

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511M)

1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration

\_\_ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:		
71085-73	11/7/2025		
Term of Issuance:			
Unconditional			
Name of Pesticide Product:			

CH-VAC-6083

Name and Address of Registrant (include ZIP Code):

CHEMAGCO LLC 15401 WESTON PARKWAY, SUITE 170 CARY, NC 27513

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention 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 U.S. Environmental Protection Agency. In order to protect health and the environment, the Administrator, on his or her 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 the 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 or registration review of your product when EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
NE	11/7/2025
Gina Burnett, Senior Regulatory Advisor	
Biopesticides Branch	
Biopesticides and Pollution Prevention Division (7511M)	
Office of Pesticide Programs	

Page 2 of 2 EPA Reg. No. 71085-73 Action Case No. 00667261

- 2. Make the following labeling change before you release this product for shipment:
  - Revise EPA Registration Number to read, "EPA Reg. No. 71085-73."
- 3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists 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 EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

Basic CSF dated 08/01/2025

If you have any questions, please contact Michael Piombino via email at piombino.michael@epa.gov.

Sincerely,

Gina Burnett, Senior Regulatory Advisor

Biopesticides Branch

Biopesticides and Pollution

NY

Prevention Division (7511M)

Office of Pesticide Programs

**Enclosure** 

## **CH-VAC-6083**

## STIMULANT OF PLANT DEFENSE REACTIONS

Active Ingredient:	
Laminarin	
Other Ingredients:	<u>96.49%</u>
Total	100.00%

# KEEP OUT OF REACH OF CHILDREN CAUTION

## ACCEPTED

11/07/2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 74005 70

71085-73

FIRST AID					
IF SWALLOWED	<ul> <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 do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>				
IF ON SKIN OR CLOTHING	<ul> <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>				
IF INHALED	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL ROCKY MOUNTAIN POISON AND DRUG CENTER at 1-866-673-6671. FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure or accident) CALL CHEMTREC: 1-800-424-9300 or 1-703-527-3887

[optional wording for use on commercial labeling; location on printed labels may vary: "See inside for additional Precautionary Statements and complete Directions for Use"; "See attached booklet for additional Precautionary Statements and complete Directions For Use"; "See containers inside for additional Precautionary Statements and complete Directions For Use" "See inside booklet for additional Precautionary Statements".

"See inside for complete Directions For Use, including Conditions of Sale and Warranty."]

CHEMAGCO LLC 15401 Weston Parkway, Suite 170 Cary, NC 27513 EPA Reg. No. 71085-XX EPA Est. No.

Net Contents: \_\_\_

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

#### **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 contaminate water when disposing of equipment wash water or rinsate.

## PHYSICAL AND CHEMICAL HAZARDS

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long pants, long-sleeved shirt, shoes plus socks, and chemical-resistant gloves. 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 PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using. 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 State or Tribal agency responsible for pesticide regulation. Do not apply this product through any type of irrigation system. Do not apply this product when raining.

## 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), and restricted entry interval (REI). 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 4 hours.

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
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material

#### PRODUCT INFORMATION

CH-VAC-6083 is an extract from the plant *Laminaria digitata* for use on food and non-food crops. CH-VAC-6083 applied to actively growing plants (see DIRECTIONS FOR USE) will improve plant health, and will help make the treated portions resistant to certain plant diseases. Plant health benefits often result in greater yields at harvest. Use CH-VAC-6083 as a preventative rather than a curative application. Apply prior to disease infestation to protect the growing leaf tissue. See specific information for diseases controlled and use rates on food and non-food crops.

CH-VAC-6083 can be used as a foliar spray, plant dip, and soil drench to control or suppress certain soil-borne diseases and to promote healthy root growth.

## MODE OF ACTION

The extract obtained from *Laminaria digitata* plant material contains active biological compounds. The extract, when applied to the host plant, increases the plant's natural defense system and strengthens cell walls. This induced resistance against important diseases is systemic. Repeat applications according to the Application Instructions to maintain induction and to protect new plant growth. The resistance induction takes place within one to two days. Use CH-VAC-6083, therefore, as a preventative treatment.

## PREPARATION OF THE MIXTURE

Shake the container and pour the required amount of CH-VAC-6083 into the sprayer tank partially filled with water while filling with the appropriate amount of water. Maintain good agitation. Do not store the mixture overnight.

## GENERAL APPLICATION INSTRUCTIONS

Do not apply this product post-harvest. Apply the required amount of CH-VAC-6083 according to the table below.

#### PRE-PLANT DIP / SOIL DRENCH USE DIRECTIONS

CH-VAC-6083 can be applied as a pre-plant dip or soil drench application for improved plant health and suppression of certain soil-borne diseases. Apply CH-VAC-6083 in a 0.15% v / v solution as a pre-plant dip or soil drench immediately prior to transplanting, unless specified differently in the SELECTED CROPS section.

## **GREENHOUSE APPLICATION INSTRUCTIONS**

CH-VAC-6083 can be used in greenhouse applications prior to transplant. At low water volumes, where acreage calculations do not apply, mix CH-VAC-6083 at 0.15% v / v solution. Start applications preventatively before the onset of disease.

## **AERIAL APPLICATION INSTRUCTIONS**

CH-VAC-6083 may be applied aerially in low volume applications. For any water volume less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre.

