

Omex Agriculture Inc
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 CANADA
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MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Names	pHortress 0-21-24, pHortress 0-37-25
Chemical Name	None
Common Name, Synonyms	Foliar suspension
Manufactured for	Omex Agriculture Inc.

2. COMPOSITION /INFORMATION ON INGREDIENTS

Suspension contains the following INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>%</u>
Mono potassium phosphate	7778-77-0	42.0
Phosphorous acid	13598-36-2	14.5
Potassium hydroxide	1310-58-3	14.0
Manganese EDTA	15375-84-5	1.56
Zinc EDTA	15954-98-0	1.34
Water	7732-18-5	26.2

3. HAZARDS IDENTIFICATION

Emergency overview	Off white free flowing suspension. No distinctive odor CAUTION! May irritate eyes, skin. May cause mucous membrane irritation.
OSHA Hazard Category	IRRITANT
Primary Routes of Entry	Skin or eye contact is the most likely exposure. Ingestion is possible. Contact with or inhalation of sprays made from fertilizer suspensions may cause irritation to eyes and throat.
Target Organs	Eyes, skin, and respiratory tract
Potential Health Effects	
Eyes	May cause irritation to eyes
Skin	Repeated or prolonged contact may cause irritation
Inhalation	Spray may cause irritation to nose, throat, mucous membranes; coughing, or difficulty in breathing.
Ingestion	Large doses of this suspension may cause nausea, vomiting, and stomach pain or cramps
Symptoms of overexposure	
Acute	Ingestion of some phosphates may cause a shock-like state, a fall in blood pressure, slow pulse, bluish skin color (cyanosis), coma, and painful muscular spasms (tetany). Other symptoms such as convulsion may result from ingestion of large amounts of this suspension.
Chronic	Repeated and prolonged contact with irritants may cause conjunctivitis or dermatitis.
Notes to Physician	In the case of inhalation, keep under medical supervision until there is no risk of acute pulmonary edema or microbial infection. Persons with chronic respiratory or skin disease may be at increased risk from exposure.

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4. FIRST AID MEASURES

Eyes	Flush gently but thoroughly for 15 minutes with large amounts of clean water, occasionally lifting upper and lower lids. Seek medical attention.
Skin	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If redness or rash develops and persists, seek medical attention. Wash or clean contaminated clothing and shoes before wearing again.
Inhalation	If respiratory symptoms develop, remove person to fresh air immediately. Seek medical attention if discomfort persists. Begin artificial respiration or CPR (cardiopulmonary resuscitation) if required and seek medical attention immediately.
Ingestion	Seek medical attention immediately. If immediate help is not available, and person is conscious, give 8 to 16 ounces of water to drink and make person vomit. Do not force an unconscious person to drink or vomit

5. FIRE FIGHTING MEASURES**FIRE AND EXPLOSION DATA**

Flashpoint	Not flammable
Flammable Limits	Not flammable
Auto ignition Temperature	Not applicable
Extinguishing Media	Dry chemical, carbon dioxide (CO ₂), or water spray

SPECIAL FIRE FIGHTING PROCEDURES

Keep unauthorized personnel away. Wear full protective clothing and self-contained breathing apparatus. Stay upwind. Stop spill/release if it can be done without risk. Apply water spray to knock down and absorb fumes and vapors. Control runoff waters. Ventilate closed spaces before entering. Always stay away from the ends of tanks.

UNUSUAL FIRE AND EXPLOSION HAZARDS

This suspension will not burn. However, high temperatures can evaporate product to dryness, leaving crystals of metal salts. At high temperatures product may release toxic fumes of phosphorus, potassium, magnesium, and zinc metals and oxides.

NFPA RATING		NFPA SCALE
Health Hazard	1	0 Least 1 Slight
Flammability	0	2 Moderate 3 High
Reactivity	0	4 Extreme

6. ACCIDENTAL RELEASE MEASURES

pHortress is a plant food. However, large spills could possibly damage vegetation or cause illness in animals. Contamination of waterways could possibly cause fish kills. Dike spill area to prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways. Keep children, animals, and unauthorized personnel away from spills.

