

2018-3698
2019-02-21

GROUP	M5	FUNGICIDE
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NET CONTENTS: 4 Kg, 10 Kg

Echo 90DF
Agricultural Fungicide
Dry Flowable
NOT FOR USE IN GREENHOUSES
ACTIVE INGREDIENT:
Chlorothalonil 90%



POISON

DANGER - CORROSIVE TO EYES. SKIN IRRITANT

POTENTIAL SKIN SENSITIZER WARNING: CONTAINS THE ALERGEN SULPHITES

READ THE LABEL BEFORE USING.

REGISTRATION NO. 29356

PEST CONTROL PRODUCTS ACT

Sipcam Agro USA, Inc.
2525 Meridian Parkway, Suite 350
Durham, NC 27713 USA

Distributed by: United Agri Products Canada Inc.
789 Donnybrook Drive
Dorchester, ON, N0L 1G5 (919) 226 1195
1-800-265-4624

KEEP OUT OF REACH OF CHILDREN
DANGER

FIRST AID

IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth, if possible.• Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.	
EMERGENCY TELEPHONE NUMBER	
All hours: 1-800-327-8633 (FASTMED) ONLY for health and environmental information.	

TOXICOLOGICAL INFORMATION

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Persons having an allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids. Exposure to this product may produce temporary side effects, characterized by irritation and redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

DANGER: CORROSIVE to the eye. DO NOT get in eyes. May irritate the skin. Avoid contact with skin or clothing. May be fatal if inhaled. Avoid inhaling/breathing dusts, spray mists...etc. Potential skin sensitizer. Wash exposed areas of skin with soap and warm water after handling or using. DO NOT take internally. DO NOT store near feed or foodstuffs. Store in a cool place. Apply only to areas specified on the label.

Wear coveralls over long pants, a long-sleeved shirt, goggles or a face shield, apron and chemical resistant gloves during mixing, loading, clean-up and repair activities. Wear long pants, a long-sleeved shirt and chemical resistant gloves during application.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools, and recreation areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

DO NOT re-enter treated areas within 48 hours. If required, individuals may re-enter treated areas within 48 hours for short-term tasks not involving hand labour only if at least 4 hours has passed since application, and long pants, long-sleeved shirt, hat and chemical-resistant gloves are worn.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

For recyclable containers

DO NOT reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple-or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

2018-3698

2019-02-21

For returnable containers

Disposal of Container:

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For containers that can be refilled for the use by the distributor/dealer

Disposable of Container:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be filled by the distributor/dealer with the same product. DO NOT reuse this container for any other purpose.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING CALL 1-800-327-8633 (FASTMED)

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

PRODUCT INFORMATION

ECHO 90DF Agricultural Fungicide is an excellent fungicide when used according to label directions for control of a broad spectrum of plant diseases. This product can be used effectively in dilute or concentrate sprays. Thorough uniform coverage is essential for disease control.

DO NOT combine ECHO 90DF Agricultural Fungicide in the spray tank with pesticides, surfactants or fertilizers unless your prior use has shown the combination physically compatible and non-injurious under your conditions of use. Note: Slowly invert container several times to assure uniform mixture.

The required amount of ECHO 90DF Agricultural Fungicide should be added slowly into the spray tank during filling. With concentrate sprays, premix the required amount of this product in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations.

DIRECTIONS FOR USE

Dosage rates on this label indicate kilograms of ECHO 90DF Agricultural Fungicide per hectare unless otherwise stated. Applications should be made in sufficient water to obtain adequate coverage of foliage and stems. Volume of water to be used will vary with crop and amount of plant growth. Spray volume usually will range from 225 - 1,600 litres per hectare for dilute sprays and 50 - 100 litres per hectare for concentrate ground sprays and aircraft applications. Both groundboom and aircraft methods of application are recommended unless specific directions are given for a crop.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT allow effluent or runoff from greenhouses and mushroom houses containing this product to enter lakes, streams, ponds or other bodies of water.

DO NOT APPLY THIS PRODUCT WITHIN 10 DAYS BEFORE OR AFTER AN OIL APPLICATION AS THE PRESENCE OF OIL MAY RESULT IN BURNING TO FLOWERS AND LEAF TISSUE.