## APPLICATION RATES FOR SELECTED CROPS

[Note to Reviewer: bracketed text is Optional]

Crop	Target Disease	Application	Product Use	Application Instructions		
		method	Rate Per			
			Application/acre			
Artichoke[*]	Powdery Mildew[*]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications		
	[Erysiphe			preventatively or when conditions for disease		
	cichoracearum]			development become favorable. At water		
	[Leveillula Taurica]			volumes above 70 gallons per acre apply CH-		
	Ramularia Leaf			VAC-6083 at 0.15% v /v. Reapply every 7 –		
	Spot[*] [Ramularia			14 days. Under moderate to heavy disease		
	cynarae]			pressure, tank mix this product with another		
				registered fungicide.		
CH-VAC-6083 has a	CH-VAC-6083 has a pre-harvest interval (PHI) of 0 days.					

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

Crop	Target Disease	Application method	Product Use Rate per	Application Instructions
Asparagus[*]	Botrytis Blight[*] [Botrytis cinerea] Rust[*] [Puccinia aspargi]	Foliar	Application/acre 14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v /v. Reapply every 7 – 14 days. Under moderate to heavy disease pressure, tank mix this product with another
CH MAC (0021	nua hawyast intowyal (DII	H) CO I		registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Bushberries and Caneberries[*] Blueberry[*] Blackberry[*] (all varieties) Cranberry[*] Currant[*] Elderberry[*] Gooseberry[*] Huckleberry[*] Juneberry[*] Ligonberry[*] Loganberry[*] Raspberry, Black[*] Raspberry, Red[*] Salal[*] and other berry crops[*]	Mummy Berry[*] [Monilinia vaccinii- corymbosi] Alternaria Fruit Rot[*] [Alternaria spp.] Anthracnose Fruit Rot[*] [Colletotrichum acutatum] Bacterial Canker[*] [Pseudomonas syringae-]) Botrytis Blight[*] [Botrytis cinerea] Leaf Rust[*] [Pucciniastrum vaccinii] Leaf Spot and Blotch[*] [Mycosphaerella spp.] [Septoria spp.] Phomopsis Leaf Spot, Twig Blight, and Fruit Rot[*] [Phomopsis spp.] Powdery Mildew[*] [Microsphaera alni] Spur Blight[*] [Didymella spp.] [Phoma spp.]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v /v. Reapply every 7 – 14 days. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.  Mummy Berry — Initiate application at bud break stage of development. Apply this product preventatively and repeat on a 7-14 day interval or as needed. For best performance, tank mix this product with other registered fungicides for Mummy Berry control.  Botrytis Blight — Apply this product preventatively when the first disease symptoms are visible and reapply every 7-14 days.  Bacterial Canker — Apply this product prior to Fall rains and repeat applications during dormancy before Spring growth. This product can be tank mixed with another registered fungicide for improved control of bacterial canker.  Anthracnose Fruit Rot and Alternaria Fruit Rot on blueberries — Initiate applications on a 7-14 day interval.

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per Application/acre	
Bulb Vegetables[*] Onion[*] (Bulb and Green) Garlic[*] Leek[*] Shallot[*] and other bulb vegetable crops[*]	Bacterial leaf streak[*] [Xanthomonas spp] Botrytis Leaf Blight[*] [Botrytis squamosa] Botrytis Neck Rot[*] [Botrytis spp.] Downy Mildew[*] [Peronospora spp.] Onion Purple Blotch[*] [Alternaria porri] Powdery Mildew[*] [Erysiphe spp.]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Reapply every 7 – 14 days. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
	Rust[*] [Puccinia porri] Stemphyllium Leaf Blight[*] [Stemphylium vesicarium] Fusarium spp.[*] Pythium spp.[*] Rhizoctonia spp.[*] Yellow soft virus	Plant Dip / Soil Drench	0.15% v / v solution	For plant dip and soil drench applications, apply this product in a 0.15% v/v solution (15 fl oz of product per 100 gallons water) as a pre-plant dip or soil drench immediately prior to transplanting.