Pump spilled material into suitable containers for removal. Flush area with water, contain and remove cleanup liquid. Small amounts of spilled liquid may be absorbed using appropriate absorbent material. As conditions warrant, notify proper authorities, downstream sewer and water treatment operations, and other downstream users about potentially contaminated water.

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7. HANDLING AND STORAGE

Hygienic Practices	It is advisable to wash promptly if skin becomes contaminated; before eating, drinking, using tobacco, or chewing gum; before using toilet facilities; and at the end of the work shift before leaving worksite.
Storage	Store at temperatures between 41°F and 104°F (5°C and 40°C), in well-ventilated areas and away from heat or flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	No exposure limits have been set for this suspension.
Ventilation	None required under normal conditions.
Eyes	Chemical protective goggles should be used where splashing may occur and when transferring liquid fertilizer.
Skin	Wear rubber or neoprene gloves for transfer operations or where splashing may occur. If irritation occurs, impervious clothing and gloves should be worn.
Respiratory	None required under normal conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	Not known
Freezing Point	Not known
Vapor Pressure	Not known
Vapor Density	Not known
Percent Volatile (by Volume)	Negligible
Evaporation Rate	Negligible
Solubility in Water	Readily soluble
PH	5.0
Salt-out Temperature	Not applicable
Specific Gravity (H ₂ O=1)	1.62
Appearance and Odor	Off white free flowing suspension. No distinctive odor

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use and storage
Hazardous Polymerization	Not known to occur
Incompatibility	Phytotoxicity can occur when suspension or spray is combined with copper sprays
Hazardous Decomposition Products	At high temperatures product may release toxic fumes of phosphorus, potassium, magnesium, and zinc metals and oxides.
Conditions to Avoid	Store at temperatures between 41°F and 104°F (5°C and 40°C). Avoid freezing or overheating.

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11. TOXICOLOGICAL INFORMATION

Published health information about ingredients includes the following:

Mono potassium phosphate	No data found
Phosphorus acid	No data found
Potassium hydroxide	Approximate lethal dose is 5 grams
Manganese EDTA	No data found
Zinc EDTA	LD50 = 85 mg (Zn)/kg (intraperitoneal, mouse) toxic effects not reported other than lethal dose value

POTENTIAL CARCINOGEN DATA (IARC, NTP, OSHA)

None found for this suspension

FOR HEALTH EMERGENCIES CALL YOUR LOCAL POISON CENTER

12. ECOLOGICAL INFORMATION

No data found

pHortress is a plant food. However, large spills could possibly damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways.

13. DISPOSAL CONSIDERATIONS

If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods. Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations.

14. TRANSPORTATION INFORMATION

DOT Proper Shipping Name	Not applicable
DOT Hazard Class	This material not regulated by DOT
ID No.	Not listed
Packaging Group	Not applicable
NA ERG No.	Not applicable
Label/Placard Required	None
Freight Description	Fertilizing compound (MFG) liquid

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15. REGULATORY INFORMATION

Reportable Quantity –CERCLA Potassium hydroxide: (RQ) 1000 pounds (454 kg)
Statutory one pound applies to manganese and zinc compounds.

SARA Title III (EPCRA) Manganese and zinc are subject to the reporting requirements of Section 313 (40 CFR Part 372).

<u>CAS #</u>	<u>Chemical name</u>	<u>Percent by weight</u>
15375-84-5	Manganese EDTA	Percentages are
15954-98-0	Zinc EDTA	proprietary information

CALIFORNIA Proposition 65: WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

EPA National RESPONSE CENTER 1-800-424-8802

16. OTHER INFORMATION

Date Prepared January 10, 2008

Name of responsible party Omex Agriculture Inc
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NOTICE

All information appearing in this document is based on data provided by third party sources and is believed to be accurate as of the preparation date but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.

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