

# FUNGI-PHITE® CEREALS

A Fungicide for the Suppression and Control of Phytophthora, Pythium and Downy Mildew

## ACTIVE INGREDIENTS:

Mono- and di-potassium salts of Phosphorous Acid*	45.5%
OTHER INGREDIENTS	54.5%
TOTAL	100.0%

\* Contains 5.41 lbs/gal of the active ingredients of Mono- and di-potassium salts of Phosphorous Acid

\* Equivalent to 3.38 lbs/gal Phosphorous Acid

## KEEP OUT OF REACH OF CHILDREN CAUTION

### FIRST AID

If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

### Hotline Number

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.

**See Inside Booklet for Precautionary Statements and Directions for Use**

EPA Reg. No. 73771-5



This product is manufactured by:  
Verdesian Life Sciences, U.S., LLC 1001 Winstead Drive, Suite 480, Cary, NC 27513

Target Market  
CEREALS

Target Usage/  
Application

FUNGICIDE

Net Contents

2.5 gal

REV 04/15 AO  
FF01142

## PRECAUTIONARY STATEMENTS 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).

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear

- long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks
- protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers to be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notifications, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear coveralls, waterproof gloves, shoes and socks, and protective eyewear.

### CHEMIGATION

Apply this product only through the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, fanjet or micro-sprinkler; or drip (trickle) and hydroponic solutions. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water system must contain a functional, reduced pressure zone (RPZ) backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or, in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Use a pesticide supply tank that is equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker-spreaders, insecticides, nutrients, etc. Observe all directions, cautions and limitations on the label of the product(s) being mixed.

For fixed position irrigation systems, apply the pesticide towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system. Apply the pesticide continuously through irrigation systems that move and do not irrigate the same or fixed area during the irrigation cycle.

Complete the pesticide injection in sufficient time to allow the pesticide to be completely flushed out of the irrigation system before the system is shut down.

#### **SPRINKLER CHEMIGATION**

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Use a pesticide supply tank that is equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker-spreaders, insecticides, nutrients, etc. Observe all directions, cautions and limitations on the label of the product(s) being mixed.

For fixed position irrigation systems, apply the pesticide towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system. Apply the pesticide continuously through irrigation systems that move and do not irrigate the same (fixed) area during the irrigation cycle.

Complete the pesticide injection in sufficient time to allow the pesticide to be completely flushed out of the irrigation system before the system is shut down.

#### **DRIP (TRICKLE) CHEMIGATION**

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

System must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Use a pesticide supply tank that is equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker-spreaders, insecticides, nutrients, etc. Observe all directions, cautions and limitations on the label of the product(s) being mixed.

Apply the pesticide towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system.

Complete the pesticide injection in sufficient time to allow the pesticide to be completely flushed out of the irrigation system before the system is shut down.

#### **†GENERAL HYDROPONIC APPLICATION**

General Root Rots ( <i>Pythium</i> , <i>Phytophthora</i> )	For use with plants grown in recirculating hydroponic systems to aid in the control of pathogens.	Add 1-2 liters Fungi-Phite® per 20,000 L nutrient solution.	Repeat every 4-6 weeks in summer and every eight weeks in winter. Depending on crop load and the water quality, the application time interval may be reduced.
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†Not registered for use in CA unless accompanied by a supplemental label.

**Note: For Recirculating (i.e. closed systems) use only. Do not remove reservoir water prior to harvest. Apply solid residue as fertilizer only at Fungi-Phite® concentrations at or below those approved on this label for direct application.**

### **AGRICULTURAL USE INSTRUCTIONS**

#### **GENERAL APPLICATION INSTRUCTIONS**

Apply this product by various application methods, including foliar spray (aerial and ground), soil drench, soil incorporation and bare root dip. For foliar sprays, apply this product with sufficient water volumes for adequate coverage of foliage, according to crop and growth stage.

Make applications prior to disease development in conjunction with good cultural management practices. Do not exceed the use rates or apply more frequently than the specified interval or plant injury can occur. Do not apply to plants that are dormant or heat or moisture stressed. To avoid undesirable copper phytotoxicity, do not make foliar applications to plants treated with copper-based compounds at less than 20 day intervals unless instructed to do so by your crop consultant. Allow foliage to dry completely after application. Do not apply when conditions favor wet tissue for prolonged periods (>4 hours).

#### **MIXING INSTRUCTIONS**

1. Fill the spray tank with  $\frac{1}{2}$  to  $\frac{3}{4}$  of the required volume of water before adding the product.
2. Add the product slowly to the tank and agitate by hydraulic or mechanical means.
3. Continue to fill the tank with water to the desired volume while agitating.
4. Continue agitation when applying.

**In preparing tank mixes with fungicides registered for use on cereals, add the Fungi-Phite to water first and then add the tank mix partner with agitation.**

## COMPATIBILITY

When using Fungi-Phite in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix product label. No label dosage rate must be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product that prohibits such mixing. Tank mixtures or other applications of products are permitted only in those states in which the products are registered.

This product is compatible with most products used in agriculture. However, crop sensitivity to these mixtures may vary. If these combinations or others have not been previously used, do not tank mix without first testing the mixture's compatibility nor apply it without assessing its safety to the crop (Phytotoxicity).

The use of spray adjuvants (i.e. stickers, spreaders, wetting agents) will enhance this products performance. If an adjuvant is used with this product, test before use for compatibility. Do not use strongly acidifying compatibility agents.