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per Application/acre	
Cereal Grains[*] Barley[*] Buckwheat[*] Grain[*] Milo[*] Oat[*] Millets[*] Rice[*] Rye[*] Sorghum[*] Triticale[*] Wheat[*] and other cereal grain crops[*]	Powdery Mildew[*] [Erysiphe graminis] Bacterial Blight and Streak[*][Xanthomonas spp.] Brown Rot, Leaf Spots & Smuts[*] [Ceratobasidium spp.][(Cercospora spp.] [Cochliobolus spp.] [Drechslera spp.] Rice Blast[*] [Pyricularia grisea] Rust[*] [Puccinia spp.] Septoria Leaf Spot[*][Septoria spp.] Sheath Spot and Blight[*][Rhizoctonia oryzae] [Thanatephorus cucumeris] Stem Rot[*] [Sclerotium oryzae] Smut[*] [Tilletia barclayana]	Foliar	14 fl oz - 22 fl oz	To optimize disease control and maximize yields, begin applications prior to flag leaf / panicle initiation / floral initiation. Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Reapply every 7 – 14 days. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Citrus Crops[*] Orange[*] Grapefruit[*] Lemon[*] Tangelo[*] Tangerine[*] Pummelo[*] and other citrus crops[*]	Bacterial Canker[*] [Xanthomonas spp.] Alternaria Brown Spot[*] [Alternaria alternata] Bacterial Blast[*] [Pseudomonas syringae] Black Spot[*] [Guignardia citricarpa]  [Phyllosticta citricarpa] Greasy Spot[*] [Mycosphaerella citri] Melanose[*] [Diaporthe citri] Postbloom Fruit Drop[*] [Colletotrichum acutatum] Scab[*] [Elsinoe australis] [Elsinoe fawcetti]	Foliar	14 fl oz – 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 100 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. For high water volume applications (100 – 400 gpa), mix CH-VAC-6083 in a 0.15% v / v solution. Repeat applications at 7- 14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Cole Crops (Brassicas)[*] Broccoli[*] Broccoli Rabe[*] Brussels Sprouts[*] Cabbage[*] Chinese Broccoli[*] Chinese Cabbage (Bok Choy) [*] Chinese Cabbage (Napa) [*] Chinese Mustard[*] Cabbage (Gai Choy) [*] Cauliflower[*] Cavalo[*] Cavalo[*] Collards[*] Kale[*] Kohlrabi[*] Mizuna[*] Mustard Greens[*] Mustard Spinach[*] Rape Greens[*] and other cole crops[*]	Powdery Mildew[*] [Erysiphe cruciferarum] [Erysiphe polygoni] Alternaria Leaf Spot[*] [Alternaria spp.] Downy Mildew[*] [Peronospora parasitica] Pin Rot Complex[*] [Alternaria/Xanthomonas] Xanthomonas Leaf Spot[*] [Xanthomonas campestris]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7-14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per Application / acre	Application Instructions
Corn[*] Sweet Corn[*] Field Corn[*] Popcorn[*] Silage Corn[*] Seed Corn[*] and other corn crops[*] (includes crops grown for seed)	Anthracnose Leaf Blight[*] [Colletotrichum graminicola] Eye Spot[*] [Aureobasidium zeae] Grey leafspot[*] [Cercospora zeae-maydis  Rusts[*] [Puccinia spp.] Northern Leaf Blight[*] [Exserohilum turcicum] Northern Leaf Spot[*] [Cochiliobus carbonum] Southern Leaf Blight[*] [Cochliobolus heterostrophus]	Foliar	14 fl oz - 22 fl oz	To optimize disease control and maximize yields, apply CH-VAC-6083 prior to Tassel. Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Reapply every 7 – 14 days.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Cotton[*]	Alternaria Leaf Spot[*] [Alternaria spp.] Anthracnose[*] [Glomeria spp.] Ascochyta Blight[*] [Ascochyta spp.] Cercospora Leaf Spot[*] [Cercospora spp.] Diplodia[*] [Diplodia spp.] Hard Lock[*] [Fusarium spp.] Leaf Spot[*] [Corynespora cassicola] Phoma Blight[*] [Phoma spp.] Rust[*] [Puccinia spp.] Stemphyllium Leaf Spot[*] [Stemphyllium spp.]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7-14 dayintervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per Application/acre	
Cucurbits[*]	Powdery Mildew[*]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications
Includes all types	[Erysiphe cichoracearum]			preventatively or when conditions for
and hybrids of:	[Sphaerotheca fuliginea]			disease development become
Chayote[*]	Anthracnose[*]			favorable. At water volumes less than
Chinese	[Colletotrichum			70 gallons per acre apply CH-VAC-6083
waxgourd[*]	-			at 14 fl oz per acre. At water volumes
Cucumber[*]	lagenarium]			above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v.
Citron melon[*]	Alternaria Blight[*]			Repeat applications at 7 - 10 day
Gherkin[*]	[Alternaria cucumerina]			intervals.
Pumpkin[*]	Cercospora Leaf Spot[*]			
Watermelon[*]	[Cercospora citrulina]			Under moderate to heavy disease
Edible Gourd:	Downy Mildew[*]			pressure, tank mix this product with
Chinese okra[*]	[Pseudoperonospora			another registered fungicide.
Cucuzza[*]	cubensis]			
Hyotan[*]	Gummy Stem Blight[*]			
Mormordica spp.:	[Didymella bryoniae]			
Balsam apple[*]	Phytophthora Blight[*]			
Balsam pear[*] Bitter melon[*]	[Phytophthora capsici] Fusarium spp.[*]	Plant Dip / Soil	0.15% v/ v	Equalant dia and sail duanah
Chinese	Phytophthora spp.[*]	Drench	solution	For plant dip and soil drench applications, apply this product in a
cucumber[*]	Pythium spp.[*]	Diench	Solution	0.15% v/v solution (15 fl oz of
Muskmelon:	Rhizoctonia spp.[*]			product per 100 gallons water) as a
Cantaloupe[*]	Verticillium spp.[*]			pre-plant dip or soil drench
Cantaloupe[ ] Casaba[*]	verucuum spp.[*]			immediately prior to transplanting
Crenshaw				infinediately prior to transplanting
melon[*]				
Golden pershaw[*]				
melon[*]				
Honeydew melon[*]				
Honey balls[*]				
Mango melon[*]				
Persian melon[*]				
Pineapple melon[*]				
Santa Claus				
melon[*]				
Snake melon[*]				
Summer Squash:				
Crookneck				
squash[*] Scallop squash[*]				
Straightneck				
squash[*]				
Vegetable				
marrow[*]				
Zucchini[*]				
Winter Squash:				
Acorn squash[*]				
Butternut squash[*]				
Calabaza[*]				
Hubbard squash[*]				
Spaghetti squash[*]				
and other cucurbit				
crops[*]				
CH-VAC-6083 has a	pre-harvest interval (PHI)	of 0 days.		

