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WESTERN

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The Best Products.
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FARM SERVICE

MATERIAL SAFETY DATA SHEET NO. 416

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME First Choice ^(F) DepHeat 2
Chemical Name None
Common Name, Synonyms Foliar nutrient/buffer combination
MANUFACTURER Western Farm Service, Inc.
EMERGENCY TELEPHONE NUMBERS Information (209) 436-0450 8am-5pm PST M-F
CHEMTREC (800) 424-9300 24 hours every day

2. COMPOSITON/INFORMATION ON INGREDIENTS

Nutrients derived from the following INGREDIENTS

Chemical Name	CAS#	
Phosphoric acid	7664-38-2	Refer to Section 8 for exposure guidelines
Potassium chloride	7447-40-7	
Water	7732-18-5	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear, colorless liquid. No odor

DANGER! Hazard to humans and domestic animals
Can cause severe eye and skin burns. May be fatal if inhaled or swallowed.

OSHA HAZARD CATEGORY - CORROSIVE

CERCLA RATINGS (SCALE 0-3)

HEALTH = 3 FIRE = 0 REACTIVITY = 0 PERSISTENCE = 0

PRIMARY ROUTE(S) OF ENTRY Skin or eye contact is the most likely
exposure. Ingestion of solution or inhalation
of vapor or mist is possible.

TARGET ORGANS Eyes, skin, respiratory tract

3. HAZARDS IDENTIFICATION (con't)

POTENTIAL HEALTH EFFECTS

- Eyes Causes severe burns. Direct contact with liquid or exposure to mist can cause stinging, tearing, redness, swelling, corneal damage, and irreversible eye damage.
- Skin Causes severe burns. Direct contact or exposure to vapors or mists can be severely irritating to skin and may result in redness, swelling, burns, and severe skin damage.
- Inhalation Breathing mists may cause severe irritation or burns of the nose, throat, respiratory tract, and pneumonitis (inflammation of the lungs).
- Ingestion May be harmful or fatal if swallowed. Can cause severe irritation or burns of the mouth, throat, and digestive tract; abdominal pain, nausea, vomiting, and diarrhea.

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 this liquid.

CHRONIC No data found

Notes to Physician The effects of contact or inhalation may be delayed. In the case of inhalation, keep under medical supervision until there is no risk of acute pulmonary edema or microbial infection. Probable mucosae damage may contraindicate the use of gastric lavage.

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 immediately.
- Skin Quickly remove contaminated clothing and shoes. Wash affected area thoroughly with soap and water. Seek medical attention immediately if skin surface is damaged. 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. Use respiratory medical device, if available, in place of mouth-to-mouth resuscitation. Trained person may administer oxygen if physician advises. Seek medical attention immediately.

4. FIRST AID MEASURES (con't)

Ingestion Seek medical attention immediately. If conscious, have person rinse mouth thoroughly with water or milk, give 8 ounces or more of water or milk to drink. DO NOT induce vomiting. Do not force an unconscious person to drink or vomit.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION DATA

Flashpoint	Not combustible
Flammable Limits	Not applicable
Autoignition Temperature	Not applicable

Extinguishing Media	Water spray or extinguishing agents suitable to the surrounding fire
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SPECIAL FIRE FIGHTING PROCEDURES

Keep unauthorized personnel away. Wear positive pressure self-contained breathing apparatus and full protective clothing. Stay upwind. Stop spill/release if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Control runoff waters. Ventilate closed spaces before entering. Always stay away from the ends of tanks.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Contact with common metals may generate hydrogen gas which can form flammable mixtures with air. At high temperatures this solution may release toxic fumes of fluorides, phosphorus and potassium oxides, and hydrochloric acid.

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

6. ACCIDENTAL RELEASE MEASURES

First Choice DepHeat 2 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.

6. ACCIDENTAL RELEASE MEASURES

Pump spilled material into suitable containers for removal. Flush area with water, contain and remove cleanup liquid. Small amounts of spilled solution 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.

