

2016-7924/2017-8184  
2018-02-02



GROUP	<b>11</b>	FUNGICIDE
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**NET CONTENTS:  
2, 4 or 10 LITRES**

**REASON® 500SC FUNGICIDE  
SUSPENSION CONCENTRATE**

**For control of fungal diseases in Carrot, Cucurbit Vegetables, Potatoes, Turnip Greens,  
Tomato, Ginseng, Succulent Beans, Basil, and Tobacco**

**For suppression of fungal diseases in Brassica Head and Stem Vegetables, Brassica Leafy  
Greens, Bulb Vegetables, Spinach (including baby spinach) and Succulent Beans  
For control of seed-borne late blight in Potatoes**

**COMMERCIAL**



**CAUTION – POISON  
CAUTION - EYE IRRITANT**

REGISTRATION NUMBER: **27462** PEST CONTROL PRODUCTS ACT

**ACTIVE INGREDIENT:**

Fenamidone 500 g/L

Contains 1,2-benzisothiazolin-3-one at 0.017% as a preservative

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

**Bayer CropScience Inc.**  
Suite 200, 160 Quarry Park Blvd. S.E.  
Calgary, Alberta  
T2C 3G3  
[www.cropscience.bayer.ca](http://www.cropscience.bayer.ca)

**For product information, call: 1-888-283-6847  
In case of spills, poisoning, fire or other emergencies,  
call: 1-800-334-7577 (24 hours a day)**

## PRECAUTIONS:

**KEEP OUT OF REACH OF CHILDREN.** Avoid contact with eyes and skin. May irritate eyes. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. No food, drink or tobacco should be allowed in areas of chemical storage or use. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847, or visit [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca)

## PROTECTIVE CLOTHING AND EQUIPMENT:

During mixing, loading, clean-up and repair activities, workers must wear long-sleeved shirts, long pants, shoes plus socks, chemical resistant gloves and safety goggles or a face shield. Applicators and other handlers, as well as workers handling potato seed pieces treated with REASON 500 SC Fungicide must wear long-sleeved shirt, long pants, shoes plus socks and chemical-resistant gloves. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist. Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

## FIRST AID:

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. 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:

- This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.
- Treat symptomatically.
- Medical Personnel should contact Bayer's Medical Information Services, Toll-Free: 1-800-334-7577.

## ENVIRONMENTAL HAZARDS:

- TOXIC to aquatic organisms. Observe buffer zones specified under the DIRECTIONS FOR USE. This product may be harmful to beneficial predatory or parasitic arthropods. The best available application technique, which minimizes off target drift, should be used to reduce effects on beneficial arthropods in the field boundary.
- 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 strip between the treated area and the edge of the water body.
- Dispose of all excess treated seed pieces. Left over treated seed pieces may be double-sown around the headland or buried away from water sources in accordance with local requirements.
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## STORAGE

- Do not contaminate water, food, or feed by storage or disposal.
- Keep away from fire or open flame or other sources of heat
- CANNOT be stored below freezing.
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertiliser, plants and foodstuffs.
- Do not use or store in or around the home.
- Keep in original container during storage.
- In case of fire, leaking or damaged containers, call toll free 1-800-334-7577.

## DISPOSAL

### Recyclable Container 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.

### Disposal of Unused, Unwanted Product:

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 cleanup of spills.

### Disposal of Unused Spray Solution:

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

## 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.

For more information contact:

Bayer CropScience Inc.  
Suite 200, 160 Quarry Park Blvd. S.E.  
Calgary, Alberta  
T2C 3G3  
Reason is a registered trademark of Bayer AG.



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# REASON 500SC Fungicide

Table of Contents:	Section Number:
GENERAL INFORMATION      The Product	1
SAFETY AND HANDLING	
Precautions, Protective Clothing & Equipment, and Re-entry Restriction	2
First Aid and Toxicological Information	3
Environmental Hazards	4
Storage	5
Disposal	6
DIRECTIONS FOR USE	
Crop, Disease, Rate, Timing	7
Resistance Management Recommendations	8
Application Precautions	9
Mixing Instructions	10
Pre-harvest Intervals	11
Notice	12

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## GENERAL INFORMATION

### Section 1: The Product

#### The Product:

As a foliar product, for control of fungal diseases in Carrot, Cucurbit Vegetables, Potatoes, Turnip Greens and Tomato. For suppression of fungal diseases in Brassica Vegetables, Bulb Vegetables and Spinach, including baby spinach. As a potato seed piece treatment, for control of seed-borne late blight in potatoes. REASON 500SC Fungicide is a preventative, protectant fungicide, which inhibits spore germination and acts as an anti-sporulant.

