anything by mouth to unconscious victim. If victim is alert and not convulsing, rinse mouth and give large amounts of water (or milk if available) to dilute stomach contents. Small quantities are unlikely to cause toxic effect. Get medical attention if a large amount of DAP is ingested (small children, more than 50g).

Vegetative Growth Booster

SECTION 5 – FIRE FIGHTING MEASURES

Flammable	Non-Flammable under normal conditions.	If yes, under what conditions?	Avoid excessive heat.		
Means of Extinction		Dry chemical, carbon dioxide, water spray, fog or foam.			
Flashpoint (°C) and method	NAP	Upper Flammable Limit (% by volume)	NAP	Lower Flammable Limit (% by volume)	NAP
Auto ignition Temperature (°C)	NAP	Explosion Data – Sensitivity to Impact	NAP	Explosion Data- Sensitivity to Static Discharge	NAP

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures

Spillage should be swept up and placed in chemical waste container to be disposed at an appropriate waste disposal facility according to current applicable laws, regulations and product characteristics at time of disposal. Adequate ventilation is required

If spill could potentially enter any waterways including intermittent dry creeks contact the local authorities.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment

Keep in a tightly closed container. Do not handle unless safety precautions have been read and understood. Avoid eye and skin contact. Do not puncture, drag or slide container. Protect against physical damage and moisture.

Storage Requirements

Store in a cool, dry and ventilated area. Store away from potential sources of heat and fire.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits	<input checked="" type="checkbox"/> ACGIH TLV	<input checked="" type="checkbox"/> OSHA PEL	<input type="checkbox"/> Other (specify)		
ACGIH TLV-TWA: 10 mg/m ³ (inhalable particles); 3 mg/m ³ (respirable particles) OSHA TWA-PEL: 15mg/m ³ (total dust); 5 mg/m ³ (respirable dust)					
Specific Engineering Controls (such as ventilation , enclosed process) Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Personal Respirators (NIOSH Approved): When engineering controls are not feasible, a respirator (NIOSH approved) may be worn.					
Personal Protective Equipment	<input checked="" type="checkbox"/> Gloves	<input checked="" type="checkbox"/> Respirator	<input checked="" type="checkbox"/> Eye	<input checked="" type="checkbox"/> Footwear	<input checked="" type="checkbox"/> Clothing <input checked="" type="checkbox"/> Other
Hands: Wear water resistant rubber (latex, butyl or plastic (PVC) gloves. See glove manufacturer literature for information on permeability. Eyes: Wear approved eye protection to safeguard against potential eye contact, irritation, or injury. Other: A source of clean water should be available in the work area for flushing eyes and skin. Clothing and Footwear: Impervious clothing and footwear should be worn. Respirator: When engineering controls are not feasible, a respirator (NIOSH approved) may be worn.					

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State Green Powder	Odour and Appearance Slight ammonia odor	Odour Threshold (ppm) NAV
Specific Gravity NAV	Vapour Density (air = 1) NAV	Vapour Pressure (mmHg) NAV
Evaporation Rate NAV	Boiling Point (°C) NAV	Freezing Point (°C) NAV
pH 7.4-8.0 in 1% solution	Coefficient of Water/Oil Distribution NAV	[Solubility in Water] Very soluble (68-70 g/100ml @ 20°C)

Vegetative Growth Booster

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability √Yes □ No	Under which conditions Stable under normal conditions. Avoid excessive heat.
Incompatibility with Other Substances √Yes □ No	If yes, which ones? Avoid contact with strong oxidizing agents and strong bases.
Reactivity, and under what conditions?	Avoid contact with alkalis and heat.
Hazardous Decomposition Products	When heated to decomposition, oxides of phosphorus, oxides of nitrogen (NO, NO ₂ , NO ₄) and ammonia (NH ₃) vapors are released.

SECTION 11 – TOXICOLOGICAL INFORMATION

Diammonium Phosphate LD ₅₀ 6500 mg/kg oral rat	
Irritancy of Product May cause mild irritation to eyes, skin, digestive tract and respiratory system.	
Skin Sensitization	Respiratory Sensitization
Carcinogenicity - IARC NO	Carcinogenicity – ACGIH NO
Reproductive Toxicity NAV	Teratogenicity NAV
Embryotoxicity NAV	Mutagenicity NAV
Name of Synergistic Products/Effects NAV	

SECTION 12 – ECOLOGICAL INFORMATION

Acute Toxicity to Fish: (Coho salmon, Chinook salmon, Rainbow trout, Bluegill, Large mouth bass, Tilapia, Fathead minnow) 96-hr: LC ₅₀ =90-1875 mg/L
Acute Toxicity to Aquatic Invertebrates: (Amphipod) 96-hr: LC ₅₀ =40-52 mg/L; (Snails, worm) 96-hr: LC ₅₀ =1005-2472 mg/L
Acute Toxicity to Aquatic Plants: (<i>Selenastrum capricornutum</i>) 72-hr: NOEC (stimulation)=3.57 mg DAP/L; NOEC (toxicity)= 97.1 mg DAP/L.
Environmental Fate: NAV
Ecotoxicity: Inorganic phosphates have the potential to increase the growth of freshwater algae whose eventual death will reduce the available oxygen to aquatic life.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal
Waste must be disposed of in accordance with federal, provincial and municipal environmental control regulations.

SECTION 14 – TRANSPORT INFORMATION

Special Shipping Information	
TDG Not Regulated	[DOT] Not regulated
[IMO] NAV	[CAO] NAV

SECTION 15 – REGULATORY INFORMATION

[WHMIS Classification] Not Regulated	[OSHA] Regulated
[SARA] Regulated under 40 CFR Part 370-Hazardous Chemical Reporting	[TSCA] Regulated

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR

Vegetative Growth Booster

SECTION 16 – OTHER INFORMATION

As of the date of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable laws. However, no warranty or representation of law or fact, with respect to such information is intended or given.