

2013-6155
2013-11-19

GROUP	M	FUNGICIDE
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NET CONTENTS: 1-1000 L

Echo 720
Agricultural Fungicide
Suspension



WARNING POISON
POTENTIAL SKIN SENSITIZER

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING.

GUARANTEE: Chlorothalonil 720 g/L

Contains 1,2 benzisothiazolin-3-one at 0.0097% as a preservative

REGISTRATION NO. 29355 PEST CONTROL PRODUCTS ACT

Sipcam Agro USA, Inc.
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Durham, NC 27713 USA
(919) 226 1195

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

FIRST AID

KEEP OUT OF REACH OF CHILDREN
WARNING

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

WARNING: 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-sleeve shirt, goggles or a face shield, apron and chemical resistant gloves during mixing ,loading, clean-up and repair activities. Wear long pants, a long sleeve-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 US and you require information on acceptable residue levels in the US, visit CropLife Canada's web site 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

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

PRODUCT INFORMATION

ECHO 720 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 720 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 720 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 litres of ECHO 720 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 making devices.

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. Specific 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.

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.

APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION SOLID SET IRRIGATION EQUIPMENT:

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 ECHO 720 Agricultural Fungicide 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.

ECHO 720 Agricultural Fungicide 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 this 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 this product into water source. The tank containing this 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.

VEGETABLE and FIELD CROPS

Crop	PHI (days)	Diseases	Rate Per Hectare	Application Directions
Broccoli, Brussels Sprouts, Cabbage, Cauliflower	7	Alternaria leaf spot, Downy mildew	1.7 - 3.3 L	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.
Carrot	1	Early blight (Cercospora), Late blight (Alternaria)	1.7 - 2.2 L	Start applications when disease threatens and repeat at 7 - 10 day intervals or as necessary to maintain control.
Celery	7	Early blight (Alternaria), Late blight (Septoria)	1.1 - 1.7 L 3 - 5 day schedule -- OR - 1.7 - 2.8 L 8 - 10 day schedule	Start applications when transplants are set in the field. Apply ECHO 720 Agricultural Fungicide in sufficient water to obtain adequate coverage. For control of early blight and late blight in celery seedbeds, use 1.4 - 1.9 L 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.
Chickpea	48	Ascochyta blight	2.1 - 2.8 L 1 st application 1.4 - 2.1 L 2 nd , 3 rd applications	Make the first application at very early flowering and remaining applications at 10-day intervals. DO NOT make more than three applications per season. Apply only with ground application equipment in 220 litres of water per hectare. DO NOT apply by air.
Cantaloupe, Cucumber Muskmelon, Honeydew melon, squash, pumpkin watermelon	1	Anthracnose, Powdery mildew, Scab	3.3 L 2.2 L for Anthracnose control on watermelon, squash and pumpkin	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.

Dry peas	32	Ascochyta blight (Mycosphaerella pinodes)	1.4 - 2.1 L	Apply at early flowering. Make a second application at early pod set, around 10 days after the first. Always apply the higher rate when conditions are favourable for disease. If conditions remain favourable for disease a third application should be made 10-14 days later during pod filling. DO NOT make more than three applications per season. DO NOT feed the hay from treated crop to livestock. DO NOT allow grazing of treated crop.
Lentils	48	Ascochyta blight Anthracnose	1.4 - 2.8 L	Apply at preflowering prior to row closure, then make a second application 10-14 days after the first application (during bloom period). Do not make more than two applications per season. 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.
Mushroom	7	Dry bubble (Verticillium)	N/A	Individuals applying this product in mushroom facilities should wear a full-face respirator during all activities. In addition, if re-entry into mushroom facilities is required within 12 hours after treatment, wear a full-face respirator. Apply 175 millilitres per 100 square metres immediately after casing or in the casing mix, and 90 millilitres per 100 square metres at pinning, in 100 to 130 litres of water. DO NOT make more than two applications.
Onion (dry bulb and green bunching)	7 (dry bulb) 14 (green bunching)	Botrytis leaf blight	1.7 - 3.3 L	Start applications when disease threatens and repeat at 7-10 day intervals or as necessary to obtain control. DO NOT make more than 3 applications per season to dry bulb onions and DO NOT make more than 5 applications per season to green bunching onions.