## SAFETY AND HANDLING

### Section 2: Precautions, Protective Clothing and Equipment, and Re-entry Restriction.

#### PRECAUTIONS:

**KEEP OUT OF REACH OF CHILDREN.** Avoid contact with eyes and skin. May irritate eyes. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. No food, drink or tobacco should be allowed in areas of chemical storage or use. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847, or visit [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca)

#### PROTECTIVE CLOTHING AND EQUIPMENT:

During mixing, loading, clean-up and repair activities, workers must wear long-sleeved shirts, long pants, shoes plus socks, chemical resistant gloves and safety goggles or a face shield. Applicators and other handlers, as well as workers handling potato seed pieces treated with REASON 500 SC Fungicide must wear long-sleeved shirt, long pants, shoes plus socks and chemical-resistant gloves. . Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist. Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

### Section 3: First Aid and Toxicological Information

#### FIRST AID:

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. 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:

- This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.
- Treat symptomatically.
- Medical Personnel should contact Bayer's Medical Information Services, Toll-Free: 1-800-334-7577.

#### Section 4: Environmental Hazards:

- TOXIC to aquatic organisms. Observe buffer zones specified under the DIRECTIONS FOR USE. This product may be harmful to beneficial predatory or parasitic arthropods. The best available application technique, which minimizes off target drift, should be used to reduce effects on beneficial arthropods in the field boundary.
- 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 strip between the treated area and the edge of the water body.
- Dispose of all excess treated seed pieces. Left over treated seed pieces may be double-sown around the headland or buried away from water sources in accordance with local requirements.

#### Section 5: STORAGE

- Do not contaminate water, food, or feed by storage or disposal.
- Keep away from fire or open flame or other sources of heat
- CANNOT be stored below freezing.
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertiliser, plants and foodstuffs.
- Do not use or store in or around the home.
- Keep in original container during storage.
- In case of fire, leaking or damaged containers, call toll free 1-800-334-7577.

#### Section 6: DISPOSAL

##### Recyclable Container 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.

**Disposal of Unused, Unwanted Product:**

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 cleanup of spills.

**Disposal of Unused Spray Solution:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

## DIRECTIONS FOR USE

### Section 7: Crop, Disease, Rate, Timing

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

The DIRECTIONS FOR USE for this product described below were developed by persons other than Bayer CropScience Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Bayer CropScience Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops described below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

**Bulb Vegetables (Crop Group 3)**

Garlic, great-headed garlic, leek, onion (dry bulb and green), Welch onion, shallot, chive (fresh leaves), chive (Chinese, fresh leaves), daylily (bulb), Hosta, elegans, Fritillaria (bulb and leaves), garlic (serpent), kurrat, lady's leek, Lily (bulb), wild leek, onion (Beltsville bunching), onion (Chinese bulb), onion (fresh), onion (macrostem), onion (pearl), onion (potato bulb), onion (tree tops)

CROP	DISEASE	RATE	TIMING
Bulb Vegetables (Crop Group 3)	Suppression of Downy mildew ( <i>Peronospora destructor</i> )	400 mL/ha	For optimum results, begin applications as soon as crop and/or environmental conditions become favourable for disease development. Applications should be made

			on a 5-10 day interval depending upon disease conditions. Apply on the shorter application interval under conditions of high disease pressure.
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**RESTRICTIONS:** Do not apply more than 1600 mL/ha per growing season of REASON 500SC Fungicide on Bulb Vegetables, a maximum of 4 applications per growing season. Do not apply within 7 days of harvest.

Apply by ground equipment only.

To limit the potential for resistance to develop, do not apply more than 2 sequential applications of REASON 500SC Fungicide or other Group 11 fungicides. If two sequential applications are made, switch to a labelled non-Group 11 fungicide for at least 2 applications before applying a Group 11 fungicide again.

Do not re-enter treated fields until residues have dried.


