

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 30, 2020

Lizbeth Rea Director of Regulatory Affairs Sipcam Agro USA, Inc. 2525 Meridian Parkway, Suite 350 Durham, NC 27713

Subject: Registration Review Label Mitigation for Cymoxanil Product Name: Echo 378-Cymoxanil 50 EPA Registration Number: 60063-47 Application Dates: 9/27/2018 Decision Numbers: 567818

Dear Ms. Rea:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Cymoxanil Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at <u>Stanton.darius@epa.gov</u>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

Chlorothalonil	Group	M5	Fungicide
Cymoxanil	Group	27	Fungicide

# ECHO<sup>®</sup> 378/Cymoxanil 50

#### **Active Ingredients:**

Chlorothalonil (tetrachloroisophthalonitrile):	31.51%
Cymoxanil (2-cyano-N-[(ethylamino)carbonyl]-2-(methoxyimino) acetamide):	
Other Ingredients:	
Total:	100.0%

Contains 3.15 pounds Chlorothalonil per gallon (378 grams per liter). Contains 0.42 pounds Cymoxanil per gallon (50 grams per liter).

# **KEEP OUT OF REACH OF CHILDREN**

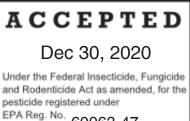
# CAUTION

	FIRST AID
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have affected person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told by a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</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>
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 IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product contreatment.	tainer or label with you when calling a poison control center or doctor, or going for
Emergency phone nu	(800) 424-9300 CHEMTREC (transportation and spills) (800) 222-1222 National Capital Poison Center
	N: Probable mucosal damage may contraindicate the use of gastric lavage. Persons ergic reaction respond to treatment with antihistamines or steroid creams and/or systemic

EPA Reg. No. 60063-47 Net Contents: \_\_\_\_\_ [gallons] [gal.] [(Liters)] [(L)] [Lot number / Label Date Code]

> Manufactured for Sipcam Agro USA, Inc. 2525 Meridian Parkway Durham, NC 27713

EPA Est. No. \_\_\_\_\_ [Lot no. begins with xx]



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#### **OPTIONAL LANGUAGE FOR LABEL**

[Pull open here] [Pull back [book] [label] here] [See additional Precautionary Statements and Directions For Use inside booklet.] [Application Type AG Agricultural] [Formulated in the United States of America, with U.S. and imported ingredients.] [Read the [entire] label carefully before opening the container] [Fungicide]

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**: Harmful if swallowed or absorbed through skin. Harmful if inhaled. Avoid contact with eyes, skin or clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

Mixers, loaders, applicators must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

#### Potatoes

Mixers/Loaders supporting aerial applications for potatoes must wear chemical resistant gloves.

#### Mechanical Pressurized Handgun

Mixer, loaders, applicators using mechanically-pressurized handguns must also wear chemical resistant gloves.

In addition, mixers/loaders supporting chemigation must wear chemical resistant gloves and must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N\*, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

#### **Engineering Controls:**

Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

# USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

# **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwater or rinsate.

#### Ground Water Advisory

Chlorothalonil degradates are known to leach through soil into ground water under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

#### Surface Water Advisory

Chlorothalonil can contaminate surface water through spray drift. DO NOT apply when weather conditions favor drift from treated areas. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

# **DIRECTIONS FOR USE**

#### **Precautions and Restrictions**

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, or pets, either directly or through drift. Only protected handlers may be in the area during applications. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

DO NOT use this product in greenhouses.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, 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 of 12 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, chemical resistant gloves made of any waterproof materials, shoes plus socks, and protective eyewear.

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6½ days entry is permitted only when the following safety measures are provided: At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area.

Workers must be informed, in a manner they can understand:

- that residues in the treated area may be highly irritating to their eyes;
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes;
- that if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water; and
- how to operate the eyeflush container.

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170):

Do not enter or allow others to enter into treated areas until spray deposits have dried.

#### **PRODUCT RESTRICTIONS:**

- This product must not be applied within 150 feet (for aerial and air-blast applications), or 25 feet (for ground applications) from marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.
- Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40 CFR 170.305].

# SPRAY DRIFT MANAGEMENT

#### **Aerial Applications**

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 7 5% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply during temperature inversions.

#### **Ground Boom Applications**

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.I).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

# 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**

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 aerially to crops, do not release spray at a height greater than I 0 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.

# **CROP ROTATION RESTRICTIONS**

The crops on this label may be replanted anytime after application of this product. All other crops cannot be replanted until 30 days after the last application of this product.

