

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Zinc Chelate 10%
Product Number: FFN-00064
Product Use: Micronutrient
Supplier Information: Verdesian Life Sciences, U.S., LLC
 1001 Winstead Drive, Suite 480
 Cary, NC 27513
 1-800-868-6446
Emergency Number: 1-800-535-5053 INFOTRAC

2. HAZARDS IDENTIFICATION

CLASSIFICATION

HEALTH HAZARDS:

| | |
|----------------------|------------|
| Eye irritation | Category 2 |
| Skin irritation | Category 2 |
| Acute toxicity, oral | Category 4 |

SIGNAL WORD:

WARNING



HAZARD STATEMENTS:

Causes skin and serious eye irritation. Harmful if swallowed.

PRECAUTIONARY STATEMENTS

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye/face protection.

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash before reuse. Specific treatment, see supplemental first aid information. If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENTS | CAS NO. | % BY WEIGHT |
|-------------------|-------------|-------------|
| Zinc EDTA Chelate | 97859-51-2 | Proprietary |
| Zinc Compounds | Proprietary | < 50% |
| Zinc Sulfate | 7733-00-0 | Proprietary |

If Chemical Name/CAS No is "Proprietary" and/or Weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures:

General Advice: Provide this SDS to medical personnel for treatment.

If in Eyes: In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation develops and persists, get medical attention.

If on Skin or Clothing: In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If irritation develops and persists, get medical attention.

If Swallowed: If swallowed, rinse mouth with water (only if the person is conscious) If large quantities are swallowed, call a physician immediately.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Most important symptoms and effects: May cause skin and eye irritation; harmful if swallowed.

Recommendations for immediate medical care and special treatment, if needed:

Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Specific Hazards Arising from the substance/mixture during a fire: Oxides of nitrogen, carbon, and other hazardous products may be formed in a fire situation.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8. Do not walk through spilled material. Ventilate enclosed areas.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain.

Methods for Containment: Stop leak if you can do it without risk. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Clean-Up: SMALL SPILLS: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. LARGE SPILLS: Dike far ahead of liquid spill for later disposal. See Section 13: DISPOSAL CONSIDERATIONS for more information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: May be harmful if swallowed. Causes skin and eye irritation. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Conditions for safe storage, including any incompatibilities

Storage: Store in a cool, dry location away from direct sunlight, incompatible materials, sources of intense heat, or where freezing is possible. Keep container closed when not in use. Do not store near seeds, fertilizers, insecticides or fungicides. Containers should be opened in well-ventilated areas. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

No exposure limits noted for this product. The following information is given as general guidance.

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin and Body Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--------------------------------|
| Appearance: | Colorless to pale green liquid |
| Odor: | Odorless |
| Odor threshold: | No data available |
| pH: | 8.5 – 9.5 |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range | >212° F (>100° C) |
| Flash point: | No data available |
| Evaporation rate: | No data available |
| Flammability (solid, gas): | No data available |
| Upper/lower flammability or explosive limits: | No data available |
| Vapor pressure: | No data available |
| Vapor density: | No data available |
| Relative density: | 10.5 to 10.67 lbs/gal |
| Solubility(ies): | No data available |
| Partition coefficient: n-octanol/water: | No data available |
| Autoignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity:

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Excessive heat.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Oxides of nitrogen, carbon, and other hazardous products may be formed in a fire situation.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Likely Routes of Exposure: Inhalation, ingestion, eye and skin contact.

Eye Contact: Causes serious eye irritation.

Skin Contact: Causes skin irritation.

Ingestion: Harmful if swallowed.

Inhalation: Avoid breathing mists or sprays.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Inhalation

Acute (Immediate) No data available
Chronic (Delayed) No data available

Skin

Acute (Immediate) Causes skin irritation
Chronic (Delayed) No data available

Eye

Acute (Immediate) Causes serious eye irritation
Chronic (Delayed) No data available

Ingestion

Acute (Immediate) Harmful if swallowed.
Chronic (Delayed) No data available

Carcinogenic Effects This material does contain components that may cause cancer; however, the amounts present are well below regulatory cut-offs for classification.

Description of Symptoms: Please see Section 4 of this SDS for symptoms.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and Degradability: No data available

Bioaccumulation: No data available

Mobility in Soil: No data available

Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of content in accordance with local, regional, national and international regulations.

Container Disposal Method: Dispose of container in accordance with local, regional, national and international regulations.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT:

Non Regulated

IMDG:

Non Regulated

IATA:

Non Regulated

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS**

TSCA Inventory: Listed

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370.66):

Immediate

Section 313 Toxic Chemical(s):

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

SAFETY DATA SHEET

Zinc Chelate 10%

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

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| 16. OTHER INFORMATION |
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National Fire Protection Association (NFPA) Hazard Rating:

Health Hazards: 1 **Flammability:** 0 **Instability:** 0 **Special Hazards:** NDA
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key to abbreviations:

N/A = Not applicable

NDA = No data available

NE = Not Established

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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