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

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Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

Brassica Head and Stem Vegetables & Kohlrabi:  
 Broccoli; Brussels sprouts; Cabbage; Cabbage, Chinese, Napa; Cauliflower & Kohlrabi

CROP	DISEASE	RATE	TIMING
Brassica Head and Stem Vegetables Group & Kohlrabi	Suppression of Downy Mildew ( <i>Peronospora parasitica</i> )	400 - 600 mL/ha	Begin applications as soon as crop and/or environmental conditions become favourable for disease development. Applications should be made on a 5-10 day interval. Apply on the shorter application interval and/or switch to the higher rate under conditions favourable to high disease pressure. Thorough coverage is required. Use a spray volume of 150 – 250 L/ha.

**RESTRICTIONS:** Do not apply more than 3 applications of REASON 500SC Fungicide per growing season to Brassica Head and Stem Vegetables & Kohlrabi. Do not apply within 2 days of harvest.

Apply by ground equipment only.

To limit the potential for resistance to develop, do not apply more than one application of REASON 500SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.

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

The DIRECTIONS FOR USE for this product described below were developed by persons other than Bayer CropScience Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Bayer CropScience Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops described below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

Brassica Leafy Greens (except turnip greens):

Arugula; Broccoli raab; Broccoli, Chinese; Cabbage, Abyssinian; Cabbage, seakale; Chinese cabbage, bok choy; Collards; Cress, garden; Cress, upland, Hanover salad, Kale; Maca, Mizuna; Mustard greens; Radish, leaves; Rape greens; Rocket, wild; Shepherd's purse; Watercress

CROP	DISEASE	RATE	TIMING
Brassica Leafy Greens Subgroup	Suppression of Downy Mildew ( <i>Peronospora parasitica</i> )	400 - 600 mL/ha	Begin applications as soon as crop and/or environmental conditions become favourable for disease development. Applications should be made on a 5-10 day interval. Apply on the shorter application interval and/or switch to the higher rate under conditions favourable to high disease pressure. Thorough coverage is required. Use a spray volume of 150 – 250 L/ha.

**RESTRICTIONS:** Do not apply more than 3 applications of REASON 500SC Fungicide per growing season to Brassica Leafy Greens Subgroup. Do not apply within 2 days of harvest.

Apply by ground equipment only.

To limit the potential for resistance to develop, do not apply more than one application of REASON 500SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.

**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product described below were developed by persons other than Bayer CropScience Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Bayer CropScience Inc itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops described below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

CROP	DISEASE	RATE	TIMING
Carrot	damping off and cavity spot caused by <i>Pythium</i> spp.	600 mL/ha	Make the first application within 7 days after planting. Apply in spray volume of 300-750 L/ha and direct spray to the base of the plant. Repeat applications should be at 7-day intervals.

**RESTRICTIONS:** Do not apply more than 2 applications of Reason 500 SC Fungicide per growing season to carrots. Do not apply within 14 days of harvest. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different group or mode of action.

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

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Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

Cucurbit crops including: Chinese cucumbers, cucumbers, gourds, pumpkin, summer squash, winter squash, citron melon, muskmelon, watermelon, cantaloupes

CROP	DISEASE	RATE	TIMING
Cucurbits	Downy mildew ( <i>Pseudoperonospora cubensis</i> )	400 mL/ha	Begin applications as soon as crop and/or environmental conditions become favourable for disease development. Apply in a spray volume of 300-600 L/ha. Applications should be made on a 5-10 day interval depending upon disease conditions. Apply on the shorter application interval under conditions of high disease pressure.

**RESTRICTIONS:** Do not apply more than 4 applications of REASON 500SC Fungicide per growing season to cucurbits. Do not apply within 14 days of harvest.

Apply by ground equipment only.

To limit the potential for resistance to develop, do not apply more than one application of REASON 500SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

Do not re-enter treated fields until residues have dried.

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

The DIRECTIONS FOR USE for this product described below were developed by persons other than Bayer CropScience Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Bayer CropScience Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops described below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

CROP	DISEASE	RATE	TIMING
Ginseng	Phytophthora blight and root rot caused by <i>Phytophthora cactorum</i>	600 mL/ha	Begin applications as soon as crop and/or environmental conditions become favourable for disease development. Apply in spray volume of 460 - 1400 L/ha. Repeat applications should be at 8-14-day intervals.

**RESTRICTIONS:** Do not apply more than 3 applications of Reason 500 SC Fungicide per growing season. Do not apply within 14 days of harvest. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Apply by ground equipment only.

