

2010-4141
2012-05-25

GROUP	11	M ²	FUNGICIDE
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CABRIO® PLUS

FUNGICIDE

Broad spectrum fungicide for use in potatoes

WATER DISPERSIBLE GRANULAR

COMMERCIAL (AGRICULTURAL)

GUARANTEE: Pyraclostrobin5%
 Metiram55%

Warning, contains the allergen soy

REGISTRATION NO. 30395

PEST CONTROL PRODUCTS ACT

WARNING



**POISON
EYE AND SKIN IRRITANT**

**READ THE LABEL AND ATTACHED BROCHURE BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT,
1-800-454-2673**

NET CONTENTS: 0.100 kg - 1000 kg

BASF Canada Inc.
100 Milverton Drive
5th Floor
Mississauga, Ontario
L5R 4H1
1-877-371-2273

CABRIO ® PLUS is a registered trademark of BASF.

GENERAL INFORMATION

This package contains **CABRIO PLUS**, a 60% Water Dispersible Granular. The active ingredients in **CABRIO PLUS** include pyraclostrobin and metiram. Together these ingredients provide both translaminar and contact control with ingredients belonging to different classes of fungicide (group 11 and group M2).

CABRIO PLUS has a protective effect because it inhibits spore, mycelial growth and sporulation of the fungus on the leaf surface and inside the plant. Optimum disease control is achieved when **CABRIO PLUS** is applied in a regularly scheduled protective spray program and is used in a rotation program with other fungicides.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Harmful or Fatal if swallowed. May irritate eyes. Causes skin irritation. **DO NOT** get in eyes or on skin or clothing.
3. Wash thoroughly after handling and before eating, drinking or smoking.
4. For farmers:
Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing/loading/clean-up, application and repair. Gloves are not required for an applicator in an enclosed cab.

For custom applicators and aerial mixer/loaders:

During mixing/loading/clean-up and repair, wear chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear. Wear cotton coveralls over a long sleeved shirt, long pants, chemical-resistant gloves, socks and footwear during application. Gloves are not required for an applicator in an enclosed cab .

For aerial applicators:

Wear a long sleeved shirt, long pants, socks and footwear during application

5. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
6. Clean spray equipment thoroughly after use.
7. Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
8. 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 web site at www.croplife.ca.

9. This product contains an active ingredient which are toxic to aquatic organisms. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
10. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.
11. Custom applicators must use ground boom equipment with an enclosed cab. A closed cab is a chemical resistant barrier that completely surrounds the occupant of the cab and prevents contact with the pesticide or treated surfaces outside the cab.

FIRST AID

If swallowed: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: 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 centre or doctor for further treatment advice.

If in eyes: 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 centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms, non-target terrestrial plants and small wild mammals. Observe buffer zones specified under DIRECTIONS FOR USE.

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

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.

This product contains an active ingredient which are toxic to aquatic organisms.

STORAGE

1. Store in original tightly closed container.
2. Do not ship or store near food, feed, seed and fertilizers.
3. Store in cool, dry, locked, well-ventilated area without floor drain.

DISPOSAL

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 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.

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.

DIRECTIONS FOR USE

Apply recommended rates of **CABRIO PLUS** as instructed by the following crop application rate table. Apply **CABRIO PLUS** with ground or aerial spray equipment. Equipment should be checked frequently for proper calibration.

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, drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Potato Application Rate Table (Ground and Aerial Application)

Crop	Disease	Spray Interval	Application Rate (kg/ha)
Potato	Early blight (<i>Alternaria solani</i>)	7 - 14 days	2.25- 3.35
	Late blight (<i>Phytophthora infestans</i>)	7 - 10 days	2.25- 3.35
<p>Applications of CABRIO PLUS for the control of early blight (<i>Alternaria solani</i>) and late blight (<i>Phytophthora infestans</i>) should begin prior to row closure or when conditions become favourable for the development of disease (whichever comes first). For early blight use 2.25 to 3.35 kg/ha and apply on a 7-14 day interval. For late blight use 2.25 to 3.35 kg/ha and apply on a 7- 10 day interval.</p> <p>In order to reduce the selection of less sensitive strains of the target fungi, for early and late blight control it is recommended that no more than one (1) application of CABRIO PLUS be made before alternating to an effective fungicide with a different mode of action from Group 11 Fungicides for at least one application.</p> <p>No more than three (3) applications of CABRIO PLUS should be made per season.</p>			