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Fruiting Vegetables[*] Tomato[*] Pepper[*] Eggplant[*] Ground Cherry[*] Okra[*] Tomatillo[*] and other fruiting	Bacterial Blight[*]  [Xanthomonas spp.] Bacterial Spot[*]  [Xanthomonas spp.] Bacterial Speck[*]  [Pseudomonas syringae] Black Mold[*]  [Alternaria alternata] Early Blight[*] Grey Mold[*]  [Botrytis cinerea] Late Blight[*]  [Phytophthora infestans] Phytophthora Blight[*]  [Phytophthora capsici] Powdery Mildew[*]  [Erysiphe spp.]  [Leveillula taurica]  [Oidopsis taurica]  [Sphaerotheca spp.]  Target Spot[*]  [Corynespora cassiicola]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
CH VAC 6092 hour	Fusarium spp.[*] Phytophthora spp.[*] Pythium spp.[*] Rhizoctonia spp.[*] Verticillium spp.[*]	Plant Dip / Soil Drench	0.15% v/ v solution	For plant dip and soil drench applications, apply this product in a 0.15% v/v solution (15 fl oz of product per 100 gallons water) as a pre-plant dip or soil drench immediately prior to transplanting

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per	
			Application/acre	
Grape[*]	Powdery Mildew[*]	Foliar	14 fl oz - 60 fl oz	Start CH-VAC-6083 applications
	[Uncinula necator]			preventatively or when conditions
	Angular Leaf Spot[*]			for disease development become favorable. At water volumes less
	[Mycosphaerella angulata]			than 100 gallons per acre apply CH-
	Anthracnose[*]			VAC-6083 at 14 fl oz per acre. For
	[Elsinoe ampelina]			high water volume applications (100
	Botrytis Bunch Rot[*]			-400 gpa), mix CH-VAC-6083 in a
	[Botrytis cinerea]			0.15% v /v solution. Repeat
	Black Rot[*]			applications at 10 - 14 day
	[Guignardia bidwellii]			intervals.
	Downy Mildew[*]			II. 4
	[Plasmopara viticola]			Under moderate to heavy disease pressure, tank mix this product with
	Eutypa[*]			another registered fungicide.
	[Eutypa lata]			another registered rangierae.
	Leaf Blight[*]			
	[Pseudocercospora vitis]			
	Phomopsis Fruit Rot[*]			
	[Phomopsis viticola]			
	Ripe Rot[*]			
	[Colletotrichum gloeosporioides]			
	Sour Rot[*]			
	[Alternaria tenuis]			
	[Anernaria tenuis] [Aspergillus spp.]			
	[Aspergitius spp.] [Cladosporium herbarum]			
	[Penicillium spp.]			
	[Rhizopus arrhizus]			
CIL VAC (002 h	pro horyest interval (PHI)	£0.1		

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Grass seed[*]	Powdery Mildew[*] [Erysiphe graminis] [Oidium spp.] [Podosphaera spp.] [Sphaerotheca spp.] Rust[*] [Puccinia spp.]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v /v. Repeat applications at 7 - 10 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
CH-VAC-6083 ha	s a pre-harvest interval (PH)	O of 0 days		•

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per Application/acre	
Hops[*]	Downy Mildew[*] [Pseudoperonospora humuli] Powdery Mildew[*] [Sphaerotheca macularis]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v.  Repeat applications at 7 - 10 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.  Minimum spray volumes for hop growth stages are as follows:  Emergence to Training: Apply 14 fl oz of this product per acre using a minimum spray volume of 20 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.  Training to Wire-Touch: Apply 14 fl oz of this product per acre using a minimum spray volume of 50 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.  Wire-Touch through Harvest:  Apply CH-VAC-6083 at 0.15% v / v involumes above 70 gallons per acre. Higher water volumes may be necessary to achieve thorough coverage.  For control of Downy Mildew:  Tank mix this product with another fungicide labeled for Downy Mildew control and re-apply at a 7-day interval or according to the label directions of the tank mix partner. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
Do not enter or allow	a pre-harvest interval (PHI) of worker entry into treated area	s during the restric	ted-entry interval (RI	EI) of 4 hours.

Стор	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Leafy Vegetable	Bacterial	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications
Crops[**]	Blight/Rot™			preventatively or when conditions
Arugula	Xanthomonas			for disease development become
Celery[*]	spp.]			favorable. At water volumes less
Corn Salad[*]	Cercospora			than 70 gallons per acre apply CH-
Cress[*]	leafspot[*]			VAC-6083 at 14 fl oz per acre. At
Dandelion[*]	Cercospora			water volumes above 70 gallons per
Dock Edible[*]	spp.] Downy			acre apply CH-VAC-6083 at
Chrysanthemum[*]	Mildew[*]			0.15% v / v.
Endive[*]	[Bremia			Repeat applications at 7 - 10 day
Fennel[*]	lactuca]			intervals.
Head Lettuce[*]	[Peronospora			Under moderate to heavy disease
Leaf Lettuce[*]	spp.]			pressure, tank mix this product with
Parsley[*]	Drop[*]			another registered fungicide.
Purslane[*]	[Sclerotinia minor]			
Radicchio[*]	[Sclerotinia			
Rhubarb [*]	sclerotiorum]			
Spinach[*]	Grey mold[*]			
Swiss Chard[*]	[Botrytis			
and other leafy	cinerea]			
vegetable crops[*]	Late Blight[*]			
	[Septoria			
	apiicola]			
	Pink Rot[*]			
	[Sclerotinia			
	sclerotiorum]			
	Powdery Mildew[*]			
	[Erysiphe			
	cichoracearum]			
	Sclerotinia Head and			
	LeafWhite Rust[*]			
	[Albugo occidentalis]			