CROP	DISEASE	RATE	TIMING
Potato	Seed-borne late blight ( <i>Phytophthora infestans</i> )	Seed piece Treatment:  10 mL/100 kg of seed	<p>Apply Reason 500 SC Fungicide when seed-borne late blight is a threat. For optimal disease control, good coverage of the seed piece is required. Apply specified dosage as a diluted spray using equipment that ensures uniform coverage of each seed piece.</p> <p>Apply no more than 150 ml of slurry/100 kg of seed pieces. Agitate or stir the slurry solution as needed. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. It is recommended to periodically clean and sanitize all surfaces which may come in contact with cut seed-pieces (i. e. cutting machines, tables, knives, planting equipment etc.). Seed pieces must be treated immediately after cutting. Do not use treated seed pieces for food, feed, or fodder. As part of the seed cutting and treating process, application of an absorbent ingredient is recommended to improve suberization.</p>

CROP	DISEASE	RATE	TIMING
<p>REASON 500 SC Fungicide can be tank mixed with TITAN and EMESTO SILVER, TITAN or EMESTO SILVER for application as a seed piece treatment of potato, when additional disease control and/or insect control is required. Refer to the registered label of each tank-mix partner for application rates, precautions and directions for use associated with those products, and follow the most restrictive label precautions and limitations.</p> <p>Reason 500 SC Fungicide must be utilized as part of a total integrated approach to disease management. This approach involves the use of cultural, mechanical and, where required, other chemical techniques. These techniques include but are not limited to the use of high quality seed pieces, crop rotation, optimal planting and harvest timing, proper handling of tubers, proper sanitation to reduce inoculum levels and the use of post harvest fungicide applications of alternative chemistries to reduce disease in storage.</p> <p>Reason 500 SC Fungicide does not control bacterial diseases that may be present within the seed. Treatment of mechanically damaged or poor quality or low vigour seed may result in reduced germination, vigour and/or resultant yield. Treatment of sprouted seed which is known to be of poor quality or low vigour may result in reduced germination and/or seedling vigour. Avoid treating excessively sprouted seed. It is commonly known, the application of seed-piece treatments may delay emergence when disease is not present. Due to seed quality and storage conditions beyond the control of Bayer CropScience, no claims are made with regard to germination of potato seed pieces after treatment with Reason 500 SC Fungicide.</p> <p>If cut seed needs to be stored or held for a few days, make sure that there is adequate cool air movement through the pile of cut seed potatoes at relative humidity of 85-90%. Store cut seed at or below 7°C. Temperatures above 10 °C promote soft rot in seed. Cut and treated seed should not be piled above 1.8 m in height.</p> <p>After cutting, treated seed pieces should be planted in soil above 7°C with adequate soil moisture required for planting.</p> <p>When transporting Reason 500 SC Fungicide treated seed, make sure the seed is covered. DO NOT apply this product or treated seed-pieces directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.</p> <p>DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.</p>			



**NOTE TO USER:** The DIRECTIONS FOR USE for this product for the use on Spinach including baby spinach, were developed by persons other than Bayer CropScience and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Bayer CropScience itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on Spinach including baby spinach. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience harmless from any claims based on efficacy or phytotoxicity in connection with the use on Spinach including baby spinach.

CROP	DISEASE	RATE	TIMING
Spinach including baby spinach	Suppression of Downy Mildew ( <i>Peronospora farinosa</i> f. sp <i>spinaciae</i> )	400 mL/ha	Begin applications prior to onset of disease which typically occur in humid weather or when rains and heavy dews occur, approximately early to after mid-June. Continue applications on a 7 day spray interval Do not make more than one application of Reason 500 SC Fungicide before alternating with a fungicide from a different resistance management group Apply with sufficient water to ensure thorough coverage of foliage.

