



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

89118-12

Date of Issuance:

7/18/19

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

VCP-026

Name and Address of Registrant (include ZIP Code):

Vive Crop Protection, Inc.  
6275 Northam Dr., Suite 1  
Mississauga, Ontario  
Canada L4V 1Y8

C/O Olav Messerschmidt  
OMC Ag Consulting  
828 Tanglewood Lane  
East Lansing, MI

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:

Hope Johnson, Product Manager 21  
Fungicide Branch, Registration Division (7505P)

Date:

7/18/19

3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 89118-12.”
  - Add an EPA Establishment Number and Net Contents information.
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/03/2018
- Alternate CSF A dated 12/03/2018
- Alternate CSF B dated 12/03/2018
- Alternate CSF C dated 12/03/2018

The alternate brand name Xyler FC has been added to the product record.

If you have any questions, please contact Maryam K. Muhammad by phone at 703-347-0301, or via email at [Muhammad.maryam@epa.gov](mailto:Muhammad.maryam@epa.gov).

Enclosures

METALAXYL	GROUP	4	FUNGICIDE
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# VCP-026

[Alternate Brand Name: "Xyler FC"]

Active Ingredient:	By Wt
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester	31.3 %
Other Ingredients:	68.7 %
<b>TOTAL</b>	<b>100.0 %</b>

This product contains 2.8 pounds of active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN CAUTION

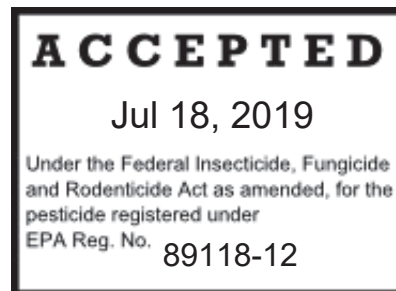
This label must be in the possession of the user at the time of application.

See [back panel][inside booklet] for additional precautionary information.

EPA Reg. No. 89118-                      EPA Est. XXX-YY-Z  
Net Contents: 1, 2½, 5, 275, \_\_\_\_\_ Gallons



**Vive Crop Protection Inc.**  
828 Tanglewood Ln.  
East Lansing, MI 48823  
1-416-260-8889



## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.**

FIRST AID
<b>If swallowed:</b> <ul style="list-style-type: none"><li>● Call a poison control center or doctor immediately for treatment advice.</li><li>● Have person sip a glass of water if able to swallow.</li><li>● Do not induce vomiting unless told to by a poison control center or doctor.</li><li>● Do not give anything to an unconscious person.</li></ul>
<b>If on skin or clothing:</b> <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>
<b>EMERGENCY INFORMATION</b> <p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>In the event of a medical or chemical emergency contact Chemtel Inc. in North America at 1-800-255-3924 or worldwide international at +1-813-248-0585.</p>

## Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves made of: barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene, polyvinylchloride (PVC)  $\geq$  14 mils or viton  $\geq$  14 mils;
- Shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## Environmental Hazards

For terrestrial uses: 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

## Groundwater Advisory

This chemical is known to leach through the soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## Physical or Chemical Hazards

Do not mix or allow coming in contact with any oxidizing agent. hazardous chemical reaction may occur.

## 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 may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Exception: If the product is planted in-furrow or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls;
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber;
- Shoes plus socks.

## Product Restrictions

### Rotational Crops

Do not plant any crop that is not registered for use with metalaxyl in metalaxyl-treated soil for a period of 12 months unless a shorter interval is specified on the following list.