Parsnip	7	Root canker (Phoma)	1.9 L	Start applications in mid-August and repeat at 7-10 day intervals. DO NOT make more than seven applications per season.
Potato	1	Late blight (Phytophthora infestans) Early blight (Alternaria), Botrytis vine rot	0.8 - 1.7 L 1.1 L for Early blight and Botrytis vine rot control	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.
Sweet Corn	14	Common rust	2.2 L	Apply when symptoms are first noticed and repeat again 10 - 14 days later. DO NOT make more than two applications per season.
Tomato (including processing tomatoes)	1	Early blight Late blight, Septoria leaf spot, Anthracnose	1.7 - 2.8 L	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 2.8 L per hectare rate. Under severe disease conditions, shorten the spray interval. Processing tomatoes - This product can be tank mixed with LEXONE® herbicide. Follow the above directions for use for disease control and use LEXONE at 150 grams active ingredient per hectare for weed control. Refer to the Lexone label for proper rates and use. When using this tank mix combination, DO NOT apply within 30 days before harvest.
		Botrytis gray mould	3.3 L	Apply on an 8 - 10 day schedule

Wheat	30	Septoria leafspot, Septoria glume blotch, Tan spot	1.0 - 1.7L	Apply at Zadoks growth stage 37 (flag leaf emergence) and repeat 10-14 days later at growth stage 51-55 (visible ear). A third application at growth stage 59-69 (ear fully emerged) may be necessary if conditions favour disease spread.
		Fusarium head blight (scab) suppression	1.4-1.7L	Apply at growth stage 61-65 (early flowering). For best results, this application must be made prior to conditions favouring infection, i.e. before flowering has started in the majority of tillers and wet weather is due. DO NOT make more than three applications per season. DO NOT feed the straw from treated crop to livestock. DO NOT allow grazing of treated crop.

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	Rate Per Hectare	Application Directions
Evening primrose	N/A	Blight and dieback	1.6 L	Fall applications only. Apply to direct seeded fields after emergence when disease symptoms appear. Repeat once after 28 days or after 14 days if the conditions favour disease. Maximum of two applications per year.
Ginseng	14	Leaf spot and grey mold	1.7 - 3.3 L	Start applications when disease threatens and repeat at 7-10 day intervals. DO NOT make more than six applications per season. Do not feed treated ginseng (roots or foliage) to livestock.

FRUIT CROPS

Crop	PHI (days)	Diseases	Rate Per Hectare	Application Directions
Blueberry	54	Anthracnose fruit rot, Alternaria fruit rot, Phomopsis canker	5.0 L	Make three applications at green tip, pink bud and petal fall. After petal fall, a protective schedule using a different registered product may be necessary to ensure continued control of fruit rot.
Cherry (sour) Apply in 500-1000 litres of water per hectare.	40	Blossom blight (Monilinia)	3.5 - 6.3 L	Make 1-3 applications from white bud through shuck split. Use higher rate per hectare for trees greater than 6 metres in height, or if weather is warm (above 16°C) and wet during bloom.
		Cherry leaf spot		Pre-harvest: Apply once at shuck split. Post-harvest: Apply once to foliage 1-7 days after fruit is removed. In orchards with a high leaf spot incidence, make a second application 10-14 days later.
		Black knot	4.2 - 6.3 L	For orchards with a history of disease, prune out, remove and burn all black knots from commercial orchard during the dormant period, before bud break. Remove any infected wild cherry or plum trees surrounding commercial orchard. Follow the spray schedule for blossom blight, including one application at shuck split. DO NOT apply after shuck split to avoid fruit injury. DO NOT make more than 3 pre-harvest applications per season.

Cranberry	50	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 BY AIR.		
		Fruit rots	4.7 – 8.1 L	Apply at early bloom, late bloom and 10-14 days later. Use the higher rate under severe conditions.
		Twigleaf blight and upright dieback		Apply at bud break, early bloom, and late bloom. Use the higher rate under severe conditions.
Peach, Nectarine Apply in 500-1000 litres of water per hectare.	60	Blossom blight (Monilinia)	3.5 – 6.3 L	Make 1-3 applications from pink bud through shuck split. Use higher rate per hectare for trees greater than 6 metres in height, or if weather is warm (above 16°C) and wet during bloom. Apply in 500-1000 litres of water per hectare. DO NOT apply after shuck split to avoid fruit injury.
		Leaf curl	3.5 – 4.9 L	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 litres of water per hectare.
Strawberry	30	Botrytis fruit rot	2.4 L	Apply once in the fall. Apply two pre-bloom sprays the following spring, one when new growth appears and again 10-12 days later. Use ground application equipment only. DO NOT make more than three applications per year. DO NOT apply by air.

CONIFERS

Diseases	Rate Per Hectare	Application Directions
Scleroderris canker (pines), Swiss needlecast, Rhabdocline needlecast (Douglas-fir)	1.7 - 3.3 L	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	2.5 - 4.2 L	
Rhizosphaera needlecast (spruces), Scirrhia brown spot (pines)	6.6 L	
Lophodermium needlecast	1.7 - 3.3 L	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 3.3 L/ha on a 3-week schedule.
Botrytis seedling blight, Phoma twig blight	1.7 - 3.3 L	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.

ECHO is a registered trademark of Sipcam Agro USA, Inc.

LEXONE is a registered trademark of E.I. duPont de Nemours and Company.

Resistance Management Recommendations

For resistance management, ECHO 720 Agricultural Fungicide contains a Group M fungicide. Any fungal population may contain individuals naturally resistant to ECHO 720 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 720 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 720 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 or to report suspected resistance, contact company representatives at:
(519) 268 5906 or Fax (519) 268 8013.

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