Apply only when the potential for drift to non-target areas of human habitation and areas of human activity such as houses, cottages, schools, and recreational areas is minimal. Take into consideration

2018-3698

2019-02-21

wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

Groundboom

Except Applications to Potatoes

Wear coveralls over a long-sleeved shirt and long pants, chemical resistant gloves, socks and shoes during mixing, loading, clean-up, and repair activities. Wear a long sleeved-shirt, long pants, chemical resistant gloves, socks and shoes during application. Gloves are not required during application within a closed cab.

Groundboom Application to Potatoes

Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up, and repair. Gloves are not required during application within a closed cab.

Applicators treating potato fields must use groundboom equipment with an enclosed cab. Gloves are not required for an applicator in an enclosed cab. Wear chemical-resistant gloves when leaving the cab for clean-up and repair.

Airblast

Wear coveralls over a long-sleeved shirt and long pants, chemical resistant gloves, socks and shoes during mixing, loading, clean-up, and repair activities. Wear a long sleeved-shirt, long pants, chemical resistant gloves, socks and shoes during application. Gloves are not required during application within a closed cab.

In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Southwestern hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection.

Aerial

The field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up, and repair.

Aerial applicators: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit.

Irrigation System

Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up, and repair.

Hand Held Spray Equipment

Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up, and repair.

Applicators in greenhouses and mushroom houses must wear a respirator with a NIOSH- approved organic vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides.

Vegetative Filter Strips

A Vegetative Filter Strip (VFS) of at least 10 metres wide must be constructed and maintained. The VFS is required between the field edge and adjacent, downhill aquatic habitats to reduce risk to aquatic organisms from run-off. Aquatic habitats include, but are not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries.

The VFS is to be composed of grasses and may also include shrubs, trees, or other vegetation. Additional guidance can be found on the PMRA Environmental Risk Mitigation webpages.

2018-3698

2019-02-21

Both VFS and spray drift buffer zones must be observed.

Spray Drift Buffer Zones

Spray drift buffer zones are to protect terrestrial and aquatic habitats from spray drift. Spray drift buffer zones are a separate requirement from VFS which are required to mitigate risks from runoff.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Spot treatments using hand-held equipment **DO NOT** require a buffer zone.

The spray drift buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Buffer Zone Table

	Crop	Buffer Zones (metres) Required for the Protection			
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	wheat, evening primrose, potato	2	1	2	1
	carrots, sweet corn, parsnip, dry pea	3	1	3	1
	celery, chickpeas, lentils, strawberry	3	1	3	2
	cole crops, cucurbit vegetables, ginseng, onion, cabbage, tomato, outdoor ornamentals	4	1	4	2
	blueberries (lowbush, highbush), conifers - outdoor	5	1	5	3
	cranberry	10	1	10	4

	Crop		Buffer Zones (metres) Required for the Protection			
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Airblast	Outdoor ornamentals (excluding Pachysandra)	Early growth stage	35	10	35	25
		Late growth stage	25	5	25	15
	Blueberry (lowbush, high bush)	Early growth stage	40	15	40	30
		Late growth stage	30	5	30	20
	Cherries, peaches, nectarines, conifers - outdoors	Early growth stage	40	15	40	30
		Late growth stage	30	10	30	20
Aerial	Potato, evening primrose	Fixed wing	65	4	65	20
		Rotary wing	50	1	50	15
	Wheat	Fixed wing	75	5	75	20
		Rotary wing	55	2	55	15
	Parsnip	Fixed wing	90	5	90	20
		Rotary wing	60	3	60	20
	Dry pea	Fixed wing	95	5	95	25
		Rotary wing	70	4	70	20
	Carrot	Fixed wing	100	5	100	30
		Rotary wing	75	5	75	20
	Lentils, celery	Fixed wing	175	10	175	40
		Rotary wing	100	5	100	30
	Cole crops, cucurbit, onion, tomato	Fixed wing	200	10	200	55
		Rotary wing	125	10	125	40

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray-drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site. This tool cannot be used to reduce the vegetative filter strips.