ROTATION CROP	PLANTING TIME FROM LAST VCP-026 APPLICATION
Alfalfa (birdsfoot trefoil); Almonds; Apples; Asparagus; Avocados; Blueberries; Citrus; Clover; Cole Crops; Cotton; Cranberries; Cucurbit Vegetables; Deciduous Fruits and Nuts*; Eggplant; Garlic; Ginseng; Grapes; Grasses**; Hops; Leafy Vegetables (Excluding Brassica); Legume Vegetables (Beans and Peas - Succulent and Dried); Onions (Dry Bulb, Green, and Seed); Papaya, Peanuts; Peppers; Pineapples; Potatoes; Raspberries; Root and Tuber Vegetables; Soybeans; Spinach; Stone Fruits; Strawberries; Sugar Beets; Tobacco; Tomatoes; Walnuts	0 Days
Corn	9 Months
Cereal Grains Other Than Corn	14 Days
Corn Crops Not Intended for Food or Feed	0 Days
All Other Crops Intended for Food or Feed	12 Months

\* These crops and other perennial crops may be planted Immediately following last application of this product provided they will not bear harvestable fruit within 12 months.

\*\* Any grass, Gramineae family (either green or cured), except the following. Do not apply to sugarcane; to any of the following that will be fed to or grazed by livestock: barley, buckwheat, corn, millet (pearl or proso), oats, popcorn, rice, rye, sorghum, teosinte, triticale, wheat, or wild rice; or to any enclosed pasture grasses or grasses grown for hay or silage, such as bermudagrass, bluegrass, bromegrass, or fescue.

## Replanting

If replanting is necessary, additional applications of this product may be made, provided that the total amount of metalaxyl applied does not exceed the maximum allowed for the specific crop.

## Restrictions

- This product is not to be used in foliar applications except as specified on this label for the treatment of storage rot in potatoes use.
- This product is for field use only and may not be used on transplant trays, greenhouses, lath houses, float houses, hydroponic production, or in bedding plant structures.
- Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same year: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

## Product Information

VCP-026 is a systemic fungicide used to control certain diseases caused by members of the Oomycete class of fungi on specified crops. Other fungicides must be used to control diseases incited by other classes of fungi.

## Integrated Pest Management (IPM)

VCP-026 should be used as one component in an integrated disease management program including cultural practices that reduce disease. Consult your local extension specialist or certified crop advisor for local best practices to manage disease. VCP-026 may be used in agricultural extension advisory programs (disease forecasting) which recommend fungicide applications based on environmental and other factors.

## Spray Drift Advisories

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## Importance of Droplet Size

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## Controlling Droplet Size - Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Controlling Droplet Size - Aircraft**

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### **Boom Height - Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **Release Height - Aircraft**

Higher release heights increase the potential for spray drift. When applying aurally to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

### **Shielded Sprayers**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **Temperature and Humidity**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **Temperature Inversions**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **Wind**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **Application and Mixing Instructions**

Shake well before use.

VCP-026 fungicide is designed for at-plant, and pre-plant incorporated (PPI) applications, and must be diluted with water and/or liquid fertilizer before application. Refer to Specific Use Directions for Crop Plants for pest control or suppression instructions.

Do not use strainer (nozzle screens) with a mesh designation greater than 50.

Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

VCP-026 can be mixed directly with water and/or liquid starter or popup fertilizer. Follow liquid fertilizer recommendations regarding seed safety and use guidelines. Conduct a preliminary jar test using the appropriate



ratio of fertilizer and VCP-026 (see instructions below). If mixture compatibility is not acceptable, repeat the jar test with an equivalent volume of water added to the liquid fertilizer prior to adding VCP-026. Do not exceed dilution specified by mixing instructions. For best results, use immediately after mixing. Do not allow a tank mixture to set overnight. Do not store mixtures. Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

- Use spray nozzles appropriate for the crop to provide full coverage and uniform distribution of the spray mixture
- Use screens where appropriate to protect sprayer equipment and prevent clogging
- Screens used to protect pump on the suction side to be no finer than 16-mesh
- Do not fit the recirculation line of the spray system with a screen
- Screens used on the spray nozzles are to be no finer than 50-mesh
- The spray system pump is to have sufficient capacity to deliver 35-40 psi of pressure to the nozzles, and recirculate at least 10% of the tank volume per minute to maintain a uniform mixture
- Agitate the spray mixture with a jet agitator or liquid sparge tube
- Do not use air sparge

Consult manufacturers of spray equipment for more information on sprayer use, calibration, and recommendations. Consult state agricultural extension recommendations for local directions and spray schedules.