Legume Vegetables[*]	Bacterial Blight[*]	г 1'		İ
(not including soybeans and peanuts) Chick Peas[*] Dry Beans[*] Garbanzo Beans[*] Green Beans[*] Lentils[*] Lima Beans[*] Peas[*] Shell Beans[*] Snap Beans[*] Split Peas[*] and other legume crops[*]	[Xanthomonas campestris] Grey Mold[*] [Botrytis cinerea] Pythium[*] (aerial blight phase) [Pythium spp.] Powdery Mildew[*] [Erysiphe spp.] Rust[*] [Puccinia spp.] [Uromyces appendiculatus] White Mold[*] [Sclerotinia sclerotiorum]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Стор	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Mint and Other Herbs/Spices[*] Angelica[*] Balm[*] Basil[*] Borage[*] Burnet[*] Chamomile[*] Chamomile[*] Chervil[*] Chervil[*] Chive[*] Clary[*] Coriander[*] Costmary[*] Cilantro[*] Curry[*] Dillweed[*] Horehound[*] Hyssop[*] Lavender[*] Lemongrass[*] Lovage[*] Marjoram[*] Nasturtium[*] Parsley (dried) [*] Peppermint[*] Rosemary[*] Sage[*] Savory[*] (summer and winter) Sweet Bay[*] Tanragon[*] Thyme[*] Wintergreen[*] Woodruff[*]` Wormwood[*] and other herbs/spices[*]	Downy Mildew[*] [Peronospora spp.] Powdery Mildew[*] [Erysiphe spp.] Rust[*] [Puccinia menthae]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
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Crop	Target Disease	Application method	Product Use Rate per Application/ acre	Application Instructions
Oil Seed Crops[*] (not including cotton, peanut, or soybean) Canola[*] Castor[*] Flax[*] Rapeseed[*] Safflower[*] Sesame[*] Sunflower[*] and other oil seed crops[*]	Bacterial Pustule[*] [Xanthomonas spp.] Bacterial Speck[*] [Pseudomonas syringe pv. glycinea] Brown Spot[*] [Septoria glycines] Cercospora Leaf Spot[*] [Cercospora spp.] Downy Mildew[*] [Peronospora mansherica] Pod and Stem Blight[*] [Diaporthe phaseolorum var. sojae] [Phomopsis longicola] White Mold/ Sclerotinia Stem Rot[*] [Sclerotinia sclerotiorum]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14-day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Сгор	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Olive[*]	Olive Knot[*] [Pseudomonas savastanoi]	Foliar	14 fl oz – 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 100 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. For high water volume applications (100 – 400 gpa), mix CH-VAC-6083 in a 0.15% v/v solution. Repeat applications at 10 - 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application Method	Product Use Rate per Application/acre	Application Instructions
Ornamentals[*] Herbaceous Ornamentals[*] Flowering Plants Foliage Plants  Woody Ornamentals[*] Broadleaves, Shrubs and Trees Conifers, Shrubs and Trees	Anthracnose[*] [Colletotrichum spp.] Bacteria[*] [Erwinia spp.] [Pseudomonas spp.]  [Xanthomonas spp.]  Black Spot of Rose[*] [Diplocarpon rosae]  Blossom Blight[*] [Monilinia spp.]  Downy Mildew[*] [Peronospora spp.] [Plasmopara viburni]  Grey Mold[*] [Botrytis cinerea] Leaf Spot[*] [Alternaria spp.] [Cercospora spp.] [Entomosporium spp.] [Entomosporium spp.] [Septoria spp.] [Septoria spp.] [Oidium spp.] [Podosphaera spp.] [Sphaerotheca spp.] Rust[*] [Puccinia spp.] Scab[*]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively at the 4 – 6 leaf stage or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide. This product may be used to control certain diseases of container, bench, flat, plug, bed, or field-grown ornamentals in greenhouses, shade-houses, outdoor nurseries, retail nurseries, and other landscape areas.
	[Venturia spp.]  Fusarium spp.[*]  Phytophthora spp.[*]  Pythium spp.[*]  Rhizoctonia spp.[*]  Verticillium spp.[*]	Plant Dip / Soil Drench	0.15% v / v solution	For plant dip and soil drench applications, apply this product in a 0.15% v/v solution (15 fl oz of product per 100 gallons water) as a pre-plant dip or soil drench immediately prior to transplanting.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

The following plant species have been treated with CH-VAC-6083 to prevent disease.

## Plants investigated:

## **Annual and Perennial Flowering Plants**

Begonias, Freesias, Geraniums, Gerbera, Impatiens, Lamium, Lisianthus, Petunias, Poinsettias, Roses, Salvias, Snapdragons, Zinnias.

