

Material Safety Data Sheet

Ripen

1. Product and compagny identification:

Product name :	Ripen
Chemical family:	A mixture of plant nutrition mineral in aqueous solution
Supplier/Manufacturer:	GENERAL HYDROPONICS Europe boulevard du Biopole 32500 Fleurance Tel: 05 62 06 08 30

2. Hazards identification

Caution: May cause irritation to skin, eyes and respiratory tract. May be harmful if swallowed.

Carcinogenicity : None

Target Organs: Respiratory track, eyes and skin.

Summary of Risks: Ingestion of Ripen™ may cause gastrointestinal distress with abdominal pain, nausea, vomiting, and diarrhea. As long as these chemicals remain in aqueous solution they do not present an inhalation hazard.

Eye contact: May cause eye irritation.

Note: never give anything by mouth to an unconscious person.

3. Composition/information on ingredients

Ingredients : Ripen™ 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, Potassium Chloride, Magnesium Sulfate, Potassium sulfate, Ammonium Sulfate, Potassium Nitrate, and Magnesium Carbonate.

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

4. First aid measures

Eye contact: Flush eyes, including under the eyelids, with flooding amounts of running clean water for at least fifteen (15) minutes. Seek medical attention if irritation persists.

Skin contact: Thoroughly wash affected area with mild soap and water. Seek medical attention if irritation persists.

Inhalation: Remove victim from exposure. Restore/aid breathing as necessary. Get medical assistance.

Ingestion: Give conscious victims a large quantity of water to drink. Induce vomiting and get medical

5. Fire-fighting measures

Ripen™ is not combustible.

Extinguishing Agents: Use extinguishing agents that are suitable for the surrounding fire.

Special fire Fighting Procedures: Remove containers from the fire area, if it can be done safely.

Toxic fumes/gases can be evolved in a fire situation. Fire fighters should use self-contained breathing apparatus. Wear full protective gear, and avoid skin and eye exposure. Be aware of runoff from fire control methods. Do not release to sewers or waterways.

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. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Use spark-proof tools and explosion-proof equipment. Dispose 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). Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Use spark-proof tools and explosion-proof equipment. Dispose 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 precautions: Avoid ingestion, skin and eye contact as well as inhalation

Storage: Ripen™ should be stored in its original containers in a cool, dry, well-ventilated area on a non-combustible surface. Store away from aluminum, ethoxyethynl alcohols, combustible materials, reducing agents, and other incompatible materials. Protect containers from physical damage.

8. Exposure controls/personal protection

Ventilation: Use local exhaust ventilation to control airborne levels where dusts are generated..

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.

9. Physical and chemical properties

Physical State: All compounds in Ripen™ are in aqueous solution.

Color: Orange

Density: 1.19

pH: 3.7

Odor: None

Solubility: Ripen™ is readily soluble in water

10. Stability and reactivity

Stability/Polymerization : Ripen™ is stable at room temperature in closed containers and under normal storage and handling conditions. Hazardous polymerization does not occur in any of the components.

Incompatibility: Ripen™ contains chemicals that can violently explode when melted with active metals such as aluminum and magnesium. Violent reaction may occur when it come in contact with ethoxyethynyl alcohols.

Hazardous Decomposition Products: At high temperatures, decomposition products are formed oxides of phosphorus, magnesium oxide, potassium oxide(s), nitrogen and sulfur oxide(s).

11. Toxicological information

Most of the chemicals in Ripen are toxic by ingestion, respiration or dermal contact.

12. Ecological information

Ecotoxicity: Not expected to be significant

Environmental degradation: Unknown

13. Disposal considerations

Waste disposal: Follow state and local regulations

14. Transport information

Avoid transportation with food stuffs

15. Regulatory information

- Labelling according to CE regulations
- No special warnings
- National regulations

16. Other information

GHE's Ripen 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.