The use of this and any product containing chlorothalonil is prohibited on greenhouse-grown food crops

2018-3698

2019-02-21

unless clearly specified on the label.

Application and Calibration Techniques for Solid Set Irrigation Systems

Adjust sprinkler nozzles to prevent direct spray or drift into non-target areas. Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents within desired time periods. Mix desired amount of this product for acreage to be covered into quantity of water used during calibration. Operate entire system at normal pressures recommended by the manufacturer of injection equipment for amount of time established during calibration.

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 (e.g., as indicated by dye) and continue to operate irrigation system until product has been cleared from the last sprinkler head. **DO NOT** operate irrigation system without safety valves or other devices to prevent back-siphoning of product into water source. Tank containing product should be connected to the discharge side of irrigation pump or other pressurized equipment attached to irrigation line. Never inject pesticides into the intake line or the suction side of pump. Irrigation water treated with this product should be maintained on the treated area until the water is absorbed by the soil.

Do not apply this product through any other type of irrigation system.

Do not apply when wind speed causes any non-uniform distribution and/or favours drift beyond the area intended for treatment.

Do not apply by chemigation if the area to be treated is within 100 metres or a residential area or park.

Fungicide Resistance Management

For resistance management, this product contains a Group M5 fungicide. Any fungal population may contain individuals naturally resistant to ECHO 90DF Agricultural Fungicide and other Group M5 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist.

Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of ECHO 90DF Agricultural Fungicide or other Group M5 fungicides with different groups that control the same pathogens. Use tank mixtures with fungicide/bactericides from a different group that is effective on the target pathogen when such use is permitted.
- Avoid application of more than the maximum number listed in the label and consecutive sprays of ECHO 90DF Agricultural Fungicide or other fungicides in the same group in a season.
- Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and 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/bactericide applications.
- Monitor treated fungal populations for sign of resistance development. Notify Sipcam Agro USA, Inc. if reduced sensitivity of the pathogen to ECHO 90DF Agricultural Fungicide is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and disease problems in your area.

This product is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk from disease resistance exhibit a single-site mode of fungicidal action. This product, with a multi-site mode of action, may be used to delay or prevent the

2018-3698

2019-02-21

development of resistance to single-site fungicides.

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.

For further information and to report suspected resistance, contact company representatives at: (519) 268 5906 or Fax (519) 268 8013.

2018-3698

2019-02-21

VEGETABLE, FRUIT and FIELD CROPS

*Application of any product containing chlorothalonil cannot be made more frequently than the Retreatment Intervals stated below.

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Blueberry (highbush)	54	Anthracnose fruit rot (<i>Colletotrichum gloeosporioides</i>) Alternaria fruit rot (<i>Alternaria</i> spp.) Phomopsis canker (<i>P. vaccinii</i>)	4.0 (3.6)	Make two applications at green tip, pink bud or petal fall using at least a 7-day retreatment interval. After petal fall, a protective schedule using a different registered product may be necessary to ensure continued control of fruit rot.
<p>Blueberry Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 2 • Reentry Interval (days): 3 (Handset irrigation) 0.5 (All other activities) 				
Broccoli, Brussels Sprouts, Cabbage, Cauliflower	7	Alternaria leaf spot (<i>Alternaria alternata</i>) Downy mildew (<i>Pseudoperonospora cubensis</i>)	1.3 – 2.7 (1.2-2.4)	Apply in sufficient water to obtain adequate coverage. Make application after transplants are set in the field (or shortly after emergence of field seeded crop) or when conditions favour disease development. For cabbage, make a second application 7-10 days after the first application to maintain disease control.
<p>Broccoli, Brussels sprouts, Cauliflower Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications/year: 1 • Reentry Interval (days): <ul style="list-style-type: none"> ▪ 5 (Topping (Brussels sprouts)) ▪ 5 (Scouting) ▪ 0.5 (All other activities) <p>Cabbage Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> ▪ 2 (Scouting, Thinning) ▪ 1 (Hand weeding) ▪ 0.5 (All other activities) 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Carrot	1	Early blight (<i>Cercospora carotae</i>) Late blight (<i>Alternaria dauci</i>)	1.3 – 1.8 (1.2-1.6)	Apply in sufficient water to obtain adequate coverage. Use 1.3 – 1.8 kg in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 - 10 days intervals to maintain control.
Carrot Restrictions: <ul style="list-style-type: none"> • Maximum number of applications/year: 7 • Reentry Interval (days): <ul style="list-style-type: none"> ▪ 22 (Hand harvesting) ▪ 7 (Scouting) ▪ 0.5 (All other activities) 				
Celery, field	7	Early blight (<i>Cercospora apii</i>) Late blight (<i>Septoria apicola</i>)	0.9 – 1.3 (0.8 - 1.2) 3- to 5-day schedule -- OR -- 1.3 – 2.3 (1.2 - 2.0) 8- to 10-day schedule	Start applications when transplants are set in the field. Apply this product in sufficient water to obtain adequate coverage.
Celery, seedbeds (greenhouse)	N/A	Early blight (<i>Cercospora apii</i>) Late blight (<i>Septoria apicola</i>)	1.4 – 1.9 (1.0-1.4)	For control in celery seedbeds, use of this product per 1000 litres of water and apply 1,400 litres per hectare. Start application shortly after crop emergence. Use the higher rate under severe disease conditions.
Celery Restrictions: <ul style="list-style-type: none"> • Maximum number of applications/year: <ul style="list-style-type: none"> • 2 (field) • 1 (greenhouse seedbeds) • Reentry Interval (days): <ul style="list-style-type: none"> • 0.5 (All activities) (field and greenhouse seedbeds) 				