Ground Application

Apply **CABRIO PLUS** at rates listed in the application rate and timing when conditions are favourable for the development of disease. Use a minimum water volume of 200 L/ha on potatoes. Ensure thorough coverage of foliage. Consult nozzle manufacturers recommendation for spray pressures for specific nozzles.

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

Aerial Application

Apply **CABRIO PLUS** at rates listed in the application rate and timing table when conditions are favourable for the development of disease. Use a minimum water volume of 50 L/ha. Ensure thorough coverage of foliage. Consult nozzle manufacturers recommendation for spray pressures for specific nozzles.

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) 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.

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 crop 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.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and mixer/loaders must wear chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing/loading, clean-up 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.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-877-371-BASF (2273) or obtain technical advice from the distributor or your provincial agricultural representative.

Additives

Do not use additives or adjuvants unless otherwise specified.

Buffer Zones

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:			
			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*	Potatoes		10	3	1	1
Aerial	Potatoes	Fixed wing and rotary wing	275	30	10	10

*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

Mode of Action

Pyraclostrobin, one of the active ingredients of **CABRIO PLUS**, belongs to the group of respiration inhibitors classified by the PMRA as Quinone Outside Inhibitors (QoI), or Target Site of Action Group 11 Fungicides. Metiram, the other active ingredient of **CABRIO PLUS**, is classified by the PMRA as a Target Site of Action Group M² Fungicides.

Resistance management

CABRIO PLUS contains pyraclostrobin, a Group 11 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of QoI fungicides (Target site Group 11), such as for example dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates with acquired resistance to Group 11 fungicides, such as pyraclostrobin, azoxystrobin and fenamidone may eventually dominate the fungal population if Group 11 fungicides are used predominantly and repeatedly in the same field in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control by **CABRIO PLUS** or other Group 11 fungicides.

CABRIO PLUS contains metiram a Group M² fungicide. Any fungal population may contain individuals naturally resistant to **CABRIO PLUS** and other Group M² 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.

The following recommendations may be considered to delay the development of fungicide resistance:

1. **Applications:** Adhere to the label instructions regarding the consecutive use of **CABRIO PLUS** or other target site of action fungicides that have a similar site of action on the same pathogens. To maintain the performance of **CABRIO PLUS** in the field, do not exceed the total number of sequential applications and the total number of applications of **CABRIO PLUS** per season as stated below in the Restrictions and Limitations table.
2. **IPM:** **CABRIO PLUS** should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or BASF for additional IPM strategies established for your area. **CABRIO PLUS** may be used in Agricultural Extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favourable for disease development.
3. **Monitor:** Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development.
4. **Reporting:** If a target site fungicide, such as **CABRIO PLUS**, appears to be less or no longer effective against a pathogen that it previously controlled or suppressed, contact a BASF-representative at 1-877-371-2273 or at www.ag solutions.ca, local extension specialist, or certified crop advisor to assist in determining the cause of reduced performance.

MIXING

1. Clean spray tank following sprayer clean-up recommendations on the label of the product applied previously.
2. Fill the spray tank one-half full of water and start agitation.
3. Add the required amount of **CABRIO PLUS** to the tank.
4. Continue agitation while filling the remainder of the spray tank with water.
5. After use, clean the spray tank.

RESTRICTIONS AND LIMITATIONS

1. **Crop Rotation Restrictions:** Crops listed on the **CABRIO PLUS** label may be planted immediately following the last application. All other crops can be planted 14 days after last application.

2. Crop preharvest interval and application limitation:

Crop	Application to harvest interval (days)	Maximum number of applications per year	Maximum number of sequential applications
Potatoes	3	3	1

3. Crop can be grazed or fed to livestock.

