

**MATERIAL SAFETY DATA SHEET**  
**GENERAL HYDROPONICS FLORASHIELD™**  
**3/7/09**

**SECTION 1. MATERIAL IDENTIFICATION**

**Product Name:** General Hydroponics FloraShield™ Plant and System Wash

**General Use:** A plant and hydroponics system wash

**Chemical Family:** Aqueous mixture of inorganic minerals

**Manufactured by:** General Hydroponics, 3789 Vine Hill Road. 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. 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 \*\*\***

**As part of good industrial and personal hygiene and safety procedure,  
avoid all unnecessary exposure to the chemical substance and ensure  
prompt removal from skin, eyes and clothing  
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<sup>0</sup> 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 30<sup>0</sup> 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.