2018-3698

2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Cherry (sweet and sour) Apply in 500-1000 litres of water per hectare.	40	Blossom blight (<i>Monilinia laxa</i>) Cherry leaf spot (<i>Blumeriella jaapii</i>) Black knot (<i>Apiosporina morbosa</i>)	2.8 – 5.0 (2.5-4.5)	Pre-harvest: Apply 1-2 applications from pink through shuck split at 10 days apart. DO NOT make more than 2 pre-harvest applications per season. DO NOT apply within 40 days of harvest.
	N/A	Cherry leaf spot (<i>Blumeriella jaapii</i>) Black knot (<i>Apiosporina morbosa</i>)	3.3 – 5.0 (3.0-4.5)	Post-harvest: Apply once to foliage 1-7 days after fruit is removed. DO NOT make more than 1 post-harvest application per season.
<p>Cherry Restrictions:</p> <p>Pre-Harvest</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 2 (Spring) • Reentry Interval (days): <ul style="list-style-type: none"> • 8 (Thinning) • 0.5 (All other activities) • DO NOT apply after shuck split to avoid fruit injury. <p>Post-Harvest</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 1 				
Chickpeas	48	Ascochyta blight (<i>A. phaseolorum</i>)	1.7 – 2.2 (1.5 - 2.0) (1 st application) 1.1 – 1.7 (1.0 - 1.5) (second application)	Use the higher rate for the first application at very early flowering and the lower rate for the second application after a 10-day interval. Apply by ground only in 220 liters of water per hectare.
<p>Chickpea Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 2 (Scouting) • 0.5 (All activities) • Apply only with ground application equipment. • DO NOT apply using aerial application equipment. 				