**RESTRICTIONS:** Do not apply more than 4 applications of Reason 500 SC Fungicide per growing season to Spinach. Do not apply within 2 days of harvest. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

CROP	DISEASE	RATE	TIMING
Potato Tomato	Early Blight ( <i>Alternaria solani</i> )  Late blight ( <i>Phytophthora infestans</i> )	REASON 500SC Fungicide applied as a tank mix with Dithane DG* . Apply REASON 500SC Fungicide at 200 mL/ha plus Dithane DG* at 1.25 kg/ha)  REASON 500SC Fungicide applied as a tank mix with BRAVO 500. Apply REASON 500SC Fungicide at 200 mL/ha plus BRAVO 500 at registered rates.	Application of REASON 500SC Fungicide should begin when plants are 15-20 cm high or when disease threatens (whichever comes first). Apply a fungicide having a different mode of action within 7-10 days after each application. Use the shorter spray interval when conditions favour disease development. Follow the recommended spray interval for each fungicide application before proceeding with the next application. Ensure that the area to be treated is covered uniformly. For aerial application (potatoes only), apply REASON 500SC Fungicide in no less than 35 L of water per ha at a pressure no less than 300 kPa. Consult the label of the tank mix partner for further instructions regarding directions for use, restrictions and precautions.

**RESTRICTIONS:** Do not apply REASON 500SC Fungicide more than 6 times in a year. Do not apply within 14 days of harvest.  
For potatoes apply using ground or air equipment only. For tomatoes apply using ground equipment only (Aerial application is not permitted).  
For Potato, do not re-enter treated fields until residues have dried.  
For Tomato, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

\* When using other formulations of mancozeb, adjust application rates accordingly to apply 935 grams active ingredient per ha.

CROP	DISEASE	RATE	TIMING
Turnip Greens	Downy mildew ( <i>Peronospora parasitica</i> )	400 – 600 mL/ha	For optimum results, begin applications as soon as crop and/or environmental conditions become favourable for disease development. Applications should be made on a 5-10 day interval depending upon disease conditions. Apply on the shorter application interval and/or switch to the higher rate under conditions favourable to high disease pressure.
<p><b>RESTRICTIONS:</b> Do not apply REASON 500SC Fungicide more than 2 times per growing season.</p> <p>Do not apply within 2 days of harvest.</p> <p>Apply by ground equipment only.</p> <p>To limit the potential for resistance to develop, do not apply more than one application of REASON 500SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.</p> <p>Reason 500SC Fungicide may be applied to turnip varieties for human consumption only. Not for use on forage turnips where tops are intended for livestock feed.</p> <p>Reason 500SC Fungicide may be applied to turnip cultivars that are grown for tops (greens) only. Turnip roots should be culled and not used as food or animal feed.</p>			

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

The DIRECTIONS FOR USE for this product described below were developed by persons other than Bayer CropScience Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Bayer CropScience Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops described below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Bayer CropScience Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

CROP	DISEASE	RATE	TIMING
Edible-podded beans and succulent shelled beans with the exception of succulent shelled cowpeas	Control of Cottony Leak ( <i>Pythium aphanidermatum</i> )  Suppression of <b>Phytophthora blight</b> ( <i>Phytophthora capsici</i> )	600 mL/ha	Begin applications as soon as crop and/or environmental conditions become favourable for disease development. Apply in spray volume of 280-560 L/ha. Repeat applications should be at 7-day intervals. Always consult your extension service for recommended pest management practices for your area.

**RESTRICTIONS:** Do not apply more than 3 applications of Reason 500 SC Fungicide per growing season. Do not apply within 3 days of harvest. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Apply by ground equipment only.

**NOTE TO USER:** The DIRECTIONS FOR USE for this product for the use on basil, were developed by persons other than Bayer CropScience and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Bayer CropScience itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on basil. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience harmless from any claims based on efficacy or phytotoxicity in connection with the use on basil.

CROP	DISEASE	RATE	TIMING
Basil	Downy Mildew ( <i>Peronospora belbarhii</i> )	400 mL/ha	Apply 400 mL/ha per application as a foliar application to control downy mildew. Begin applications when crop and/or environmental conditions become favourable for disease development. Apply in a minimum spray volume of 200 L/ha. Continue applications on a 7 day spray interval.

**RESTRICTIONS:** Do not apply more than 4 applications of Reason 500 SC Fungicide per growing season to basil. Do not apply within 2 days of harvest. Apply by ground equipment only. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (BELOW):** The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Bayer CropScience and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Bayer CropScience itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops listed above. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

CROP	DISEASE	RATE	TIMING
Tobacco	Blue mold ( <i>Peronospora tabacina</i> )	400 – 600 mL/ha	For optimum results, begin applications as soon as crop and/or environmental conditions become favorable for disease development. Applications should be made on a 5 -10 day interval depending upon disease conditions.