## **Trees and Shrubs**

Azalea, Boxwood, Crape Myrtle, Dogwood, Indian Hawthorne, Jumbo Azalea, Lilac, Loropetalum, Japanese Maple, Japanese Privet, *Photinia*, Rhododendron, *Rosaceae*, Soft Touch Holly, Spirea, *Viburnum*.

## **Tropical Foliage**

Aglaonema, Dieffenbachia, Dracaena, English Ivy, Hibiscus, Leatherleaf Fern, Spathiphyllum.

Since it is not possible to test all ornamental species or varieties grown in the greenhouse, test CH-VAC-6083 on a few plants prior tolarge-scale usage.

White Mold[*] per acre. At water volumes above 70 gallons	Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
	Peanut[*]	[Aspergillus niger] Rhizoctonia Foliar Blight, Peg, and Root Rot[*] [Rhizoctonia solani] White Mold[*]	Foliar	14 fl oz - 22 fl oz	preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v.  Repeat applications at 7- 14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Pome Fruits[*] Apple[*] Crabapple[*] Loquat[*] Oriental Pear[*] Pear[*] Quince[*] Mayhaw[*] and other pome fruit crops[*]	Powdery Mildew[*] [Podosphaera leucotricha] Alternaria Blotch[*] [Alternaria mali] Apple Scab[*]  [Venturia inaequalis] Suppression only Bitter Rot[*] [Colletotrichum spp.] Black Rot/Frogeye Leaf Spot[*] [Botryosphaeria obtusa] Bot Rot[*] [Botryosphaeria dothidea]  Brooks Spot[*] [Mycosphaerella pomi] Bull's Eye Rot[*] [Neofabraea spp.] Cedar-Apple Rust[*] [Gymnosporangium juniperi-virginianae] Suppression only Fire Blight[*] [Erwinia amylovora) Suppression only Flyspeck[*] [Zygophiala jamaicensis] Sooty Blotch[*] [Geastrumia polystigmati]) [Leptodontium elatius] [Peltaster fructicola] White Rot[*] [Botryosphaeria dothidea]	Foliar	14 fl oz – 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 100 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. For high water volume applications (100 – 400 gpa), mix CH-VAC-6083 in a 0.15% v / v solution.  Repeat applications at 10 - 14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.  Fire Blight – Apply CH-VAC-6083 in the appropriate volume of water in combination with an appropriate registered bactericide from green bud stage to petal fall stage on one year old wood. After blooming period continue CH-VAC-6083 applications if disease conditions are favorable.  Scab – After primary disease contamination, or in situations favorable for disease development, apply CH-VAC-6083 in the appropriate amount of water until conditions for development have subsided.

Сгор	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Root, Tuber and Corm Crops[*] Potato[*] Beet[*] Carrot[*] Cassava[*] Ginger[*] Ginseng[*] Horseradish[*] Radish[*] Sweet Potato[*] Turnip[*] and other root crops (including those for seed production) [*]	Bacterial Leaf Blight[*] [Xanthomonas campestris] Black Root Rot / Black Crown Rot[*] [Alternaria spp.]  Downy Mildew[*] [Peronospora spp.] Early Blight[*] [Alternaria solani] Grey Mold[*] [Botrytis spp.] Late Blight[*] [Phytophthora infestans] Powdery Mildew (Erysiphe spp.][*] White Mold[*] [Sclerotinia sclerotiorum]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Do not enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **4 hours**.

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per	
			Application/acre	
Soybean[*]	Aerial Web Blight[*]	Foliar	14 fl oz - 22 fl oz	To optimize disease control and
	[Rhizoctonia solani]			maximize yields, apply CH-VAC-6083
	Alternaria Leafspot[*]			prior to flowering. Start CH-VAC-6083
	[Alternaria spp.]			applications preventatively or when
	Anthracnose[*]			conditions for disease development
	[Colletotrichum truncatum]			become favorable. At water volumes
	Asian Soybean Rust[*]			less than 70 gallons per acre apply
	[Phakopsora pachyrhizi]			CH-VAC-6083 at 14 fl oz per acre. At
	Brown Spot[*]			water volumes above 70 gallons per
	[Septoria glycines]			acre apply CH-VAC-6083 at 0.15% v /
				V
	Cercospora Blight[*]			Reapply every 7 – 14 days. Under
	[Cercospora kikuchii]			moderate to heavy disease pressure,
	Frog-eyed Leaf Spot[*]			tank mix this product with another
	[Cercospora sojina]			registered fungicide.
	Pod and Stem Blight[*]			
	[Diaporthe spp.]			
	Septoria Brown Spot[*]			
	[Septoria glycines]			
	White Mold[*]			
	[Sclerotinia sclerotiorum]			
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Crop	Target Disease	Application method	Product Use Rate per	Application Instructions
			Application/acre	
Stone Fruits[*] Apricot[*] Cherry (sweet)[*] Cherry (tart)[*] Nectarine[*] Peach[*] Plum[*] Pumcot[*] Prune [*] and other stone fruit crops[*]	Alternaria Spot/Fruit Rot[*] [Alternaria alternata] Anthracnose[*] [Colletotrichum spp.] Bacterial Canker[*] [Pseudomonas spp.] Bacterial Spot[*] [Xanthomonas pruni] Brown Rot Blossom Blight[*] [Monilinia laxa] Brown Rot Fruit Rot[*] [Monilinia fruticola] Cercospora Leaf Spot[*] [Cercospora spp.] Cherry Leaf Spot[*] [Blumeriella jaapii] Grey Mold[*] [Botrytis cinerea] Powdery Mildew[*] [Podospha era spp.] [Sphaerotheca pannosa] Rust[*] [Tranzschelia discolor] Rusty Spot[*] [Podosphaera leucotricha] Scab[*] [Cladosporium carpophilum] Shot Hole[*] [Wilsonomyces carpophilus]	Foliar	Application/acre  14 fl oz – 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7-14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.  **Bacterial Blight** — Apply CH-VAC-6083 in the appropriate volume of water. Begin applications preharvest before fall rains.  **Brown Rot Blossom Blight** — Apply CH-VAC-6083 in appropriate volume of water. Begin applications at early bloom and repeat through petal fall on a 7 – 10 day interval.  **Powdery Mildew** — Apply CH-VAC-6083 in appropriate volume of water. Begin applications at popcorn stage and continue as needed on a 7 – 10 day interval.  **Scab** — Apply CH-VAC-6083 in appropriate volume of water. Begin applications at petal fall and continue on a 7 – 10 day interval until conditions favorable for disease development have diminished.  **For all other diseases** — Begin applications when conditions favorable for disease development are present.  *Apply CH-VAC-6083 in the appropriate volume of water on a 7 – 14 day interval. For high water volume applications (100 – 400 gpa), mix CH-VAC-6083 in a 0.15% v / v solution.  *Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
CH-VAC-6083 has	s a pre-harvest interval (Pl	HI) of <b>0 davs</b> .		