# **INTEGRATED PEST MANAGEMENT**

This product is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. This product is recommended for use in programs that are compatible with the principles of Integrated Pest Management (IPM), including the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

For resistance management, please note that Echo 459/Cymoxanil 61 is a mixture of chlorothalonil (Group M5) and cymoxanil (Group 27) fungicides.

Chlorothalonil is a multi-site mode of action fungicide while cymoxanil is a single site mode of action fungicide, potentially susceptible to development of insensitive strains of fungi. While unexpected, any fungal population may contain individuals naturally resistant to this product and other Group M5 or Group 27 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 (name of product) or other Group (mode of action group number) 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/bacterial populations for resistance development.

Consult with your federal or state Cooperative Extension Service representatives for guidance on the proper use of this product in programs which seek to minimize the occurrence of disease resistance to other fungicides.

#### Mixing, Loading and Applying

This product is intended to be diluted into water, then applied to crops by typical agricultural spraying techniques. **Always apply in sufficient water to obtain thorough, uniform coverage of foliage and crop surfaces intended to be protected from disease**. Spray volume to be used will vary with crop and amount of plant growth. Spray volume should normally range from 20 to 150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop.

Slowly invert container several times to assure uniform mixture. Measure the required amount of this product and pour into the spray tank during filling. Keep agitator running when filling spray tank and during spray operations.

# Apply the spray mixture as soon as possible after preparation. Do not allow spray mixture to stand overnight or product degradation may occur. If the pH of the spray mix is greater than 7, either add a buffering agent to reduce the pH to 7 or less or apply the spray mixture immediately.

#### **Tank Mixing**

When tank mixing this product with other pesticides observe the more restrictive label limitations and precautions. Do not exceed any label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

Do not combine this product in the sprayer tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. Do not combine this product with Dipel 4L, Triton AG-98, Triton B-1956, Latron AG-98 or Latron B-1956, as phytotoxicity may result from the combination when applied to the crops on this label. DO NOT tank mix this product with oil, or with any adjuvants which contain oil as their principal ingredient. When an adjuvant is to be used with this product, Sipcam Agro USA recommends the use of a Council of Producers and Distributors of Agrotechnology (CPDA) certified adjuvant. Do not use with Copper-Count®-N in concentrated spray suspensions.

Dipel is a registered trademark of Valent Biosciences Corporation.

Latron and Triton are registered trademarks of Dow Agrosciences LLC.

Copper-Count N is a registered trademark of Mineral Research and Development Corporation.

#### Applications through Sprinkler Irrigation Systems (Chemigation)

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set and portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system. Use only on crops specifically designated in the DIRECTIONS FOR USE.

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 apply this product through irrigation systems connected to a public water system. '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 per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject this product into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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 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.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

This product may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

#### A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a metering pump, such as a positive displacement injection pump of either diaphragm or piston type, constructed of materials that are compatible with pesticides, fitted with a system interlock, and capable of injection at pressures approximately 2 to 3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix recommended amount of this product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from last sprinkler head.

#### B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of this product for acreage to be covered with water so that the total mixture of this plus water in the injection tank is equal to the quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. No agitation should be required. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until this product has been cleared from last sprinkler head.

#### **Application Rates**

Dosage rates on this label indicate pints of this product per acre, unless otherwise stated. Under conditions favoring disease development, the high rate specified and shortest application interval should be used.

For each listed crop, the maximum amount of chlorothalonil active ingredient (lbs a.i./A) which may be applied during each growing season is provided.

