

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: GRO-PHITE
Product Number: FFN-01167
Other Information: 0-0-25; 0-29-25
Product Use: Foliar or Soil Nutrient
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

HEALTH HAZARDS:

Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 1A
Acute toxicity, oral	Category 4

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if swallowed. Causes severe skin burns and eye damage.

**PRECAUTIONARY STATEMENTS**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

Immediately call a POISON CENTER or doctor/physician. Specific treatment (see Section 4. First Aid).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Store locked up. Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Organic Acid Salt	Proprietary	5-10
Organic Acid	Proprietary	>1
Organic Compound	Proprietary	>1
Proprietary Potassium Compounds	Proprietary	>1
Water and other components	Proprietary	87-92

Each of the components are present in less than 1% concentration (or 0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).

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.

0% of this mixture consists of ingredient(s) of unknown toxicity.

4. FIRST AID MEASURES**First Aid Measures:**

General Advice: Immediate medical attention is required. Provide this SDS to medical personnel for treatment.

If in Eyes: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

If on Skin: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Seek immediate medical attention/advice.

If Swallowed: Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

If Inhaled: Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get medical attention immediately if symptoms occur.

Most important symptoms and effects: Burning sensation.

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

Note to Physician: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Water spray may be inefficient when fighting fire.

Specific Hazards Arising from the substance/mixture during a fire: The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Protective equipment and precautions for firefighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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

Methods for Containment: Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. See Section 13: DISPOSAL CONSIDERATIONS for more information.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Do not ingest. If swallowed then seek immediate medical assistance.

Conditions for safe storage, including any incompatibilities

Storage: Store locked up in a cool, dry place. Keep container tightly closed and out of direct sunlight during storage for extended amounts of time. Do not add water or other material to the container. Do not contaminate water, food or feed by storage or disposal. Store above 32° F.

Incompatible Materials: Strong oxidizing agents; bases; acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Proprietary	NE	2 Ceiling (vacated)	2 Ceiling	NE	mg/m ³

NE = Not Established

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 face shield. 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, shoes plus socks, chemical-resistant apron, and impervious 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. If irritation is experienced, ventilation and evacuation may be required.

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 liquid
Odor:	Slight
Odor threshold:	No data available
pH:	6.9
Melting point/freezing point:	No data available
Initial boiling point and boiling range	212° F (100° C)
Flash point:	9034° F (5001° C)
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:	No data available
Solubility(ies):	Miscible
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: Exposure to air or moisture over prolonged periods.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as oxides of carbon.

11. TOXICOLOGICAL INFORMATION**Potential Health Effects:**

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

Eye Contact: Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

Skin Contact: Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

Ingestion: Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Inhalation: Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

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.

Toxicological Data:

Based on a proprietary component:

Oral, Rat LD₅₀: 214 mg/kg

Subchronic (Target Organ) Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.

Carcinogenicity / Chronic Health Effects: STOT–repeated exposure: Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen.

Reproductive Toxicity: No data available.

Developmental Toxicity: No data available.

Germ Cell Mutagenicity: No data available.

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

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Harmful to aquatic life.

Component Information:

Mosquitofish 96-hour LC₅₀: 80 mg/l

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 contents in an approved waste disposal plant, according to federal, state and local regulations.

Container Disposal Method: Dispose of container in an approved waste disposal plant, according to federal, state and local 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 and Delayed

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.

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

Proprietary component: 1,000 lbs

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.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:**Health Hazards:** 3 **Flammability:** 0 **Instability:** 0 **Special Hazards:** NDA**HMIS****Health Hazards:** 3 **Flammability:** 0 **Physical Hazards:** 0 **Personal Protection** X

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key to abbreviations:

ACGIH = America Conference of Governmental Industrial Hygiene

IARC = International Agency for Research on Cancer

N/A = Not applicable

NDA = No data available

NE = Not Established

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits

TWA = Time Weighted Average

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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