Unless otherwise directed by registered supplemental labeling, follow the Directions for Use in each crop group section.

## Mixing Instructions

### Solo VCP-026 Application

- Determine the required volume of water or liquid fertilizer for application and fill the spray/mixing tank with  $\frac{1}{2}$  -  $\frac{2}{3}$  of this volume
- Begin agitation of the tank and add the required volume of VCP-026 for the insecticide application
- Continue agitation while adding the remaining  $\frac{1}{2}$  -  $\frac{1}{3}$  volume of water or liquid fertilizer to complete the spray mixture
- Apply the mixture after the contents of the tank are completely dispersed
- Maintain agitation of the spray tank until all of the spray mixture has been applied.
- Thoroughly rinse spray tank with water and dispose of the rinse water by spraying onto a section of the already treated crop

Restrictions: Do not prepare more spray mixture than is required for the treatment. Do not allow a mixture to set overnight. If the mixture settles, agitate the mixture and assess to ensure thorough re-mixing prior to application. Do not store spray mixtures.

### VCP-026 Tank Mixture Application

VCP-026 may be applied in tank mixtures with adjuvants, micronutrients, and other products approved for use on registered crops.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When an adjuvant is used, it is recommended to use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification.

**Test potential mixing partners, including adjuvants, for mixing compatibility using a standard jar test or other similar method and for crop safety prior to use on a crop. Incompatibilities may exist with some methylated seed oils, crop oil concentrates, or silicone-based adjuvants; conduct jar tests before using.**

*The following jar test procedure is recommended to evaluate compatibility: Following any product specific instructions for order of addition, pour the recommended proportions of the products into a suitable container, mix thoroughly and allow to stand at least twenty (20) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible.*

Do not prepare more spray mixture than is required for the treatment. For best results, use immediately after mixing. Do not allow a mixture to set overnight. If the mixture settles, agitate the mixture and assess to ensure thorough re-mixing prior to application. Do not store spray mixtures.

## Instructions For Soil Applications

### At-Plant Linear Application Instructions

Apply VCP-026 as an in-furrow spray in 3-7 gallons of spray per acre, unless otherwise specified.

Consult the table below to determine equivalent per acre application rates based on the linear application rates specified in the Specific Use Directions For Crop Plants section.

<b>At Plant In-Furrow Application Rates (fl oz per acre)</b>					
Row Spacing	Row ft per Acre	<i>0.21 fl oz per 1000 row feet</i>	<i>0.43 fl oz per 1000 row feet</i>	<i>0.79 fl oz per 1000 row feet</i>	<i>1.20 fl oz per 1000 row feet</i>
20	26136	5.6	11.2	20.5	31.4
22	23760	5.1	10.2	18.7	28.5
24	21780	4.7	9.3	17.1	26.1
26	20105	4.3	8.6	15.8	24.1
28	18669	4.0	8.0	14.7	22.4
30	17424	3.7	7.5	13.7	20.9

32	16335	3.5	7.0	12.8	19.6
34	15374	3.3	6.6	12.1	18.4
36	14520	3.1	6.2	11.4	17.4
38	13756	2.9	5.9	10.8	16.5
40	13068	2.8	5.6	10.3	15.7
<b>Linear Row Feet Calculation: 522,720 ÷ row spacing (in inches) = Row feet per acre</b>					

**Ground Application Instructions**

Apply VCP-026 in 20 gallons of finished spray per acre, unless otherwise specified.

**Banded Application Instructions**

When banded applications are used, the treated area will be less than the total planted area and the application rate of VCP-026 will be proportionately less. Use the following formula to calculate the amount of product needed per acre when banded applications are made.

**Band Width (inches) / Row Spacing (inches) x Broadcast Rate (fl oz/A) = Banded Application Rate (fl oz/A)**

**Chemigation Use Directions**

- Apply this product only through sprinklers including center pivot, solid set, hand move, moving wheel, micro-sprinkler, or drip irrigation systems. 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.
- Follow rates and application timings given in the specific crop instructions.
- The chemical supply tank and injector system should be thoroughly cleaned and flushed with clean water.
- Do not apply at less than 15 parts water or liquid fertilizer diluant to 1 part VCP-026 tank mix to avoid the potential to deteriorate valves and seals. Leather seals are the most resistant. EPDM or silicone rubber may be used but should be replaced once a year. Do not use Vitron, Buna-N, Neoprene or PVC seals.