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Crops	PHI DISEASES RATE PER APPLICATION DIRECTIONS (DAYS) ACRE	Anthracnose ( <i>Colletotrichum</i> <i>spp.</i> ) Downy mildew ( <i>Pseudoperonospora cubensis</i> ) Target spot* ( <i>Corynespora</i> <i>cassiicola</i> )	<u>୦୦</u> ୯	cucumerina)     description       cucumerina)     DO NOT combine this product with anything except water for Alternaria leaf spot ( <i>Alternaria</i> Alternaria     3.6       alternata)     3.6       satternata)     3.6       satternata)     pints       Scab* (Cladosporium)     of use.	vars <i>xanthii syn. Sphaerotheca</i> <i>fuliginea</i> ) ( <i>Pseudoperonospora cubensis</i> ) Powny Mildew Pseudoperonospora cubensis) Powdery mildew Apply no more than 21 pints of Echo 378/Cymoxanil 50 per acre per 12-month period.	Maximum seasonal total of chlorothalonil active ingredient that may be applied: 15.75 lbs a.i./A.
	-ICATION DIRECTIONS	n plants are in first true le e for disease, but before intervals. Alternate ap erent mode of action. watermelons may result	fruit. DO NOT apply of the following conditions light; nmental conditions which iburn.	<ul> <li>product with anything</li> <li>ons unless your prior us</li> <li>njurious to watermelons un</li> </ul>	iemigation. iints of Echo 378/Cymoxa	of chlorothalonil active ingr
	APPL	Begin applications when conditions are favorable applications at 7-day i fungicide that has a diffe <b>Note:</b> Spraving mature	upper surface of the watermelons when any of 1. Intense heat and sunli 2. Drought conditions; 3. Poor vine canopy; 4. Other crop and enviror to increased natural sunl	DO NOT combine this application to watermelc combination to be non-in of use.	Apply by ground, air or ch Apply no more than 21 pi 12-month period.	Maximum seasonal total or applied: 15.75 lbs a.i./A.
Crops	RATE PER ACRE	2.3 – 3.6 pints		3.6 pints		
	DISEASES	Anthracnose ( <i>Colletotrichum</i> <i>spp.</i> ) Downy mildew ( <i>Pseudoperonospora cubensis</i> ) Target spot* ( <i>Corynespora</i> <i>cassiicola</i> )	Cercospora leaf spot* (Cercospora citrullina) Gummy stem blight/vine decline (Didymella bryoniae) Alternaria leaf blight (Alternaria	cucumerina) Alternaria leaf spot (Alternaria alternata) Scab* (Cladosporium cucumerinum)	Powdery mildew* ( <i>Podosphaera xanthii syn. Sphaerotheca fuliginea</i> ) Downy Mildew (Pseudoperonospora cubensis)	
	PHI (DAYS)		ო			
	CROP	Cucurbits: Cantaloupe, Chavote (fruit),	Chinese waxgourd (Chinese waxgourd preserving melon), cucumber, <i>Momordica</i> spp (includes balsam apple, bitter	melon <i>),</i> Muskmelon, Pumpkin, Squash; Watermelon, Zucchini	Including cultivars and /or hybrids of these.	

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CROP	PHI (DAYS)	DISEASES	RATE PER ACRE	APPLICATION DIRECTIONS
Fruiting Vegetables: (except tomato) Eggplant, Groundcherry, Okra, Pepino, Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo	m	Anthracnose ( <i>Colletotrichum</i> <i>spp.</i> ) Botrytis Leaf mold* ( <i>Botrytis</i> <i>cinera</i> ) Cercospora leaf spot*( <i>Cercospora spp.</i> ) Powdery mildew* ( <i>Leveillula</i> <i>taurica</i> )	2.4 – 2.9 pints	Begin applications when plants are in first true leaf stage or when conditions are favorable for disease, but before infection Also make applications as a foliage, flower and fruit spray when disease is anticipated. Repeat applications at 7-day intervals. Apply by ground, air or chemigation. Apply no more than 21 pints of Echo 378/Cymoxanil 50 per acre per 12-month period. Maximum seasonal total of chlorothalonil active ingredient that may be applied: 9 lbs a.i/A.
Onion (Dry bulb), Garlic	2	Downy mildew (Peronospora destructor) Purple blotch* (Alternaria porri)	1.9 – 2.9 pints	Begin applications prior to favorable infection periods. Repeat at 7 to 9-day intervals for as long as conditions favor disease. Alternate applications with a fungicide that has a different mode of action. Use the highest rate and shortest interval specified when heavy dew or rains persist.

