

MATERIAL SAFETY DATA SHEET
GENERAL HYDROPONICS PYROSOL™

6/4/01

SECTION 1. MATERIAL IDENTIFICATION

Product Name: General Hydroponics PyroSol™.

General Use: An auxiliary soil and plant substance.

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

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients: PyroSol™ is a mixture of 35% pyrophyllitic clay and other chemicals in proportions to form an excellent auxiliary soil and plant substance. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret.

Exposure limits: If inhaled in a powder form, PyroSol™ can be an irritant 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. When these chemicals are in aqueous solution and are not aerosolized, they are not an inhalation hazard.

SECTION 3. HAZARDS IDENTIFICATION

***** Emergency Overview *****

General Hydroponics PyroSol™ is a mixture of chemicals containing 35% pyrophyllitic silicate clay. It is a tan colored powder that is refined for use as an auxiliary soil and plant substance. The product contains fine silicone particles that, if inhaled over a prolonged period of time, could cause silicosis, which causes shortness of breath and eventual death by lung or heart failure. Inhalation of large quantities in a short period of time could cause acute silicosis and death.

Potential Health Effects

Inhalation: At low concentrations can cause irritation and breathing difficulty. Massive overexposure to respirable dust over a short time is rapidly fatal.

Primary Entry Routes: Inhalation.

Target Organs: Lungs.

Ingestion: Unknown.

Eye: Irritation.

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: Chi™ Foliar Spray is not combustible. However, it contains a low concentration of a powerful oxidizer and could initiate and intensify combustion of flammable materials.

Flash Point: Unknown.

Auto-ignition Temperature: Unknown.

LEL: Unknown.

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: Spills should be wiped up with absorbent materials, 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

Storage: Avoid microbial contamination, and keep pH between 4.5 and 5

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 Chi™ Foliar Spray, 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 Chi™ Foliar Spray.

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: 1.16

pH: 4.8-5.0

Appearance and Odor: Light Brown solution with an ocean smell

Odor Threshold Range: Unknown

Vapor Pressure: Unknown

Water Solubility: Soluble

Other Solubilities: 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.

Polymerization: Hazardous polymerization does not occur.

Chemical Incompatibilities: Chi™ Foliar Spray contains a low concentration of a strong oxidizing agent that could react with strong alkalis to liberate ammonia. May react vigorously with reducing materials, oil, and organic solvents.

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

Hazardous Decomposition Products: At extreme temperatures, CO, and harmful oxides may be evolved.

SECTION 11. TOXICOLOGICAL INFORMATION

Most of the chemicals in Chi™ Foliar Spray are slightly 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): Mixed fertilizer.

SECTION 15. REGULATORY INFORMATION

EPA Regulations: Not listed

SECTION 16. OTHER INFORMATION

General Hydroponics Chi™ Foliar Spray 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.