**Operating Instructions**

- 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 inter-locking 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 a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

### Specific Instructions for 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 systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) 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 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 pipe.
- The pesticide injection pipeline must 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.

### Resistance Management Recommendations

METALAXYL	GROUP	4	FUNGICIDE
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For resistance management, VCP-026 contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to VCP-026 and other group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of VCP-026 or other Group 4 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact your pesticide distributor or university extension specialist.

### VCP-026 CONVERSION TABLES

<b>Treated Area</b>			
<b>fl oz Product/A</b>	<b>lb a.i./A</b>	<b>Treated Acres per Gallon Product</b>	<b>Treated Acres per 2.5 Gallon of Product</b>
<b>11.4</b>	<b>0.25</b>	<b>11.2</b>	<b>28.0</b>
<b>17.1</b>	<b>0.375</b>	<b>7.5</b>	<b>18.7</b>
<b>22.9</b>	<b>0.5</b>	<b>5.6</b>	<b>14.0</b>
<b>45.7</b>	<b>1</b>	<b>2.8</b>	<b>7.0</b>
<b>57.1</b>	<b>1.25</b>	<b>2.2</b>	<b>5.6</b>
<b>91.4</b>	<b>2</b>	<b>1.4</b>	<b>3.5</b>

## SPECIFIC USE DIRECTIONS FOR CROP PLANTS

### COTTON

Diseases	USE RATES
	fl oz product/1000 row ft. (lb a.i./1000 row ft.)
Seed and Root Rots ( <i>Pythium</i> spp.)	0.21 - 0.43 (0.0047 - 0.0094)
Seedling Diseases and Seed Rots ( <i>Phytophthora</i> spp.)	
<b>At-Plant Application Instructions:</b>	
<ul style="list-style-type: none"> <li>● Apply in-furrow in sufficient water or liquid fertilizer to ensure uniform coverage of the row.</li> <li>● Direct the spray in the furrow over the seed just before the seed is covered.</li> </ul>	

### LEGUME VEGETABLES (SUCCULENT OR DRIED) CROP GROUP 6 (EXCEPT SOYBEAN)

Bean (*Lupinus* spp.) (grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (*Phaseolus* spp.) (field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (*Vigna* spp.) (adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean; chickpea; guar; jackbean; lablab bean; lentil; pea (*Pisum* spp.) (dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea); pigeon pea; soybean (immature seed); sword bean; all cultivars, varieties and/or hybrids of these.

Diseases	USE RATES
	fl oz product/A (lb a.i./A)
Damping Off and Root Rot ( <i>Pythium</i> spp.)	22.9 - 45.7 (0.5 - 1.0)
<b>PPI Application Instructions</b>	
<ul style="list-style-type: none"> <li>● Broadcast as a soil application prior to planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>● Mechanically incorporate into the top 2 inches of soil.</li> <li>● For banded applications, a 7 inch band is recommended. See the Banded Application Instructions for more information and the banded application formula.</li> </ul>	
<b>Soil Surface Application Instructions</b>	
<ul style="list-style-type: none"> <li>● Broadcast as a soil application at planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>● For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section for more information and the banded application calculation.</li> <li>● If rainfall is not expected before seed germination starts, VCP-026 should be moved into the seed zone after planting with 0.5 to 1 inch of irrigation.</li> </ul>	
<b>Specific Use Restrictions:</b>	
<ul style="list-style-type: none"> <li>● Do not use for disease control in greenhouse or field grown vegetable bedding plants.</li> </ul>	

