

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FUNGI-PHITE®
EPA Reg No: 73771-5
Other No: FFN-01143
Product Use: Fungicide

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**

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Mono- and di-potassium salts of phosphorus acid	13977-65-6	45.5
	13492-26-7	
Other Ingredients, including Glycerin	56-81-5	54.5

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

General Advice: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the International Poison Center at 1-888-740-8712 for emergency medical treatment information.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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: Causes moderate eye irritation.

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

Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

Extinguishing Media: LARGE FIRE: Water spray, fog or regular foam. SMALL FIRE: Dry chemical, CO₂, water spray or regular foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Unusual Fire and Explosion Hazards: When involved in a fire and exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases.

Hazardous Combustion Products: The components of this product will decompose to produce irritating vapors and toxic gases (e.g., phosphorous oxides, phosphine, carbon monoxide, and carbon dioxide).

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Avoid run off to waterways and sewers.

Methods for Clean-Up: If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

7. HANDLING AND STORAGE

Handling: Causes moderate 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.

Storage: Store in a cool, dry place. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Glycerin	5*	NE	NDA	NDA	mg/m ³

NE = Not Established

*R = Respirable Fraction

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 protective eyewear. 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 waterproof gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists 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:	Clear, colorless liquid
Odor:	Odorless
Odor threshold:	No data available
pH:	6.2 @ 68° F (20° C)
Melting point/freezing point:	32° F (<0° C)
Initial boiling point and boiling range	> 228.2 F° (109 C °)
Flash point:	N/A
Evaporation rate:	NDA
Flammability (solid, gas):	N/A
Upper/lower flammability or explosive limits:	N/A
Vapor pressure:	NDA
Vapor density:	NDA
Relative density:	1.39 g/ml @ 60 ° F (15.56° C)
Solubility(ies):	Miscible
Partition coefficient: n-octanol/water:	NDA
Autoignition temperature:	NDA
Decomposition temperature:	NDA
Viscosity:	1.36 cPs @ 68° F (20° C)

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

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 extreme temperatures and incompatible materials.

Incompatible Materials: Strong bases, strong oxidizers, strong reducers, and water-reactive materials.

Hazardous Decomposition Products: When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases (e.g., phosphorous oxides, phosphine, carbon monoxide, ammonia, and carbon dioxide).

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

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

Eye Contact: Moderately irritating based on EPA criteria.

Skin Contact: Slightly toxic and slightly irritating based on toxicity studies. Overexposure by skin absorption may cause nausea, vomiting, abdominal pain, decreased blood pressure, muscle weakness, muscle spasms.

Ingestion: Not a likely route of exposure, ingestion will lead to irritation of the throat, esophagus, and other tissues of the digestive system.

Inhalation: Inhalation of sprays or mists may be irritating to the nose, throat and exposed mucous membranes.

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:

No data available

Subchronic (Target Organ) Effects: No data available.

Carcinogenicity / Chronic Health Effects: No data available.

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:	Rainbow Trout LC ₅₀ (96 hr) > 112 mg/L
Component Information:	No data available
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:**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal Method:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Refillable Container: Refillable container. Refill this container with Mono- and di-potassium salts of Phosphorous Acid only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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**EPA FIFRA INFORMATION**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Harmful if absorbed through skin. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

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:

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.

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

Health Hazards: 3 **Flammability:** 1 **Instability:** 0 **Special Hazards:** NDA

Key to abbreviations:

N/A = Not applicable

NDA = No data available

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits, based on 15-minute exposures

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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