**RESTRICTIONS:** Do not apply more than 1600 mL/ha of REASON 500 SC Fungicide (800 grams a.i./ha) per growing season to tobacco. Do not apply within 30 days of harvest. Apply by ground equipment only. Do not apply to tobacco grown in a greenhouse. To limit the potential for resistance to develop, DO NOT apply more than one application of REASON 500 SC Fungicide or other Group 11 fungicide before alternating with a fungicide from a different resistance management group. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

## Section 8: Resistance Management Recommendations

### Resistance Management Recommendations:

For resistance management, please note that REASON 500SC Fungicide (fenamidone) contains a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to REASON 500SC Fungicide and other Group 11 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. When using REASON 500SC Fungicide or other Group 11 fungicides, the number of applications should be no more than 1/3 (33%) of the total number of fungicide applications per season.

### To delay fungicide resistance:

- Alternate with fungicides having a different mode of action other than Group 11 every 7 to 10 days after each application of REASON 500SC Fungicide.
- [Where possible, rotate the use of REASON 500SC Fungicide or other Group 11 fungicides with different groups that control the same pathogens.](#)
- A maximum of six applications per year.
- Fungicide use should be based on an integrated pest management (IPM) program that includes scouting, historical information related to pesticide use and crop rotation and record keeping and considers cultural, biological, and other chemical control practices.
- [Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications.](#)
- Monitor efficacy of all fungicides used in the disease management program against the target pathogen and record other factors that may influence fungicide performance and/or disease 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 pathogens.
- For further information and to report suspected resistance, contact a Bayer CropScience representative at 1-888-283-6847 or at [www.cropscience.bayer.ca](http://www.cropscience.bayer.ca).

## Section 9: Application Precautions

### General Application Precautions:

- Do not tank mix REASON 500SC Fungicide with pesticides, fertilizers or any other chemical additives unless recommended on this label.
- Rotational crop restrictions: All crops may be rotated following a minimum plant back interval of 30 days.
- 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 apply more than 1.8 L/ha of REASON 500 SC Fungicide in a year. When using REASON 500 SC Fungicide, do not apply more than six times in a year to support sound resistance management strategies.
- If spray mixture remains in the tank overnight, or for long periods during the day, agitate thoroughly prior to application.
- When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

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 the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse 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 REASON 500SC Fungicide only by rotary or fixed-wing 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.

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.

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.

Operator Precautions for Aerial Applications:



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, 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.

Product Specific Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-888-283-6847 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 REASON 500SC Fungicide in no less than 35 litres of water per hectare at a pressure no less than 300 kPa.

**Buffer zones:**

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

The 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	Crop	Buffer Zones (metres) Required for the Protection of Aquatic Habitat of Depths:	
		Less than 1 m	Greater than 1 m
Field sprayer	bulb vegetables, brassica leafy vegetables, brassica head and stem vegetables, carrots, cucurbits, potatoes, spinach (including baby spinach), tomatoes, turnip greens, ginseng, succulent beans, basil, tobacco	1	1
Aerial - fixed and rotary wing	Potatoes	5	1

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 S572.1) category indicated on the labels for those tank mix partners.

#### Section 10: Mixing Instructions

##### Mixing Instructions:

REASON 500SC Fungicide must be applied with properly calibrated, clean equipment. Prior to adding REASON 500SC Fungicide to the spray tank, ensure that the spray tank is thoroughly clean.

##### REASON 500SC Fungicide applied in tank mixes:

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the tank mix partner to the tank first and agitate thoroughly.
- Add the required quantity of REASON 500SC Fungicide to the water and complete filling with water to the required total volume.
- Maintain agitation throughout mixing and spraying.

#### Section 11: Pre-harvest Interval

Crop	Pre-Harvest Interval
Bulb Vegetables (Crop Group 3)	7 days
Brassica Leafy Vegetables	2 days
Brassica Head and Stem Vegetables	2 days
Carrots	14 days
Cucurbits	14 days
Ginseng	14 days
Potatoes	14 days
Spinach (including baby spinach)	2 days
Succulent beans	3 days
Tomatoes	14 days
Turnip Greens	2 days
Basil	2 days
Tobacco	30 days

#### Section 12: Notice

##### 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.

For more information contact:

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