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CROP	PHI (DAYS)	DISEASES	RATE PER ACRE	APPLICATION DIRECTIONS
				For complete control of Purple Blotch (Alternaria porri) high disease pressure, tank mix this product with Echo 720 up to 1.45 pint/acre. Follow application directions provided on the Echo 720 label.
Onion, Beltsville				Apply in a minimum of 20 gallons of water per acre for ground application and in a minimum of 5 gallons of water per acre for aerial application. Always apply in sufficient water to obtain adequate coverage of the foliage.
Duricriirig, Onion, green	14		2.4 - 2.9	Apply by ground, air or chemigation.
Shallot			STED	Apply no more than 25 pints of Echo 378/Cymoxanil 50 per acre per 12-month period for use on onion (dry bulb) and garlic and no more than 17 pints per acre per 12-month period for use on onion, Beltsville bunching; onion, green; leek; and shallot.
				Maximum seasonal total of chlorothalonil active ingredient that may be
				applied to: onion (dry bulb) and garlic: 15 lbs a.i./A. onion, Beltsville bunching; onion, green; leek; and shallot: 6.7 lbs a.i./A.
-		FOLIAGE (apply every 7 days): Early blight ( <i>Alternaria solani</i> ) Late blight ( <i>Phytophthora</i> <i>infestans</i> ) Gray leaf spot* ( <i>Stemphyllium</i>		Begin applications when plants are in first true leaf stage or when conditions are favorable for disease, but before infection. Also make applications when dew or rain occurs and disease threatens. Use the highest rate and shortest interval specified when disease conditions are severe.
1011410	m	borryosum) Gray leaf mold* (Fluvia fluva; Cladosporium) Septoria leaf spot (Septoria lycopersici) Target spot (Corynespora cassiicolla)	z.s – s.o pints	This product may be combined in the spray tank with EPA registered pesticide products that claim copper as the active ingredient and are labeled for control of bacterial diseases of tomatoes. Check the copper manufacturer's label for specific instructions, precautions and limitations prior to mixing with this product.

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	(DAYS)	DISEASES	ACRE	APPLICATION DIRECTIONS
		FRUIT (apply every 7 days beginning at fruit set): Anthracnose <i>(Colletotrichum</i>		Apply by ground, air or chemigation. When applying by chemigation, use solid set or portable wheel move systems only.
		spp.) Alternaria fruit rot (black mold) (Alternaria alternata)		Apply no more than 21 pints of Echo 378/Cymoxanil 50 per acre per 12-month period.
		Botrytis gray mold* ( <i>Botrytis</i> cinerea)	2.3 pints	Maximum seasonal total of chlorothalonil active ingredient that may be applied: 15.1 lbs a.i./A.
		Late blight fruit rot ( <i>Phytophthora infestans</i> ) Rhizoctonia fruit rot* ( <i>Rhizoctonia solani</i> )		
				For Early blight and Late blight, begin preventive applications early in the season when conditions are favorable for disease (before infection). Repeat applications at 5- to 7-day intervals. Reduce intervals to 5 days when any one of the following events occur: • Vines close within the rows:
		Late blight ( <i>Phytophthora</i> infestans)		<ul> <li>Late blight forecasting measures 18 disease severity values (DSV);</li> <li>The crop reaches 300 P-days</li> </ul>
Potato 14	4	Early blight ( <i>Alternaria solani</i> ) Botrytis vine rot* ( <i>Botrytis</i> <i>cinerea</i> ) Black dot* ( <i>Colletotrichum</i>	2.4 pints	Increase water spray volume as canopy density increases. Use the shortest interval when plants are rapidly growing and disease conditions are severe.
		coccodes)		Apply by ground, air or chemigation.
				Apply no more than 21 pints of Echo 378/Cymoxanil 50 per acre per 12-month period.
				Maximum seasonal total of chlorothalonil active ingredient that may be applied: 11.25 lbs ai/A.

\*Not registered for use in California

# STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a cool place. Protect from excessive heat.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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 at the nearest EPA Regional Office for guidance.

#### Container Disposal:

**Containers < 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 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. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Containers** ≥5 **Gallons:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follow: 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. Turn the container 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, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Bulk Containers: Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When the container is empty, replace the cap and seal all openings that have been opened during use; and return to the point of purchase, or to a designated location named at the time of purchase of this product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, call CHEMTREC. If the container is damaged and leaking or material has been spilled, follow these procedures:

- Cover spill with absorbent material.
- Sweep into disposal container.
- Wash area with detergent and water and follow with clean water rinse.
- Do not allow to contaminate water supplies.
- Dispose of according to instructions.

If not returned to the point of purchase or to a designated location, clean empty container as instructed above and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

#### WARRANTY AND LIMITATION OF DAMAGES

**CONDITIONS OF SALE**: To the extent consistent with applicable law, Sipcam Agro USA, Inc. 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 in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Sipcam Agro USA, Inc. SIPCAM AGRO USA, INC. DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. To the extent consistent with applicable law, SIPCAM AGRO USA, INC. SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND SIPCAM AGRO USA, INC.'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. BUYER AND USER ACKNOWLEDGE AND ASSUME ALL RISKS AND LIABILITY RESULTING FROM HANDLING, STORAGE AND USE OF THIS PRODUCT. SIPCAM AGRO USA, INC. DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.

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