To determine the compatibility of this product with other products, use a jar compatibility test. Add the correct proportions of each product and the appropriate quantity of water to clean container, thoroughly mix, then let stand for 3-5 minutes. If the mixture remains in solution or can be remixed readily, the products are considered compatible.

To determine if a combination is phytotoxic to a specific crop, spray a few plants/trees/vines, then evaluate 3-7 days later for visual effects.

## GENERAL DIRECTIONS FOR CEREAL GRAINS, FORAGE AND FIBER CROPS, such as:

Alfalfa, Barley, Buckwheat, Clover (all types), Corn (all types), Cotton, Hay, Kudzu, Lespedeza, Lupin, Millet, Oats, Popcorn, Rice, Rye, Sainfoin, Sorghum, Teosinte, Trefoil, Triticale, Vetch, Wheat and Wild Rice

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
<i>Phytophthora</i> and <i>Pythium</i> spp. † <b>Suppression**</b> of <i>Rhizoctonia</i> spp.,	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in 5-10 gallons/acre (48-95 L/ha) of water.	Begin application after plants are established and conditions favor disease development. <b>Disease Prevention/Low Pressure Program*</b> : Apply lower rate at 2-4 week intervals. Do not apply more than 6 times per crop cycle. <b>Disease Control/High Pressure Program*</b> : Apply higher rate at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 5-15 gallons/acre (48-140 L/ha) of water.	
	Chemigation Overhead:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water.	Apply with normal irrigation schedule. Follow <b>Disease Programs*</b> as stated above. Do not apply more than 6 times per crop cycle.
	Low Volume:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 10 gallons/acre (95 L/ha) of water.	
Downy Mildew	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in 5-10gallons/ acre (48-95L/ha) of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 5-15 gallons/acre (48-140 L/ha) of water.	<b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.
† <b>Suppression**</b> of Powdery Mildew	Foliar Spray Aerial:	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in 5-10 gallons/acre (48-95 L/ha) of water.	<b>Low Disease Pressure*</b> : Apply lower rate at the first onset of the disease. Repeat applications at 1-2 week intervals. Do not apply more than 6 times per crop cycle.
	Ground:	Apply 0.5-2 quarts/acre (1-5 L/ha) in a minimum of 5-15 gallons/acre (48-140 L/ha) of water.	<b>High Disease Pressure*</b> : Apply higher rate at the first onset of the disease. Repeat applications at 7-10 day intervals. Do not apply more than 6 times per crop cycle.

†Not registered for use in CA unless accompanied by a supplemental label.

## Suppression of Fusarium and Its Associated Mycotoxin, Deoxynivalenol (DON), in Barley, Oats, Rye, and Wheat:\*\*

DISEASE	APPLICATION METHOD	APPLICATION RATE	APPLICATION PROGRAM
†Suppression** of <i>Fusarium</i> spp. Head Diseases and the associated mycotoxin, Deoxynivalenol (DON)	Foliar Spray	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in 5-10 gallons/acre (48-95 L/ha) of water in a program including a registered fungicide labeled for Fusarium head blight control.	Make a preventative application when wheat and barley heads on the main stem are fully emerged (in Feekes growth stage 10.5 (barley) or 10.5.1 (oats, rye, and wheat)). Reapply using the lower rate at 2-4 week intervals when low disease pressure is predicted. Reapply using the higher rate at 1-2 week intervals when high disease pressure is predicted Do not apply more than 6 times per crop cycle.
	Aerial:		
	Ground:	Apply 0.5-1.5 quarts/acre (1-3.5 L/ha) in a minimum of 5-15 gallons/acre (48-140 L/ha) of water in a program including a registered fungicide labeled for Fusarium head blight control.	
	Chemigation Overhead:	Apply 2-4 quarts/acre (5-9 L/ha) in a minimum of 1,000 gallons/acre (9,350 L/ha) of water in a program including a registered fungicide labeled for Fusarium head blight control.	

When head blight is a concern, growers should manage this disease with fungicides that are labeled for and effective in managing this disease and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source. Spray equipment must be set to provide good coverage to wheat and barley heads. Deoxynivalenol (DON) is a mycotoxin that may be produced in barley, oat, rye, and wheat grain affected by Fusarium head blight. The occurrence of Fusarium Head Blight does not automatically correlate to the presence of the deoxynivalenol (DON) in barley, oat, rye, and wheat grain, but occurrence may lessen following Fungi-Phite® application to suppress Fusarium Head Blight.

†Not registered for use in CA unless accompanied by a supplemental label.

\*Check with your local Extension Agent or Crop Consultant if you are unsure about disease prevention, control or severity/pressure.

\*\*Suppression: Fungi-Phite® has suppressive properties on diseases caused by certain bacteria or fungi. When applying Fungi-Phite® for disease suppression, use it in combination with another registered bactericide or fungicide registered for the same crops listed on this label.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place.

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

### CONTAINER HANDLING:

**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.

**FOR CHEMICAL EMERGENCY ONLY (SPILL, LEAK, OR FIRE), CALL INFOTRAC AT 1-800-424-9300.**

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions for use of this product are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of VERDESIAN LIFE SCIENCES (VERDESIAN). To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

VERDESIAN warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, VERDESIAN makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. To the extent consistent with applicable law, VERDESIAN disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product. No agent of VERDESIAN is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at VERDESIAN's election, the replacement of product.

EPA 20141125 - A0

Manufactured By:  
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SPECIMEN