

MATERIAL SAFETY DATA SHEET

GENERAL HYDROPONICS FLORASHIELD™ 3/31/03

SECTION 1. MATERIAL IDENTIFICATION

Product Name: General Hydroponics FloraShield™ Plant and System Wash
General Use: A plant and hydroponics system wash.
Manufactured by: General Hydroponics, 3789 Vine Hill Road. Sebastopol CA 95472.
(707) 824-9376 Fax: (707) 824-9377

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients: FloraShield™ is a mixture of chemicals specifically formulated for use in hydroponics cultivation. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret.

Exposure Limits: No limits are established for exposure to FloraShield™.

SECTION 3. HAZARDS IDENTIFICATION

*** Emergency Overview ***

General Hydroponics FloraShield™ is a light green liquid with no odor. This product is of low toxicity, but might cause mild skin and eye irritation upon contact. It is also might be a low ingestion hazard.

Potential Health Effects

Primary Entry Routes: Ingestion and skin or eye contact

Ingestion: low ingestion hazard

Eye: minor irritant

Skin: minor irritant

Inhalation: Not considered an inhalation hazard

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

Medical Conditions Aggravated by Long- Term Exposure: Unknown

Chronic Effects: Not known

Other: Not known

SECTION 4. FIRST AID MEASURES

Inhalation: Remove exposed person to fresh air and support breathing, if necessary. Consult a physician if respiratory distress continues.

Ingestion: If swallowed, give several glasses of water to drink to dilute product. Never give anything by mouth to an unconscious person. Induce vomiting as directed by medical personnel. Call a physician.

Eye Contact: Do not allow victim to rub or keep eyes tightly shut. 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 mild soap and water. For reddened or blistered skin, consult a physician.

After first aid: Get appropriate community medical support.

SECTION 5. FIRE AND EXPLOSION DATA

Flammability Classification: Not flammable

Burning Rate: Not combustible

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

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: Spills should be wiped up with absorbent towels, or mopped up carefully and held for reclamation or disposal.

Regulatory Requirements: Avoid infiltration of the undiluted product into drains, surface water, groundwater, and soil.

SECTION 7. HANDLING AND STORAGE

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

Storage Requirements: Keep in tightly closed containers in a cool, dry, ventilated area.

Regulatory Requirements: Follow applicable OSHA regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Provide general or local exhaust ventilation.

Administrative Controls: Avoid direct contact with the product.

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 FloraShield™, 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 impervious protective clothing 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 FloraShield™.

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

Appearance and Odor: light green liquid with no odor.

pH: 7.18

Odor Threshold Range: no odor

Water Solubility: Soluble.

Boiling Point 100^o C

Freezing Point / Viscosity: Unknown

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable at room temperature in closed containers, under normal storage and handling conditions.

Polymerization: Hazardous polymerization does not occur.

Chemical Incompatibilities: Do not store in epoxy or phenolic lined containers.

Conditions to Avoid: prolonged exposure to temperatures above 30⁰ C
Hazardous Decomposition Products: When heated to decomposition, phosphorous oxides may form.

SECTION 11. TOXICOLOGICAL INFORMATION

Not believed to be toxic

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): Not listed

SECTION 15. REGULATORY INFORMATION

EPA Regulations: Not listed

SECTION 16. OTHER INFORMATION

General Hydroponics FloraShield™ 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.