

2787 W. Bullard, Suite 101
P. O. Box 1168
Fresno, CA 93715-1168
(559) 436-2800
Fax: (559) 436-2953



*The Best People.
The Best Products.
The Best Service.*

MATERIAL SAFETY DATA SHEET NO. 502

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	16-16-16 with 1%Fe, 1%Zn		
Chemical Name	None		
Common Name, Synonyms	NPK Fertilizer w/micronutrients		
Manufactured By	Western Farm Service, Inc.		
Emergency Telephone Number	Information	(559) 436-2800	8am-5pm PST M-F
	CHEMTREC	(800) 424-9300	24 hours every day

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nutrients derived from the following **INGREDIENTS**

<u>Chemical Name</u>	<u>CAS #</u>
Diammonium Phosphate	7783-28-0
Urea	57-13-6
Ammonium Sulfate	7783-20-2
Potassium Sulfate	7778-80-5
Ferrous sulfate	7720-78-7
Zinc Sulfate	7446-19-7
Dolomite	16389-88-1

3. HAZARDS IDENTIFICATION

Emergency Overview	Multi-colored solid granular material. No odor.
Primary Routes of Entry	Skin or eye contact is the most likely exposure. Inhalation of dust is possible. Ingestion is unlikely.
Target Organs	Eyes, skin, mucous membranes
Potential Health Effects	
Eyes	Dust may cause irritation to eyes.
Skin	Can cause irritation especially around cuffs and collars due to dermal abrasion.
Inhalation	Inhalation of dust may cause respiratory tract irritation.
Ingestion	May cause gastrointestinal discomfort, vomiting and other medically related problems.

3. HAZARDS IDENTIFICATION (con't)

Symptoms of Overexposure

Acute	Ingestion of 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 nausea, vertigo, vomiting, abdominal pain, rapid heartbeat, rapid breathing, coma and convulsion may result from ingestion of large amounts of nitrates.
Chronic	Repeated or prolonged contact with irritants may cause conjunctivitis or dermatitis
Note 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.

4. FIRST AID MEASURES

Eyes	Flush gently and 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. Treat irritated skin with a good quality skin lotion. If redness or rash develops and persists, seek medical attention.
Inhalation	If respiratory problems develop, remove person to fresh air immediately. Oxygen may be administered if breathing is difficult. If person is not breathing, perform artificial respiration or CPR (cardiopulmonary resuscitation) and seek medical attention immediately.
Ingestion	Give several glasses of milk or water and induce vomiting. Consult a physician. Do not attempt to induce vomiting or give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION DATA

Flashpoint	Not flammable
Flammable Limits	Not flammable, ammonia may evolve if this product is exposed to flame or extremely high temperatures. Flammable limits for ammonia are Lower 16%, Upper 25%.
Auto-ignition Temperature	Not applicable
Extinguishing Media	Water spray

5. FIRE FIGHTING MEASURES (con't)**SPECIAL FIRE FIGHTING PROCEDURE**

If exposed to fire or extreme temperatures, components may evolve that are hazardous and flammable. Ammonia, formaldehyde, oxides of sulfur, nitrogen and phosphorus, or other toxic fumes may evolve at extreme temperatures. Keep unauthorized personnel away. Stay upwind. Wear full protective clothing and self-contained breathing apparatus. Apply water spray to knock down and absorb ammonia vapors. Control runoff waters. Ventilate closed spaces before entering.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Flammable or toxic fumes may be released when the product is exposed to fire.

NFPA RATING (SCALE 0-4)

None established for this material

6. ACCIDENTAL RELEASE MEASURES

16-16-16 is a plant food. However, large spills could possibly damage vegetation or cause illness in animals. Contamination of waterways could possibly cause fish kills. Clean up dry spills manually and reuse uncontaminated product for its intended purpose. If product is dissolved, dike spill area to prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways. Keep 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.

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 in dry, well-ventilated areas and away from heat or flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: No exposure limits have been set for this material.

Ventilation: None required under normal conditions.

Eyes: When dusty conditions necessitate, wear goggles to protect eyes.

Skin: Wear rubber or neoprene gloves for all handling operations. Boots and impervious clothing should be worn when necessary to prevent skin irritation.

Respiratory: Dust mask should be used during handling operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Bulk density	63.4 lbs/ft ³
Solubility in Water	moderate
Appearance and Odor	Multicolored solid granules. No odor.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use and storage.
Hazardous Polymerization	Not known to occur.
Incompatibility	Avoid strong oxidizing agents.
Hazardous Decomposition Products	Heating may release ammonia, various oxides and other toxic fumes.
Conditions to Avoid	Prevent contamination with incompatible materials. Prevent excessive temperatures, and store in a dry location.

11. TOXICOLOGICAL INFORMATION

Published health information about ingredients includes the following:

Diammonium Phosphate	Low to moderate toxicity. Food additive in small amounts.
Urea	TDLo = 4820 mg/kg (intraplacental in 16 week pregnant woman) caused abortion.
Ammonium sulfate	TDLo = 1500 mg/kg (oral, man) caused nausea or vomiting, hypermotility, diarrhea, other changes.
Potassium Sulfate	LD50=6600 mg/kg (oral, rat) LDLo = 750 mg/kg (oral, woman)
Iron oxide	LD50=180mg/kg (Intravenous, mouse) LDLo=150mg/kg (Intravenous, rabbit)
Zinc Sulfate	TDLo 106mg/kg (oral, human) lowered blood pressure, acute pulmonary edema, hypermotility, diarrhea.

POTENTIAL CARCINOGEN DATA (IARC, NTP, OSHA)

None found for this product

FOR HEALTH EMERGENCIES CALL YOUR LOCAL POISON CENTER

12. ECOLOGICAL INFORMATION

16-16-16 is a plant food. However, large spills could possibly damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread and runoff into 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 product is not regulated by DOT
Packaging Group	Not applicable
Label/Placard Required	None

FOR TRANSPORTATION EMERGENCIES CALL CHEMTREC 1-800-424-9300

15. REGULATORY INFORMATION

Reportable Quantity - CERCLA	Statutory one pound applies to zinc compounds. Ferrous sulfate CERCLA RQ = 1000 # Zinc sulfate CERCLA RQ = 1000#
SARA Title III (EPCRA)	Zinc compounds, Aqueous ammonia from dissociable salts are subject to the reporting requirements of Section 313 (40 CFR part 372).
CALIFORNIA Proposition 65	WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproduction harm.

EPA NATIONAL RESPONSE CENTER 1-800-424-8802

16. OTHER INFORMATION

DATE PREPARED	November 14, 2005
NAME OF RESPONSIBLE PARTY	Western Farm Service, Inc. P. O. Box 1168 Fresno, California 93715-1168 (559) 436-2800

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.

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