

Material Safety Data Sheet

pH Down Dry

1. Product and compagny identification:

Product name : pH Down™ Dry Concentrate
Chemical Family : Acid crystals
Product use: To lower the pH of hydroponic nutrient solutions and plant fertilizers
Supplier/Manufacturer: GENERAL HYDROPONICS Europe
boulevard du Biopole
32500 Fleurance
Tel: 05 62 06 08 30

2. Hazards identification

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

DANGER! CAUSES SEVERE IRRITATION AND BURNS TO EVERY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED.

Potential Health Effects

Primary Entry Routes: Ingestion, inhalation, skin.

Target Organs: Gastrointestinal and respiratory tract.

Acute Effects:

- **Ingestion:** severe digestive tract irritation with possible burns.
- **Inhalation:** Irritation and possible burns.
- **Eye:** Severe burns.
- **Skin:** Severe irritation and burns.

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

Medical Conditions Aggravated by Long- Term Exposure: Unknown.

Chronic Effects: Same as acute.

Other: None

3. Composition/information on ingredients

Ingredients: pH Down™ Dry Concentrate contains urea phosphate. The exact concentration of each chemical ingredient is a trade secret.

Exposure Limits: Chemicals used in pH Down™ Dry Concentrate, 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. When these chemicals are in aqueous solution and are not aerosolized, they are not an inhalation hazard.

4. First aid measures

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Rinse out the mouth, **do not induce vomiting**, and seek immediate medical help.

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 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.

5. Fire-fighting measures

Flash Point: May be combustible at high temperatures.

Auto-ignition Temperature: Unknown.

LEL: Unknown.

Flammability Classification: Unknown.

Burning Rate: Unknown.

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

Explosion Hazards: Container may explode in heat of fire. **Hazardous Combustion Products:** Carbon and nitrogen oxides.

Fire-Fighting Instructions: 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 (SCAB) with a full-face piece.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 1

6. Accidental release measures

Spill /Leak Procedures: Use personal protective equipment, cover with dry lime or soda ash, and place in closed container for disposal. Flush spill area with water. In case of large spill, clear the area and notify appropriate emergency response activity.

7. Handling and storage

Handling Precautions: Use only in well-ventilated areas. Avoid contact with skin and eyes, inhalation of aerosols and ingestion. Wear an appropriate NIOSH-approved respirator for protection where airborne concentrations are excessive. Respirator usage must be in accordance with OSHA requirements (29 CFR 1910.134).

Storage Requirements: Store as a corrosive in tightly closed containers away from incompatible materials.

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 inhalation, ingestion, skin and eye contact. Do not mix with solutions containing bleach or ammonia.

Protective Clothing/ Equipment: Use gloves and aprons while using.

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

9. Physical and chemical properties

Appearance Odor and Physical State: White powder

Odor Threshold Range: Odorless

Vapor Pressure: Unknown

Water Solubility: Completely soluble

Other Solubilities: Unknown

Boiling Point / Freezing Point / Viscosity: Unknown

10. Stability and reactivity

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

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents, strong bases, potassium, nitrogen trichloride, sodium hypochlorite

Conditions to Avoid: Do not mix with ammonia or bleach.

Hazardous Decomposition Products: Sulfur oxides, ammonia, nitrogen oxides, potassium chlorate, potassium nitrite, sulfur trioxide

11. Toxicological information

The toxicity of the combination of the chemicals, in the concentrations used in General Hydroponics pH DownTM is unknown. The rat oral, LD50 for phosphoric acid is 1,530 mg/kg and the rabbit skin, LD50 is 220 mg/kg.

12. Ecological information

Ecotoxicity: Unknown

Environmental Fate: Not expected to be significant. Physical removal from air can occur via rainfall.

Environmental Degradation: Unknown

13. Disposal considerations

Waste Disposal: Follow State, and local regulations.

14. Transport information

The chemicals in pH Down™ Dry Concentrate are not regulated by DOT.

15. Regulatory information

EPA Regulations: Not listed.

16. Other information

General Hydroponics pH Down™ Dry Concentrate is a plant nutrition aid. 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 here in 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.