DRAFT MATERIAL SAFETY DATA SHEET

GENERAL HYDROPONICS RAPID START™

12/22/10

SECTION 1. MATERIAL IDENTIFICATION

Product Name: RapidStart™

Chemical Family: Nitrates and inorganic minerals in aqueous solution

Product Use: Hydroponic plant nutrient

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

For Emergency Day or Night Call: CHEMTREC – Domestic North America 800-424-9300,
International 703-527-3887 (collect calls accepted)

SECTION 2. INGREDIENTS AND OCCUPATIONAL EXPOSURE LIMITS

Ingredients: RapidStart™ is an especially formulated mixture of chemicals that are mixed in proportions to assure excellent plant nutrition. The product is an aqueous, inorganic, nitrate solution. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret; however, they are derived from ammonium nitrate, potassium nitrate, potassium phosphate, iron DPTA, it also contains non-plant food ingredients, 0.05 alfalfa extract, 0.05 barley extract, 0.1 willow bark extract.

Exposure Limits: Some of the chemicals used in RapidStart™, 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/m3 (respirable fraction) or 15 mg/m3 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. As long as these chemicals remain in aqueous solution and do not become aerosolized, they are not an inhalation hazard.

SECTION 3. HAZARDS IDENTIFICATION

*** Emergency Overview ***

CONTAINS OXIDIZERS, CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

NFPA Ratings:

Health: 1, Flammability: 0, Reactivity: 3, Other: Oxidizer.

Potential Health Effects

Primary Entry Routes: Ingestion, inhalation, and skin contact

Target Organs: Gastrointestinal system, blood system, skin, mucous membranes

Ingestion: Ingestion can cause irritation to the gastrointestinal tract with headaches, nausea, vomiting, and diarrhea.

Eye: Irritation, redness and pain

Skin: Irritation, redness, itching, and pain

Inhalation: Irritation to the respiratory tract. Symptoms may include coughing, 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 produce target organ damage.

Other: None

Section 4. FIRST AID MEASURES

Ingestion: Induce vomiting with large amounts of water or milk. Loosen tight clothing, such as collar, tie, belt and waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention immediately.

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: Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. 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: RapidStart™ is not combustible. However, it contains a powerful oxidizer 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 accelerate burning. 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: Wipe up with absorbent towels or mop. Avoid contact with organic materials.

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. Keep in tightly closed containers stored in a cool, dry, ventilated area. Do not store on wooden shelf or floor.

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 mist.

Respiratory Protection: If this product is used as directed, respiratory 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 RapidStart™, 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 nitride 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 RapidStart™.

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: Aqueous solution.

Density: 1.122

pH: 6.25

Appearance and Odor: Brown with nutty odor.

Odor Threshold Range: Unknown.

Vapor Pressure: Unknown.

Water Solubility: Soluble.

Other Solubilities: Unknown.

Freezing Point: Unknown

Viscosity: Unknown.

SECTION 10. STABILITY AND REACTIVITY

Stability: Unstable at high temperatures. An oxidizer reacts violently upon contact with many organic substances.

Polymerization: Polymerization does not occur.

Chemical Incompatibilities: RapidStart™ contains chemicals that are strong oxidizing agents that react with strong alkalis to liberate ammonia. They may also react vigorously with reducing materials, powdered metals, oil, and organic solvents.

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

Hazardous Decomposition Products: Oxides of nitrogen**.**

SECTION 11. TOXICOLOGICAL INFORMATION

RapidStart™ contains some chemicals that 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

DOT Transportation Data (49 CFR 172.101): Nitrates, Inorganic aqueous solution. Concentrations of RapidStart™ at the minimum temperature encountered during normal transportation, will not exceed 80% of the saturation limit. It is exempt from labeling (see code 58 of 49 CFR 172.102).

SECTION 15. REGULATORY INFORMATION

EPA Regulations: Not listed

SECTION 16. OTHER INFORMATION

General Hydroponics RapidStart™ 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.