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Cranberry	50	Fruit rots (<i>Monilinia oxycocci</i>) Twig leaf blight, Upright dieback (<i>Diaporthe vaccinia</i>)	3.8 - 6.4 (3.4 - 5.8)	Apply once per year as needed. Use the higher rate for severe disease conditions. DO NOT make more than one application per year. DO NOT apply within 50 days of harvest.
<p>Cranberry Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 1 • Reentry Interval (days): <ul style="list-style-type: none"> • 5 (Scouting) • 0.5 (All other activities) • DO NOT apply this product to fields when flooded or allow release of irrigation water from bogs for at least 3 days following application. • This product may be applied through sprinkler irrigation equipment. Use 3000 litres of water per hectare through solid set systems only. See application and calibration techniques for sprinkler irrigation under Directions for Use. • DO NOT apply using aerial application equipment. 				
Cucurbit vegetables (Cantaloupe, Cucumber, Muskmelon, Honeydew, squash, pumpkin, watermelon)	1	Anthracnose (<i>Colletotrichum spp.</i>) Powdery mildew (<i>Podosphaera xanthii syn. Sphaerotheca fuliginea</i>) Scab (<i>Cladosporium cucumerinum</i>)	2.7 (2.4) 1.8 (1.6) for Anthracnose control on watermelon, squash and pumpkin	Apply this product in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favourable for disease development. Make a second application 7 days after the first application.
<p>Cucurbit vegetables Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 0.5 (All activities) • DO NOT apply via sprinkler irrigation system. 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Dry Peas	32	Ascochyta blight (<i>Mycosphaarella pinodes</i>)	1.1 - 1.7 (1.0 – 1.5)	Make first application beginning at early flowering and the second application at early pod set, 10 days after the first. Apply the higher rate when conditions favour disease development.
Dry peas Restrictions: <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 1 (Scouting) <ul style="list-style-type: none"> • 0.5 (All activities) • DO NOT feed the hay from treated crop to livestock. • DO NOT allow grazing of treated crop 				
Lentils	48	Anthracnose (<i>Colletotrichum gleosporioides</i>) Ascochyta blight (<i>Ascochyta pisi</i>)	1.1 - 2.2 (1.0 – 2.0)	Begin applications at pre-flowering prior to row closure and make a second application 10-14 days later (during bloom period).
Lentils Restrictions: <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 3 (Scouting) • 0.5 (All activities) • Do not apply this product in combination with POAST® herbicide and MERGE® surfactant or within 48 hours of the application of POAST and MERGE. • Do not feed the straw from treated crop to livestock. • Do not allow grazing of treated crop. 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Onions (dry bulb and green bunching)	7 (dry bulb) 14 (green bunching)	Botrytis leaf blight (<i>Botrytis</i> spp.)	1.4 – 2.6 (1.2 – 2.4)	Begin applications when conditions favour disease. Make a second application 7-10 days later to obtain control. Use sufficient water to obtain adequate coverage.
<p>Onions (dry bulb and green bunching) Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications/year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 6 (Hand weeding) • 1 (Scouting) • 0.5 (All activities) 				
Parsnips	7	Root canker (<i>Phoma</i> spp.)	1.5 (1.4)	Begin applications in mid-August and repeat every 7-10 days after.
<p>Parsnips Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 7 • Reentry Interval (days): <ul style="list-style-type: none"> • 21 (Hand harvesting) • 5 (Scouting) • 0.5 (All other activities) 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Peach Nectarine	60	Blossom blight (<i>Monilinia spp.</i>)	2.8 – 5.0 (2.5 – 4.5)	Apply 1-2 applications from pink through shuck period, with an interval of 10 days. DO NOT apply within 60 days of harvest. Use higher rates for trees greater than 6 meters in height or if weather is warmer than 16°C and wet during bloom.
		Peach leaf curl (<i>Blumeriella jaapii</i>)	2.8 – 3.9 (2.5 – 3.5)	Make one application per year either as a fall dormant spray at 75-100% leaf drop or in early spring before bud swell/bud break. Apply in at least 1000 liters of water per hectare. DO NOT make more than 3 applications per year including a dormant spray.
<p>Peach and Nectarine Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 3 (2 (Spring) + 1 (Dormant)) • Reentry Interval (days): 11 (Thinning) 0.5 (All other activities) • DO NOT apply after shuck split to avoid fruit injury. • DO NOT APPLY THIS PRODUCT WITHIN 10 DAYS OF AN OIL APPLICATION AS IT MAY CAUSE BURNING TO FLOWERS AND LEAF TISSUE. 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Potato	1	Late blight (<i>Phytophthora infestans</i>)	0.7 – 1.3 (0.6 – 1.2)	Use sufficient water to obtain adequate spray coverage. Begin applications when plants are 15-20 cm high, or when disease threatens. Repeat applications at 7 to 10 day intervals to maintain disease control. Under severe disease conditions, use the higher rates at 7-day intervals.
		Early blight (<i>Alternaria solani</i>) Botrytis vine rot (<i>Botrytis cinerea</i>)	0.9 – 1.3 (0.8 – 1.2)	
<p>Potato Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 3 • Reentry Interval (days): <ul style="list-style-type: none"> • Potato (seed) <ul style="list-style-type: none"> • 23 (Handset irrigation) • 19 (Roguing) • 3 (Scouting) • 0.5 (All other activities) • Potato (table) <ul style="list-style-type: none"> • 23 (Handset irrigation) • 3 (Scouting) • 0.5 (All other activities) 				
Strawberry	30	Botrytis fruit rot (<i>Botrytis spp.</i>)	1.9 (1.8)	Make one application in the fall and two applications pre-bloom (one when new growth appears and another 10-12 days later) the following Spring.
<p>Strawberry Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 3 (2 (Spring) + 1 (Post-harvest)) • Reentry Interval (days): <ul style="list-style-type: none"> • 0.5 (All activities) • Use ground application equipment only. • DO NOT apply using aerial application equipment. • DO NOT apply via sprinkler irrigation system. 				