## PEANUT

Diseases	USE RATES
	fl oz product/A (lb a.i./A)
Seedling Disease ( <i>Pythium</i> spp.)	11.4 (0.25)
<b>At-Plant Application Instructions</b> <ul style="list-style-type: none"> <li>● Apply in-furrow in sufficient water or liquid fertilizer to ensure uniform coverage of the row.</li> <li>● For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section for more information and the banded application calculation.</li> <li>● Position the spray to be mixed with the soil covering the seed. Crop injury may occur if the seed is sprayed directly.</li> </ul>	
Pod Disease ( <i>Pythium</i> spp.)	22.9 - 45.7 (0.5 - 1.0)
<b>Specific Disease Instructions</b> <ul style="list-style-type: none"> <li>● <b>Pod Rot (<i>Pythium</i> spp.):</b> Apply as a soil-directed spray at early pod set or at pegging through overhead irrigation.</li> </ul>	

## POTATO

Diseases	USE RATES
	fl oz product/1000 row ft (lb a.i./1000 row ft)
<i>Pythium</i> Leak ( <i>Pythium</i> spp.) Pink Rot ( <i>Phytophthora erythroseptica</i> ) Seedling diseases ( <i>Pythium</i> spp.)	1.20 (0.0263)
<b>At-Plant Application Instructions</b> <ul style="list-style-type: none"> <li>● Apply as an in-furrow 6-8 inch spray directly over the seed piece in sufficient water or liquid fertilizer to ensure uniform coverage of the row.</li> </ul>	
Storage Rot ( <i>Pythium</i> spp., <i>Phytophthora erythroseptica</i> )	fl oz product/A (lb a.i./A)
	9.1 (0.2)
<b>Specific Disease Instructions</b> <ul style="list-style-type: none"> <li>● <b>Storage rot (<i>Pythium</i> spp., <i>Phytophthora erythroseptica</i>):</b> In addition to the in-furrow application, a follow-up foliar application of VCP-026 may be needed at tuber initiation.                             <ul style="list-style-type: none"> <li>○ When conditions are conducive to <i>Pythium</i> leak/Pink Rot</li> <li>○ When growing a variety susceptible to <i>Pythium</i> leak/Pink Rot</li> <li>○ In areas with long growing seasons</li> </ul> </li> <li>● Make a foliar application at the initiation of flower followed by a second application 14 days later. In areas with a history of storage rot, a third application 14 days after the second application.</li> <li>● If conditions favor the development of foliar disease, tank-mix VCP-026 with an approved fungicide effective for the control of those diseases</li> </ul>	
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>● Do not apply as a dribble over the seed piece.</li> <li>● Do not use for disease control in greenhouse or field grown vegetable bedding plants.</li> <li>● <b>PHI:</b> Do not apply within 14 days of harvest.</li> </ul>	

## ROOT AND TUBER VEGETABLES CROP GROUP 1 (EXCEPT POTATO AND SUGAR BEET)

Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; laren; parsley, turnip-rooted; parsnip; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; tanager; turmeric; turnip; yam bean; yam true.

Diseases	USE RATES	
	fl oz product/A (lb a.i./A)	
Pythium Root Rot ( <i>Pythium</i> spp.) Phytophthora Root Rot ( <i>Phytophthora</i> spp.)	45.7 - 91.4 (1.0 - 2.0)	
<b>PPI Application Instructions</b> <ul style="list-style-type: none"> <li>Broadcast as a soil application prior to planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>Mechanically incorporate into the top 2 inches of soil.</li> <li>For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section for more information and the banded application calculation.</li> </ul>		
<b>Soil Surface Application Instructions</b> <ul style="list-style-type: none"> <li>Broadcast as a soil application at planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section for more information and the banded application calculation.</li> <li>If rainfall is not expected before seed germination starts, VCP-026 should be moved into the seed zone after planting with 0.5 to 1 inch of irrigation.</li> </ul>		
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>Do not exceed 2.0 lb a.i./A per year as a soil applied application.</li> <li>Do not use for disease control in greenhouse or field grown vegetable bedding plants.</li> </ul>		

