

Material Safety Data Sheet

FloraBloom

1. Product and company identification:

Product name :	FloraBloom Advanced Nutrient System
Chemical Family :	A mixture of plant nutrition minerals in aqueous solution
Material uses:	Hydroponic plant nutrient
Supplier/Manufacturer:	GENERAL HYDROPONICS Europe boulevard du Biopole 32500 Fleurance Tel: 05 62 06 08 30

2. Hazards identification

Emergency overview

Physical state : Liquid

Color: Pink

Odor: Odorless

Hazard statements: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion

Potential acute health effects

Inhalation: No known significant effects or critical hazards

Ingestion: No known significant effects or critical hazards

Skin: No known significant effects or critical hazards

Eyes: No known significant effects or critical hazards

Potential chronic health effects

Chronic effects: No known significant effects or critical hazards

Carcinogenicity: No known significant effects or critical hazards

Mutagenicity: No known significant effects or critical hazards

Teratogenicity: No known significant effects or critical hazards

Developmental effects: No known significant effects or critical hazards

Fertility effects: No known significant effects or critical hazards

Over-exposure signs/symptoms

Inhalation: No specific data

Ingestion: No specific data

Skin: No specific data

Eyes: No specific data

Medical condition

aggravated by overexposure None known

3. Composition/information on ingredients

Ingredients : FloraBloom™ is an especially formulated mixture of chemicals that are mixed in proportions to assure excellent plant nutrition. The chemical identity of the compounds and exact proportions used in the mixture are a trade secret, however, they are derived from : Phosphoric Acid, Potassium Phosphate, Magnesium Phosphate, and Magnesium Sulfate.

Exposure limits: As long as these chemicals remain in aqueous solution they do not present an inhalation hazard.

4. First aid measures

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product: Not flammable

Extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: None known.

Special exposure hazards: No specific fire or explosion hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials:

sulfur oxides

phosphorus oxides

metal oxide/oxides

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical State: Liquid

Color: Pink

Odor: Odorless

pH: 3.5

Melting/freezing point: -1°C (30.2°F)

Relative density: 1.162

Solubility: Easily soluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical Stability: The product is stable.

Conditions to avoid: No specific data.

Incompatible material: Reactive or incompatible with the following materials: oxidizing materials and acids.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity: There is no data available.

Chronic toxicity: There is no data available.

Irritation/Corrosion

Skin: There is no data available.

Eyes: There is no data available.

Respiratory: There is no data available.

Sensitizer

Skin: There is no data available.

Respiratory: There is no data available.

Carcinogenicity: There is no data available.

Mutagenicity: There is no data available.

Teratogenicity: There is no data available.

Reproductive toxicity

There is no data available.

12. Ecological information

Ecotoxicity: No known significant effects or critical hazards.

Aquatic ecotoxicity: There is no data available.

Persistence/degradability: There is no data available.

13. Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulatory information	Un number
DOT classification	Not regulated
IMDG Class	Nog regulated
DATA-DGR Class	Not regulated

15. Regulatory information

EPA Regulations: Not listed.

16. Other information

GHE's FloraBloom is a plant nutrition product. Information assembled for this MSDS is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product. GHE 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 judgement in using this product.