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Sweet Corn	14	Common rust (<i>Puccinia spp.</i>)	1.8 (1.6)	Begin applications when disease symptoms are first observed and repeat 10-14 days after first application.
<p>Sweet Corn Restrictions:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 18 (Hand harvesting) • 14 (Mechanical harvesting) • 1 (Scouting) • 0.5 (All other activities) 				
Tomato (Including processing tomatoes)	1 (Not for Processing) 30 (Processing)	Early blight (<i>Alternaria solani</i>) Late blight (<i>Phytophthora infestans</i>) Septoria leaf spot (<i>Septoria lycopersici</i>) Anthracnose (<i>Colletotrichum spp.</i>)	1.3 – 2.2 (1.2 – 2.0)	Apply this product in sufficient water to obtain adequate coverage. Begin applications when disease threatens, and spray on an 8- to 10-day schedule at the lower rate, or at a 14-day schedule at the higher rate 2.2 Kg (2.0 kg ai).
		Botrytis gray mold (<i>Botrytis cinerea</i>)	2.7 (2.4)	Apply on a 14-day schedule.
<p>Tomato Restrictions:</p> <p>Not for Processing:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 2 • Reentry Interval (days): 0.5 (All activities) <p>For Processing:</p> <ul style="list-style-type: none"> • Maximum number of applications per year: 9 (2 applications at 3.3 L or 2.4 kg ai/ha and 7 applications at 1.7 L or 1.2 kg ai/ha) • Reentry Interval (days): <ul style="list-style-type: none"> • 7 (Scouting) • 0.5 (All other activities) • Do not hand harvest processing tomatoes. 				

2018-3698
2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Wheat	30	Septoria leafspot (<i>Mycosphaerella graminicola</i>) Septoria glume blotch (<i>Parastagonospora nodorum</i>) Tan spot (<i>Pyrenophora tritici-repentis</i>)	0.8 – 1.4 (0.7 – 1.3)	First Application: Zadok's growth stage 37 (flag leaf emergence) Second Application: 10-14 days after first application at Zadok's growth stage 51-55 (ear visible)
		Fusarium head blight (scab) (<i>Fusarium graminearum</i>) suppression	1.1 – 1.4 (1.0 – 1.3)	Make an application at Zadok's growth stage 61-65 (early flowering) for suppression of fusarium head blight. It is important to make this application prior to disease conditions or before flowering has started in the majority of tillers and wet weather is expected

Wheat Restrictions:

- Maximum number of applications per year: 2
- Reentry Interval (days):
 - 0.5 (All activities)
- DO NOT feed the straw from treated crop to livestock.
- DO NOT allow grazing of treated crop.

2018-3698
2019-02-21

***Application of any product containing chlorothalonil cannot be made more frequently than the Retreatment Intervals stated below.**

NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for Evening Primrose and Ginseng were developed by persons other than Sipcam Agro USA, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Sipcam Agro USA, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on Evening Primrose and Ginseng. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Sipcam Agro USA, Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described for Evening Primrose and Ginseng.