## SOYBEAN

Diseases	USE RATES	
	fl oz product/1000 row ft (lb a.i./1000 row ft)	fl oz product/A (lb a.i./A)
Phytophthora root and stem rot ( <i>Phytophthora megasprema</i> ) <sup>1</sup>  Pythium damping off ( <i>Pythium</i> spp.)	0.21 - 0.79 (0.0047 - 0.0172)	17.1 - 57.1 (0.375 - 1.25)
<b>At-Plant Application Instructions:</b> <ul style="list-style-type: none"> <li>Following best local practice, follow the linear rate application instructions to apply in-furrow as a spray or stream directed to the soil adjacent to seed rather than directly on seed to increase crop safety. Thorough coverage of these areas important for good disease control.</li> </ul>		
<b>Soil Surface Application Instructions:</b> <ul style="list-style-type: none"> <li>Broadcast as a soil application at planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section</li> </ul>		



<p>for more information and the banded application calculation.</p> <ul style="list-style-type: none"> <li>● Use the full broadcast rate for season-long control</li> </ul>
<p><b>Specific Disease Instructions:</b></p> <ul style="list-style-type: none"> <li>● <sup>1</sup><b>Phytophthora:</b> Under heavy late season disease pressure, this product may not provide complete control. For best results, use soybean varieties that have some degree of resistance to the races of <i>Phytophthora</i> in the field.</li> </ul>

## SUGAR BEET

Diseases	USE RATES
	fl oz product/A (lb a.i./A)
Pythium Root Rot ( <i>Pythium</i> spp.)	45.7 - 91.4 (1.0 - 2.0)
<p><b>PPI Application Instructions</b></p> <ul style="list-style-type: none"> <li>● Broadcast as a soil application prior to planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>● Mechanically incorporate into the top 2 inches of soil.</li> <li>● For banded applications, a 7 inch band is recommended. See the Banded Application Instructions for more information and the banded application calculation.</li> </ul>	
<p><b>Soil Surface Application Instructions</b></p> <ul style="list-style-type: none"> <li>● Broadcast as a soil application at planting in sufficient water or liquid fertilizer to ensure uniform coverage.</li> <li>● For banded applications, a 7 inch band is recommended. See the Banded Application Instructions section for more information and the banded application calculation.</li> <li>● If rainfall is not expected before seed germination starts, VCP-026 should be moved into the seed zone after planting with 0.5 to 1 inch of irrigation.</li> </ul>	

## STORAGE AND DISPOSAL

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

### Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

### Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

### Container Handling:

*{NOTE TO REVIEWER – The appropriate Container Handling instructions will be selected from the following to appear on the final printed commercial label depending on which container the label is being printed for.}*

[Metal or Plastic Container less than or equal to 5 gallons - Non-refillable container:

Do not reuse or refill this container. Triple rinse 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 ¼ 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.]

[Container Handling greater than 5 gallons - Refillable container:

Refill this container with pesticide only. Do not reuse the 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 person refilling. To clean 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.]

[Container Handling greater than 5 gallons - Non-refillable container:

Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.]

[CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.]

## IMPORTANT INFORMATION READ BEFORE USING PRODUCT

### Conditions of Sale and Limitation of Warranty and Liability:

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of Vive Crop Protection or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Vive Crop Protection and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, VIVE CROP PROTECTION MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT.

Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Vive Crop Protection, and Buyer assumes the risk of any such use.

To the extent consistent with applicable law, Vive Crop Protection or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF VIVE CROP PROTECTION AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF VIVE CROP PROTECTION OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement except as signed by an authorized representative of Vive Crop Protection.

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**{Optional marketing or other non-FIFRA related language}**

[Shake Well Before Use]

[Liquid fertilizer compatible]

[Mix fungicide and liquid fertilizer, worry free]

[Designed for liquid fertilizer compatibility]

[The Allosperse Delivery System is a suite of ingredients used as delivery agents to control how Xyler FC mixes with fertilizer in the mix tank.]

[Allosperse delivery system]

[Using the Allosperse delivery system]

[Apply fertilizer and fungicide in a single pass]

[Mix directly with [most types of] starter fertilizer; NO expensive equipment, NO additives]

[No worries if weather delays application – product stays mixed in {most} fertilizers for 24 hours with only mild agitation needed]