CERCOBIN® FUNGICIDE

GROUP 1 FUNGICIDE

COMMERCIAL Suspension Concentrate

ACTIVE INGREDIENT:	
thiophanate-methyl	500 g/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00113% and 2-methyl-4-isothiazolin-3-one at 0.00037% as preservatives.

OR

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001695% and 2-methyl-4-isothiazolin-3-one at 0.000555%, as preservatives.

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

REGISTRATION NO.: 32093 PEST CONTROL PRODUCTS ACT

WARNING - POISON



Warning, contains the allergen soy.

Registrant: JP Tower 10th Floor, 7-2 Marunouchi 2-chome, Chiyoda-ku Tokyo, Japan 100-7010 USA Contact Number: (212) 490-0350

Canadian Representative: Nailor Regulatory Consulting Inc. 935 Rosinke Drive Kincardine, Ontario, N2Z 2X3 519-829-5422

Net Contents: 1 L to 1060 L

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.

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 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.

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.

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

TOXICOLOGICAL INFORMATION:

No specific antidote is available. Treat symptomatically.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. May be harmful if swallowed or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing of dust or spray mist. Wash thoroughly with soap and water after handling. Wash contaminated clothes before re-use. Do not contaminate food or feed.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

DO NOT apply in greenhouses.

STORAGE:

Store this product away from food or feed.

DISPOSAL:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the 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:

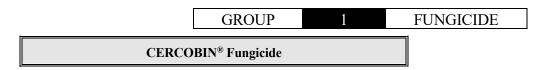
DO NOT REUSE THIS CONTAINER FOR ANY PURPOSE. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 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 refillable containers: For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 1-866-336-2983



COMMERCIAL Suspension Concentrate

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GENERAL INFORMATION:

CERCOBIN Fungicide is a systemic fungicide for control of certain fungus diseases. It is effective against certain diseases of white beans.

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.

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PRECAUTIONS:

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Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

DO NOT apply in greenhouses.

DO NOT enter or allow worker entry into treated areas to perform post-application activities during the intervals specified in the following table.

Crop	Post-Application Activity	REI and/or PHI
White Bean	Harvesting (hand, mechanical)	21 days
	Scouting, hand set/ hand line irrigation related activities involving foliar contact	2 days
	All other activities	12 hours

REI = restricted entry interval; PHI = pre-harvest interval

After handling CERCOBIN Fungicide, wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. No food, drink or tobacco should be allowed in areas of chemical storage or use. Do not apply this product in a way that will contact workers or other persons. Only protected handlers may be in the area during application.

Personal Protective Equipment (PPE):

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

If mixing and loading more than 520 L in a day, a closed mixing/loading system is required.

For groundboom application, if applying more than 520 L in a day, a closed cab tractor is required.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL PRECAUTIONS:

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

Toxic to birds.

Toxic to small wild mammals.

Toxic to earthworms.

Toxic to bees. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. To further minimize exposure to pollinators, refer to the complete guidance "Protecting Pollinators during Pesticide Spraying – Best Management Practices" on the Health Canada website (www.canada.ca/pollinators). Follow crop specific directions for application timing.

Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the evening when most bees are not foraging.

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

Avoid application when heavy rain is forecast.

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

STORAGE:

Store this product away from food or feed.

DISPOSAL:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
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For refillable containers: For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 1-866-336-2983

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that CERCOBIN Fungicide contains a Group 1 fungicide. Any fungal population may contain individuals naturally resistant to CERCOBIN Fungicide and other Group 1 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 CERCOBIN Fungicide or other Group 1 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an Integrated Pest Management 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 applications.
- Monitor treated fungal populations for resistance development. Notify Nippon Soda Co. Ltd if reduced sensitivity of the pathogen to SENATOR 50 SC 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 advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific crops and pathogens.
- For further information and to report suspected resistance, contact Nippon Soda Co. Ltd at (212) 490-0350.

Since the occurrence of resistance cannot be foreseen, Nippon Soda Co., Ltd. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of CERCOBIN Fungicide to control the resistant fungi strains.

MIXING:

SHAKE WELL BEFORE USING. Some settling may occur during prolonged periods of non-use. When high pH tank mixes exist, the interval between mixing and application should be minimized. The buffering of tank water to pH 6-7 prior to the addition of CERCOBIN Fungicide is recommended. Add required volume amount of CERCOBIN Fungicide to partially fill tank (1/2 total volume), agitate by mechanical or hydraulic means, add tank mix product if used (see below), agitate again and then add remaining required amount of water. Continuous agitation is recommended to keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Nisso America at (212) 490-0350 for information before applying any tank mix that is not specifically recommended on this label.

Tank mixing instructions: CERCOBIN Fungicide is compatible with most commonly used pesticides. If tank mixing with other materials, add products in the following order: wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble materials such as fertilizers. No claim of compatibility with other products is

implied: Do not tank mix with copper-containing materials or with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur.

CERCOBIN Fungicide may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

DIRECTIONS FOR USE

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 or mushroom houses containing this product to enter lakes, streams, ponds or other waters.

To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the evening when most bees are not foraging.

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.

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. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing - or rotorspan.

Spray Buffer Zones:

A spray buffer zone is NOT required for:

• uses with hand-held application equipment permitted on this label

The spray 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.

Method of application			Spray Buffer Zones (metres) Required for the Protection of:			
	Crop	Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	White bean		4	2	0	0
Aerial	White bean	Fixed-wing	150	40	0	0
		Rotary-wing	100	35	0	0

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray 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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca web site.

DIRECTIONS FOR USE: AERIAL APPLICATION

Apply only by fixed-wing or rotary aircraft equipment that 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 applications 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*.

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 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, 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 any questions, call the manufacturer at (212) 490-0350 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 50 litres per hectare.

RATE:

Use the recommended rate and reduce spray intervals under conditions of severe disease pressure.

Compatibility:

CERCOBIN Fungicide is compatible with most pesticides; do not mix with lime or other alkaline materials.

WHITE BEANS:

White mould (*Sclerotinia sclerotiorum*): Apply 2.45 - 3.15 L CERCOBIN Fungicide per 1000 L of water per hectare when using ground application equipment, or 50 - 60 L of water for aerial applications. This rate is equivalent to 1.225 - 1.575 kg ai per hectare for a single application. Commence when conditions favouring development of disease exist (e.g., warm, humid weather combined with heavy, dense crop foliage). This usually occurs during the early stages of bloom prior to the rows closing in. Spray to achieve optimum coverage and penetration on all parts of the plant. If disease conditions persist, a second application may be warranted with a minimal retreatment interval of 7 days. Do not apply within 21 days of harvest. The maximum seasonal rate is 6.3 L of product (3.15 kg ai) per hectare. NOTE: Do not feed or allow livestock to graze on treated crops.

Cercobin is a registered trademark of Nippon Soda Co., Ltd