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Evening Primrose	--	Blight and dieback (<i>Botrytis cinerea</i>)	1.3 (1.2)	Make applications in the Fall only 14-28 days apart. Apply to direct seeded fields after emergence when disease symptoms appear.
Evening Primrose Restrictions: <ul style="list-style-type: none"> • Maximum number of applications per year: 2 • Reentry Interval (days): <ul style="list-style-type: none"> • 0.5 (All activities) 				
Ginseng	14	Grey mold (<i>Botrytis cinerea</i>) Leaf spot (<i>Phytophthora cactorum</i>)	1.4 – 2.6 (1.2 - 2.4)	Begin applications when disease threatens and make a second application 7-10 days later.
Ginseng Restrictions: <ul style="list-style-type: none"> • Maximum number of applications per year: 3 (2 + 1 (Fall)) • Reentry Interval (days): <ul style="list-style-type: none"> • 0.5 (All activities) • Do not feed treated ginseng (roots or foliage) to livestock. 				

2018-3698

2019-02-21

Crop	PHI (days)	Diseases	Kg of Echo 90 DF Per Hectare (kg ai/ha)	Application Directions
Blueberry (lowbush)	54	Phomopsis canker (Phomopsis vaccinii). Suppression Only: Leaf spot diseases including: Septoria leaf spot (Septoria sp.) Rust (Naohidemyces vaccinii) Valdensinia leaf spot (Valdensinia heterodoxa)	2.8 (2.5)	Make the first application in early to mid-June of the sprout year. Follow with a second application in early August, with at least 42 days in between. Application should be based on the level of disease pressure in the previous year. Apply this product in 200 - 950 L/ha of water.
<p>Blueberry (lowbush) Restrictions:</p> <ul style="list-style-type: none">• Maximum number of applications per year: 2• Reentry Interval (days): 0.5 (All activities)• DO NOT apply using aerial application equipment.				

2018-3698

2019-02-21

CONIFERS (outdoor (e.g., cedar, Douglas-fir, cypresses, fir, junipers, pine, spruce); including Christmas trees)***Application of any product containing chlorothalonil cannot be made more frequently than the Retreatment Intervals stated below.**

Diseases	Kgs of Echo 90DF Per Hectare (kg ai/ha)	Application Directions
Scleroderris canker (pines) (<i>Gremeniella abietina</i>) Swiss needlecast (<i>Phaeocryptopus gaeumannii</i>) Rhabdocline needlecast (Douglas-fir) (<i>Rhabdocline spp.</i>)	1.3 – 2.7 (1.2 – 2.4)	Apply in 100 to 1000 litres of water per hectare. Make first application in spring when new shoot growth is 1 to 2 cm in length. Make an additional application at 3 to 4 weeks after first
Sirococcus Tip Blight (<i>Sirococcus conigenus</i>)	2.0 – 3.3 (1.8 – 3.0)	
Rhizosphaera needlecast (spruces) (<i>Rhizosphaera spp.</i>) Scirrhia brown spot (pines) (<i>Mycosphaerella dearnessii</i>)	5.2 (4.8)	
Lophodermium needlecast (<i>Lophodermium spp.</i>)	1.3 – 2.7 (1.2 – 2.4)	Apply in 100 to 1000 litres of water per hectare. Begin applications in mid-July to early August before infection occurs. Make an additional application 3 to 4 weeks after first application.
Lophodermium needlecast (<i>Lophodermium spp.</i>) Scleroderris canker (pines) (<i>Gremeniella abietina</i>) Swiss needlecast (<i>Phaeocryptopus gaeumannii</i>) Rhabdocline needlecast (Douglas-fir) (<i>Rhabdocline spp.</i>)	1.3 (1.2)	Apply in 100 to 1000 litres of water per hectare. Make application when seedlings are 10 cm tall and when cool, moist conditions favor disease development.
Botrytis seedling blight (<i>Botrytis spp.</i>) Phoma twig blight (<i>Phoma spp.</i>)		

2018-3698

2019-02-21

Conifer (outdoor) Restrictions:

- Maximum number of applications per year: 2
- Reentry Interval (days):
 - 15 (Harvesting (seedling production)
 - 11 (Handset irrigation)
 - 7 (Harvest (seed cone), Christmas Trees)
 - 1 (Scouting, shaping)
- 0.5 (All other activities)

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2018-3698
2019-02-21