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Strawberry[*]	Anthracnose[*] [Collectotrichum spp.] Suppression only Botrytis[*] [Botrytis cinerea]  Leaf Spot[*] [Mycosphaerella fragariae] Phomopsis Leaf Blight[*] [Phomopsis obscurans] Powdery Mildew[*] [Sphaerotheca macularis]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively immediately after transplant or prior to bloom. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7- 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
	Black Root Rot[*] [Rhizoctonia spp.] [Pythium spp.] [Fusarium spp.] [Cylindrocarpon spp.] Phytophthora Root Rot and Crown Rot[*] [Phytophthora spp.] Verticillium Wilt[*] [Verticillium spp.] Fusarium spp.[*] Pythium spp.[*] Rhizoctonia spp.[*]	Plant Dip / Soil Drench	0.15% v / v solution	For plant dip and soil drench applications, apply this product in a 0.15% v/v solution (15 fl oz of product per 100 gallons water) as a pre-plant dip or soil drench immediately prior to transplanting.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Sugarcane[*]	Brown Rust[*] [Puccinia melanocephela] Orange Rust[*] [Puccinia kuehnii]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v/v. Repeat applications at 7-14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Tobacco[*]	Blue Mold[*] [Peronospora tabacina]	Foliar	14 fl oz - 22 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 70 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. At water volumes above 70 gallons per acre apply CH-VAC-6083 at 0.15% v / v. Repeat applications at 7-14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.
	Fusarium spp.[*] Phytophthora spp.[*] Pythium spp.[*] Rhizoctonia spp.[*] Verticillium spp.[*]	Plant Dip / Soil Drench	0.15% v / v solution	For plant dip and soil drench applications, apply this product in a 0.15% v/v solution (15 fl oz of product per 100 gallons water) as a pre-plant dip or soil drench immediately prior to transplanting.

Crop	Target Disease	Application method	Product Use Rate per Application/acre	Application Instructions
Tree nut crops[*] Walnut (Black) [*] Walnut (English) [*] Almond[*] Beech nut[*] Brazil nut[*] Butternut[*] Cashew[*] Chestnut[*] Chinquapin[*] Filbert[*] Hickory nut[*] Macadamia nut[*] Pecan[*] Pistachio[*] and other tree nut crops[*]	Walnut Blight[*] [Xanthomonas campestris] Alternaria Late Blight[*] Alternaria Leaf Spot[*] [Alternaria spp.] Anthracnose[*] [Collectotrichum spp.] [Gnomonia leptostyla] Bacterial Canker[*] [Erwinia nigrifluens] [Pseudomonas syringae] Botryosphaeria Blight[*] [Botryosphaeria dothidea] Brown Rot[*] [Monilinia spp.] Eastern Filbert Blight[*] [Anisogramma anomala] Green Fruit Rot[*] [Botrytis cinerea] Leaf Rust[*] [Tranzschelia discolor] Scab[*] [Cladosporium carpophilum] [Sphaceloma perseae] Shot Hole[*] [Wilsonomyces carpophilus]	Foliar	14 fl oz - 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 100 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. For high water volume applications (100 – 400 gpa), mix CH-VAC-6083 in a 0.15% v / v solution. Repeat applications at 7- 14 day intervals. Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