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 Use and store this material in cool, dry, well-ventilated areas. Protect from extreme cold which may cause crystallization of the product. Store only in approved containers. Do not use metal containers. Keep containers closed and protect containers against physical damage. Keep away from nylon and other incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Phosphoric acid	OSHA PEL-TWA	1 mg/l.	NIOSH/IDLH level
	ACGIH TLV-TWA	1 mg/l.	1000 mg/l. ³
	ACGIH TLV-STEL	3 mg/l. ³	
Potassium chloride	No limits have been established		

Ventilation Use general or local exhaust systems sufficient to meet exposure limits.

Eyes Chemical protective goggles should be used where splashing may occur and when transferring solutions; full face shield over goggles offers further protection where liquid contact is possible.

Skin Where liquid contact, misting, or high vapor concentration is possible, wear coveralls over long-sleeved shirt and longpants, socks, chemical resistant footwear and chemical resistant gloves.

Respiratory Respiratory protection should be worn if exposure limits are exceeded.

9. PHYSICAL AND CHEMICAL PROPERTIES (typical)

Boiling Point	Approx 212 F (100 C)
Freezing Point	<3. F (0 C)
Vapor Pressure	Not known
Vapor Density (air=1)	Not known
Percent Volatile (by volume)	Not known
Evaporation Rate (n-butyl acetate=1)	Not known
Solubility in Water	Complete
pH	-0.11
Salt-out Temperature	4. F (5.0 C)
Appearance and Odor	Clear, colorless liquid. No odor

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use and storage
Hazardous Polymerization	Will not occur
Incompatibility	Corrosive to metals, nylon, leather. Contact with chlorates, sulfides, cyanides, or hypochlorites such as chlorine bleach, will produce toxic gases. Contact with alkaline materials will generate heat. Avoid contact with other strong oxidizing agents.
Hazardous Decomposition Products	At high Temperatures this solution may release toxic fumes of fluorides, phosphorus and potassium oxides, and hydrochloric acid.
Conditions to Avoid	Do not store product in metal containers Avoid overheating

11. TOXICOLOGICAL INFORMATION

Published health information about ingredients includes the following:

Phosphoric acid	LDLo = 220 mg/kg (unreported, man) toxic effects not reported other than lethal dose value LD50 = 1530 mg/kg (oral, rat) produced general depressed activity (sommolence), blood in urine (hematuria)
Potassium chloride	LDLo = 20 mg/kg (oral, man) produced nausea or vomiting, change in blood clotting factors, irregular heartbeat TDLo = 60 mg/kg/D (oral, woman) produced nausea or vomiting, change in blood clotting factors

11. TOXICOLOGICAL INFORMATION (con't)

POTENTIAL CARCINOGEN DATA (IARC, NTP, OSHA)

None found for this solution

FOR HEALTH EMERGENCIES CALL YOUR LOCAL POISON CENTER

12. ECOLOGICAL INFORMATION

No data found

First Choice DepHeat 2 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.

This substance meets the RCRA definition of hazardous waste. California prohibits land disposal for hazardous wastes with pH less than or equal to 2.

14. TRANSPORTATION INFORMATION

DOT Proper Shipping Name	Corrosive Liquid, N.O.S. (Phosphoric acid)
DOT Hazard Class	8
ID No.	UN1760
Packaging Group	III
NA ERG No.	Guide No. 154

Label/Placard Required	CORROSIVE (1001 lbs or more)
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Freight Description	Fertilizing compounds, N.O.I., liquid
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FOR TRANSPORTATION EMERGENCIES CALL CHEMTREC 1-800-424-9300

15. REGULATORY INFORMATION

Reportable Quantity - CERCLA	Phosphoric acid: (RQ) 5000 pounds (2270 kg)
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SARA Title III (EPCRA)	Phosphoric acid is subject to the reporting Requirements of Section 313 (40 CFR Part 372)
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CAS #	Chemical name	Percent by weight
7664-38-2	Phosphoric acid	22

EPA NATIONAL RESPONSE CENTER 1-800-424-8802

16. OTHER INFORMATION

DATE PREPARED April 18, 1997

NAME OF RESPONSIBLE PARTY Western Farm Service, Inc.
P.O. Box 1168
Fresno, California 93715
(209) 436-0450

NOTICE

All information appearing in this document is based on data provided by third party sources and is compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information 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.

Western Farm Service, Inc., makes no warranty of merchantability, fitness for any purpose or otherwise, express or implied, concerning this product or its uses which extend beyond the use of the product under normal conditions in accord with the statements made on the label.

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