MATERIAL SAFETY DATA SHEET

GENERAL HYDROPONICS MAXIGRO ™

1/10/05

SECTION 1. MATERIAL IDENTIFICATION

Product Name: MaxiGro ™ Nutrient for Vegetative Growth

Chemical Family: A mixture of plant nutrition minerals

Product Use: Hydroponic plant nutrient

Manufactured by: General Hydroponics, 3789 Vine Hill Rd. Sebastopol CA 95472
(707) 824-9376 Fax: (707) 824-9377

For Chemical Emergency
Spill Leak Fire Exposure or Accident:
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA 800-424-9300
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

SECTION 2. INGREDIENTS AND OCCUPATIONAL EXPOSURE LIMITS

Ingredients: MaxiGro ™ Nutrient for Vegetative Growth is an especially formulated mixture of chemicals that are mixed in proportions to assure excellent plant nutrition. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret. The product is derived from ammonium nitrate, ammonium molybdate, calcium nitrate, calcium sulfate, cobalt sulfate, copper sulfate, iron DTPA, manganese EDTA, magnesium sulfate, potassium borate, potassium nitrate, potassium phosphate, and zinc sulfate.

Exposure Limits: Some of the chemicals used in MaxiGro ™ Nutrient for Vegetative Growth, when inhaled in a powder form, are known to be irritants to the upper respiratory tract. OSHA has established a PEL for an eight-hour time weighted average of 5 mg/m^3 (respirable fraction) or 15 mg/m^3 eight-hour time weighted average (total dust). ACGIH has established a 10 mg/m3 eight-hour time weighted average threshold limit value for exposure to chemicals in this category. When these chemicals are in aqueous solution and are not aerosolized they are not an inhalation hazard.

SECTION 3. HAZARDS IDENTIFICATION

*** Emergency Overview ***

CAUTION! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. CONTAINS STRONG OXIDIZING AGENTS THAT MAY REACT VIOLENTLY UPON CONTACT WITH SOME ORGANIC SUBSTANCES, AND REDUCING AGENTS. MAY CAUSE FIRE WHEN IN CONTACT WITH ORGANIC MATERIAL AND WITH REDUCING AGENTS.

Potential Health Effects

Primary Entry Routes: ingestion, inhalation, and skin contact

Target Organs: Blood and kidneys

Ingestion: Ingestion can cause severe gastrointestinal distress, with abdominal pain, nausea, vomiting, and diarrhea.

Eye: Can cause irritation redness and pain.

Skin: Can cause irritation to the skin. Symptoms can include redness, itching, and pain.

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Carcinogenicity: IARC, NTP, and OSHA do not list as a carcinogen.

Medical Conditions Aggravated by Long- Term Exposure: Unknown

Chronic Effects: Repeated or prolonged exposure to some ingredients can cause methemoglobinemia, cyanosis, and convulsions.

Other: None

Section 4. FIRST AID MEASURES

Ingestion: If the victim is not breathing, perform mouth-to-mouth resuscitation. If breathing is difficult, administer oxygen. Never give anything by mouth to an unconscious person. Seek medical attention as soon as possible.

Eye Contact: Do not allow victim to rub or keep eyes tightly shut. Remove contact lenses, then gently lift eyelids and flush immediately and continuously with flooding amounts of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.

Skin Contact: Flush exposed area with soap and water for at least 15 minutes. If irritation persists, consult a physician. Remove contaminated clothing, and wash clothing before reuse.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. If breathing becomes difficult, administer oxygen. Consult a physician as soon as possible.

After First Aid: Get appropriate community medical support.

SECTION 5. FIRE AND EXPLOSION DATA

Flash Point: Unknown

Auto-ignition Temperature: Unknown

LEL: Unknown

Flammability Classification: MaxiGro ™ Nutrient for Vegetative Growth is not combustible. However, some components are powerful oxidizers and can initiate and intensify combustion of flammable materials.

Burning Rate: Unknown

Extinguishing Media: Use dry chemical, carbon dioxide, water spray, fog, or foam.

Unusual Fire or Explosion Hazards: Can cause explosions in contact with combustible dusts or vapors. Container may explode in heat of fire.

Hazardous Combustion Products: Can decompose explosively in a fire.

Fire-Fighting Instructions: Contains oxidizing material. Do not use water jet. Keep fire-exposed containers cool with water spray. Remove containers from the fire area, if it can be done safely. Avoid contact with organic materials. Do not release run-off from fire control methods to sewers or waterways.

Fire Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill /Leak Procedures: Avoid contact with organic materials. Small amounts can be diluted, and flushed into a sewer. Larger amounts should be dampened with water, swept up carefully to avoid dispersal in air, and held for reclamation or disposal.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

SECTION 7. HANDLING AND STORAGE

Handling Precautions: Avoid ingestion, skin contact, eye contact, and inhalation.

Storage Requirements: Separate from flammable and combustible materials, as well as from reducing agents such as zinc, alkaline metals, and formic acid.

Regulatory Requirements: Follow applicable OSHA regulations.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne concentrations as low as possible.

Administrative Controls: Avoid breathing dust.

Respiratory Protection: If this product is used as directed, repiratory protection is not required. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/ NIOSH-approved respirator. If respirators are used, OSHA requires a written respiratory protection program that includes, at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Eye Protection: When handling MaxiGro ^{TM} Nutrient for Vegetative Growth protective eyewear or goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

Protective Clothing: Wear, when the possibility of skin or clothing contamination may exist. Wear neoprene or nitrile gloves when directly handling the product.

Safety Stations: Eye wash stations, quick drench showers, and washing facilities should be readily accessible to workers handling large quantities of MaxiGro [TM] Nutrient for Vegetative Growth.

Contaminated Equipment: Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this product, especially before eating drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder.

Density: 2.2

pH: 5.8 @1g/L of distilled water

Appearance and Odor: Green powder with no odor

Odor Threshold Range: Unknown

Vapor Pressure: Unknown

Water Solubility: Soluble

Other Solubility's: Unknown

Freezing Point: Unknown

Viscosity: Unknown

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable at room temperature in closed containers, under normal storage and handling conditions. Unstable at high temperatures and if mixed with organic materials and reducing agents.

Polymerization: Hazardous polymerization does not occur.

Chemical Incompatibilities: MaxiGro [TM] Nutrient for Vegetative Growth contains chemicals that are strong oxidizing agents that react with reducing materials, oil, and organic solvents.

Conditions to Avoid: Mixture with combustible materials, high temperatures.

Hazardous Decomposition Products: At extreme temperatures, irritating and highly toxic gases may be evolved.

SECTION 11. TOXICOLOGICAL INFORMATION

Some chemicals in MaxiGro[TM] Nutrient for Vegetative Growth are toxic by ingestion, inhalation, or dermal contact.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Unknown

Environmental Fate: Not expected to be significant

Environmental Degradation: Unknown

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Follow Federal, State, and local regulations.

SECTION 14. TRANSPORTATION INFORMATION

Proper Shipping Name: Ammonium Nitrate Fertilizer
Hazard Class: 9
UN/NA: UN 2071
Packing Group: III

SECTION 15. REGULATORY INFORMATION

EPA Regulations: Not listed

SECTION 16. OTHER INFORMATION

General Hydroponics MaxiGro ™ Nutrient for Vegetative Growth is a plant nutrition product. Information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

General Hydroponics provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in using this product.