Crop	Target Disease	Application method	Product Use Rate per	Application Instructions
			Application/acre	
Tropical Fruits[*] Avocado[*] Banana[*] Kiwi[*] Mango[*] Papaya[*] Plantain[*] Pineapple[*] Pomegranate[*] and other tropical fruit[*] crops[*]	Anthracnose[*] [Colletotrichu m gloeosporioide s] Bacterial Blight[*] [Pseudomonas syringae] [Pseudomonas viridiflava] Bacterial Canker[*] [Xanthomonas campestris] Botrytis Fruit Rot[*] [Botrytis cinerea] Scab[*] [Elsinoe mangiferae] Sigatoka[*] [Mycosphaerella fijiensis]	Foliar	14 fl oz - 60 fl oz	Start CH-VAC-6083 applications preventatively or when conditions for disease development become favorable. At water volumes less than 100 gallons per acre apply CH-VAC-6083 at 14 fl oz per acre. For high water volume applications (100 – 400gpa), mix CH-VAC-6083 in a 0.15% v / v solution. Repeat applications at 7-14 day intervals.  Under moderate to heavy disease pressure, tank mix this product with another registered fungicide.

CH-VAC-6083 has a pre-harvest interval (PHI) of 0 days.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

Crop	Target Disease	Application	Product Use	Application Instructions
		method	Rate per	
			Application/acre	
Cool Season Turf	Anthracnose[*]	Foliar	14  fl oz - 22  fl oz	Start CH-VAC-6083 applications
Grasses[*]	[Colletotrichumgraminicola]			preventatively or when conditions for
	Bentgrass Dead Spot[*]			disease development become favorable.
Warm Season	[Opiosphaerella agrostis]			At water volumes less than 100 gallons
Grasses[*]	Bermudagrass Decline[*]			per acre apply CH-VAC-6083 at 14 fl
	[Gaeumannomyces graminis			oz per acre. For high water volume
	var. graminis]			applications (100 – 400 gpa), mix CH-
	Dollar Spot[*]			VAC-6083 in a 0.15% v / v solution.
	[Sclerotinia homoecarpa]			Repeat applications at 7- 14 day
	Suppression only			intervals.
	Fairy Ring[*]			
	[various Basidiomy			Under moderate to heavy disease
	cete fungi]			pressure, tank mix this product with
	Grey Leaf Spot[*]			another registered fungicide.
	[Pyricularia grisea]			
	Powdery Mildew[*]			
	[Blumeriagraminis]			
	Rust[*]			
	[Puccinia spp, Uromyces			
	spp.]			
	Yellow Tuft[*]			
	[Downy Mildew]			
CTT TT   C (000 1	[Sclerophthora]			

CH-VAC-6083 has a pre-harvest interval (PHI) of 0 days.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

<sup>[\*</sup> Not for use in California.]

<sup>[\*\*</sup> Not for use in California except on lettuce [and spinach] to control downy mildew.]

## **INTEGRATED PEST MANAGEMENT (IPM)**

Many conventional fungicides have been tested in an IPM regime with CH-VAC-6083 with very satisfactory results. One of the major objectives of IPM has been to reduce the probability of disease resistance development to a particular active ingredient. The alternate use of (1-2 sprays) followed by a conventional, registered fungicide (1-2 sprays) has been successfully used in many crops. In addition, the use of tank mixes with a conventional fungicide has also been successful. Follow label instructions of the particular registered product: Do not exceed amounts or treatment intervals on the label.

#### **COMPATIBILITY**

CH-VAC-6083 is compatible with many commonly used crop protection and crop production products, but has not been fully evaluated with all. Evaluate tank-mix compatibility prior to use. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. Apply to a small area of the crop to ensure there are no phytotoxic effects. Contact your CH-VAC-6083 representative for additional details.

- CH-VAC-6083 acts early against specified plant diseases inducing plant defense reactions.
- CH-VAC-6083 induces systemic resistance, which allows protection during growth.

## STORAGE AND DISPOSAL

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

Pesticide Storage: Keep container tightly closed when not in use.

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

Container Handling: **Nonrefillable containers equal to or less than 5 gallons**: Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ½ 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 puncture and dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

Nonrefillable containers greater than 5 gallons: Nonrefillable container. Do not reuse or refill this container. 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 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances

## CONDITIONS OF SALE AND WARRANTY

CHEMAGCO LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used according to the directions under normal useconditions.

To the extent consistent with applicable law, neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product contrary to the label instructions; the buyer assumes the risk of any such uses.

#### **Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of CHEMAGCO LLC, and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.

CHEMAGCO LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to CHEMAGCO LLC, and is subject to the inherent risks described above.

To the extent consistent with applicable law, CHEMAGCO LLC disclaims all other warranties, expressed or implied, including any warranty of merchantability or fitness for a particular purpose. To the extent consistent with applicable law, CHEMAGCO LLC, manufacturer, and seller disclaim and shall not be liable for any special, incidental, indirect, or consequential damages resulting from the use, handling, application, storage, or disposal of this product or for damages in the nature of penalties, and the user and buyer waive any right that they may have to such damages. No agent, representative or employee of CHEMAGCO LLC is authorized to make any warranty, guarantee or representation beyond those contained herein or to modify the warranties contained herein.

To the extent consistent with applicable law, the exclusive remedy of the user or buyer, and the total liability of CHEMAGCO LLC, manufacturer, and seller, shall be limited to the purchase price paid, or at CHEMAGCO LLC election, the replacement of the product.

Optional Marketing Language

- 1. Peel here to open [placeholder for arrow symbol]
- 2. For Product Use Information Call 1-800-438-6071
- 3. Product of [insert Country]