

GROUP	M	FUNGICIDE
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NET CONTENTS: 4 Kg, 10 Kg

Echo 90DF
Agricultural Fungicide
Dry Flowable

GUARANTEE:
Chlorothalonil 90%



DANGER: CORROSIVE TO EYES, SKIN IRRITANT

POTENTIAL SKIN SENSITIZER

WARNING: CONTAINS THE ALERGEN SULPHITES

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING.

REGISTRATION NO. 29356

PEST CONTROL PRODUCTS ACT

Sipcam Agro USA, Inc.
2520 Meridian Parkway, Suite 525
Durham, NC 27713-4202, USA
(919) 226 1195

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

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. The user assumes the risk to persons or property that arises from any such use of this product.

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 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.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

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

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.

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.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at www.croplife.ca.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates and marine/estuarine organisms. Runoff from treated areas may be hazardous to aquatic organisms in neighbouring areas. DO NOT apply directly to water.

Keep out of lakes, streams, and ponds. DO NOT contaminate water by cleaning of equipment, or disposal of wastes. DO NOT apply where runoff is likely to occur. DO NOT apply when weather conditions favour drift from areas being treated.

Observe a buffer zone of 100 metres for aerial applications and 15 metres for ground applications to protect surface water bodies including lakes, streams, ponds or sloughs from drift. Provincial buffer zones must be observed that may be greater than the above cited dimensions.

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.

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)

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 ground and aircraft methods of application are recommended unless specific directions are given for a crop.

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.

Additional Guidance for Aerial Application

Apply only by fixed-wing or rotary aircraft equipment, which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions: Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat. Refer to ENVIRONMENTAL HAZARDS for additional details.

Operator Precautions: Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a close system is permitted. It is desirable that the pilot has communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly. Refer to PRECAUTIONS for additional details.

VEGETABLE and FIELD CROPS

Crop	PHI (days)	Diseases	Rate Per Hectare	Application Directions
Broccoli, Brussels Sprouts, Cabbage, Cauliflower	7	Alternaria leaf spot, Downy mildew	1.4 - 2.7 Kg	Apply in sufficient water to obtain adequate coverage. Begin applications after transplants are set in the field (or shortly after emergence of field seeded crop) or when conditions favour disease development. Repeat applications at 7-10 day intervals or as necessary to maintain disease control. DO NOT use more than 5 applications per season. DO NOT apply within 7 days of harvest.
Carrot	1	Early blight (Cercospora), Late blight (Alternaria)	1.3 - 1.8 Kg	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 day intervals or as necessary to maintain control. DO NOT use more than 7 applications per season. DO NOT apply within 1 day of harvest.
Celery	7	Early blight (Alternaria), Late blight (Septoria)	0.9 - 1.3 Kg 3 - 5 day schedule -- OR - 1.3 - 2.3 Kg 8 - 10 day schedule	Start applications when transplants are set in the field. Apply ECHO 90DF Agricultural Fungicide in sufficient water to obtain adequate coverage. For control of early blight and late blight in celery seedbeds, use 1.1 - 1.6 Kg of this product per 1000 litres of water and apply 1,400 litres per hectare twice weekly or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate under severe disease conditions. DO NOT use more than 9 applications per season.

Cucumber	1	Anthracnose, Powdery mildew, Scab	2.7 Kg	Apply ECHO 90DF Agricultural Fungicide 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. Repeat applications at 7-day intervals. Under severe conditions, shorten the spray interval. DO NOT make more than 8 applications per season. DO NOT apply within 1 day of harvest.
Cantaloupe, Muskmelon, Honeydew melon	1	Anthracnose, Powdery mildew, Scab	2.7 Kg	Apply ECHO 90DF Agricultural Fungicide 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. Repeat applications at 7-day intervals. Under severe conditions, shorten the spray interval. DO NOT make more than 8 applications per season. DO NOT apply within 1 day of harvest.
Squash, Pumpkin, Watermelon	1	Anthracnose	1.8 Kg	Apply ECHO 90DF Agricultural Fungicide 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. Repeat applications at 7-day intervals. Under severe conditions, shorten the spray interval. DO NOT make more than 8 applications per season. DO NOT apply within 1 day of harvest.
		Scab	2.7 Kg	Apply ECHO 90DF Agricultural Fungicide 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. Repeat applications at 7-day intervals. Under severe conditions, shorten the spray interval. DO NOT make more than 8 applications per season. DO NOT apply within 1 day of harvest.

Potato	1	Late blight (Phytophthora infestans)	0.7 – 1.3 Kg	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, or as necessary to maintain disease control. Under severe disease conditions, use the higher rates at 7-day intervals. DO NOT use more than 12 applications per season. DO NOT apply within 1 day of harvest.
		Early blight (Alternaria), Botrytis vine rot	0.9 – 1.3 Kg	
Tomato	1	Early blight Late blight, Septoria leaf spot, Anthracnose	1.3 – 2.2 Kg	Apply ECHO 90DF Agricultural Fungicide in sufficient water to obtain adequate coverage. Begin applications when disease threatens, and spray on an 8 - 10 day schedule at the lower rate, or at a 14-day schedule at the 2.7 Kg per hectare rate. Under severe disease conditions, shorten the spray interval. Do not use more than 9 applications per season. DO NOT apply within 1 day of harvest.
		Botrytis gray mould	2.7 Kg	Apply on an 8 - 10 day schedule. DO NOT apply within 1 day of harvest.

CONIFERS

Diseases	Rate Per Hectare	Application Directions
Scleroderris canker (pines), Swiss needlecast, Rhabdocline needlecast (Douglas-fir)	1.3 - 2.7 Kg	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 additional applications at 3 to 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.
Sirococcus Tip Blight	2.0 - 3.3 Kg	
Rhizosphaera needlecast (spruces), Scirrhia brown spot (pines)	5.2 Kg	
Lophodermium needlecast	1.3 - 2.7 Kg	Apply in 100 to 1000 litres of water per hectare. Begin applications in mid-July to early August before infection occurs. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply 2.7 Kg/ha on a 3-week schedule.
Botrytis seedling blight, Phoma twig blight	1.3 - 2.7 Kg	Apply in 100 to 1000 litres of water per hectare. Begin applications in nursery beds when seedlings are 10 cm tall and when cool, moist conditions favor disease development. Make additional applications at 7- to 14-day intervals as long as disease favorable conditions persist.

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Resistance-Management Recommendations

For resistance management, ECHO 90DF Agricultural Fungicide contains a Group M fungicide. Any fungal population may contain individuals naturally resistant to ECHO 90DF Agricultural Fungicide and other Group M 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 M fungicides with different groups that control the same pathogens.
- 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 cultural, biological and other chemical control practices.
- Monitor treated fungal populations for sign of resistance development.
- 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.

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