

MATERIAL SAFETY DATA SHEET

FERTI-SPRAY Zip

Page 1 of 4

Issue Date: 04/01

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

FERTI-SPRAY ZIP

Common Name: Liquid nutrient/buffer.
 Chemical Description: Liquid fertilizer/surfactant mixture.

TSCA/CAS No.: This product is a mixture — there is no specific CAS No.

Manufactured For:

Fertizona
 2850 S. Peart Road
 Casa Grande, AZ 85222

Emergency Phone Numbers

Emergency Telephone: DAYS: (520) 836-7477
 EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

<u>CHEMICAL</u>	<u>CAS NO.</u>	<u>%</u>	<u>TLV OR PEL</u>	<u>RQ (lbs)</u>
Phosphoric acid	7664-38-2	10.4	N.A.*	5,000
Ferrous sulfate	7720-78-7	8.8	N.A.	1,000
Zinc sulfate	7733-02-2	2.5	N.A.	1,000
POE Nonylphenol	9016-45-9	2.0	N.A.	N.P.*

* N.A. - Not Available.
 * N.P. - Not Pertinent.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Clear amber liquid with slightly soapy/phosphoric acid-like odor. Severe eye irritant. Avoid mixing with strong alkalis, acids, oxidizing agents. Not D.O.T. regulated.

HEALTH: 2 REACTIVITY: 1 FLAMMABILITY: 0 ENVIRONMENT: 1
 (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

SECTION 4. FIRST AID

Eyes: Flush with water for at least 15 minutes. Do not rub eyes. Seek medical attention immediately.
 Skin: Flush with water for at least 15 minutes. Seek medical attention immediately.
 Ingestion: Drink 2 glasses of water or milk to dilute. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.
 Inhalation: Move to fresh air. If breathing becomes difficult, call a physician.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flash Point: >350°F.
 Test Method: ASTM-D93

LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	None.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	None.
Extinguishing Media:	Does not burn.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal.
Evacuation:	Not necessary.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store near food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Harmful if swallowed. Causes eye and skin irritation. In case of contact, immediately flush eyes or skin with plenty of water.

SECTION 8.	PERSONAL PROTECTIVE EQUIPMENT
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Eyes:	Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.
Skin:	Impervious gloves and clothes.
Respiratory:	Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation:	Recommended but no TLV established.

SECTION 9.	PHYSICAL AND CHEMICAL DATA
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Appearance:	Clear amber liquid.
Odor:	Slightly soapy/phosphoric acid-like.
pH:	<1.5
Vapor Pressure:	0.25 (psi)
Vapor Density (Air=1):	>1.0
Boiling Point:	98.9°C (210°).
Freezing Point:	Not available.
Water Solubility:	Miscible.
Density:	9.67 lbs./gal.
Evaporation Rate:	Not available.
Viscosity:	Not available.
% Volatile:	Not available.
Octanol/Water Partition Coefficient:	Not available.
Saturated Vapor Concentration:	Not available.

SECTION 10.	STABILITY AND REACTIVITY
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Stability:	Stable.
Conditions To Avoid:	Avoid contact with strong alkalis, acids, oxidizing agents.
Incompatibility:	Not available.
Hazardous Decomposition Products:	None.
Hazardous Polymerization:	Will not occur.

SECTION 11.	POTENTIAL HEALTH EFFECTS
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<u>Acute Effects:</u>	
Eyes:	Severe irritant. Causes redness and/or burning.
Skin:	Irritant, especially from prolonged exposure. Causes redness, drying and cracking.
Ingestion:	May cause stomach cramps and/or nausea.
Inhalation:	None expected but aerosol mist may cause mild irritation of nasal mucous membranes.
<u>Subchronic Effects:</u>	None known.
<u>Chronic Effects:</u>	None known.

SECTION 12.	ECOLOGICAL INFORMATION
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Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Not known.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

SECTION 14. TRANSPORTATION

D.O.T.:	Not D.O.T. Regulated.
Other Shipping Description:	Adhesives, Adjuvants, Spreaders or Stickers, Liquid. (NMFC Item 4612, LTL Class 60)

SECTION 15. REGULATORY INFORMATION

<u>CERCLA:</u>	Phosphoric acid, iron sulfate and zinc sulfate are listed as priority pollutants under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements.
<u>SARA TITLE III, Section 313 Toxic Chemicals:</u>	Phosphoric acid (10.4%), Zinc compounds (2.5%).
<u>PROPOSITION 65 (CA):</u>	None.

SECTION 16. OTHER

All information appearing in this document was based on data provided by third party sources and was 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.