

GROUP BM02 FUNGICIDE

# Serenade<sup>®</sup> Opti™

A Wettable Powder Biofungicide

Live Organism

### **COMMERCIAL**

## **ACTIVE INGREDIENT:**

QST 713 strain of Bacillus subtilis, contains a minimum of  $1.31 \times 10^{10} \, \text{CFU/g}$ 

## KEEP OUT OF REACH OF CHILDREN

## READ THE LABEL AND ATTACHED LEAFLET BEFORE USING

### POTENTIAL SENSITIZER

**CAUTION – EYE IRRITANT** 

REGISTRATION NO. 31666 PEST CONTROL PRODUCTS ACT

**NET CONTENTS: 1 kg - bulk** 

Bayer CropScience Inc. Suite 200, 160 Quarry Park Blvd. S.E. Calgary, Alberta T2C 3G3

Product Information: 1-888-283-6847 www.cropscience.bayer.ca

Date of Manufacture: Made in Mexico

#### 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 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.

#### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. May irritate eyes. May cause sensitization. Avoid contact with eyes, skin or clothing. Avoid inhaling/breathing dusts and spray mists. Wear a long-sleeved shirt, long pants, protective eyewear (goggles), waterproof gloves, socks and shoes and a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter when handling, mixing/loading or applying the product and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### **ENVIRONMENTAL PRECAUTIONS:**

To reduce the runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to sleep 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.

#### **STORAGE:**

Serenade Opti should be used within 6 years from the date of manufacture when stored at room temperature. Store this product away from food or feed. Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

#### **DISPOSAL:**

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spay mixture in the tank.
- 2. Follow provincial instruction 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 disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory requirements. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

Serenade Opti is a registered trademark of Bayer.

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Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

#### STORAGE:

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#### **ENVIRONMENTAL PRECAUTIONS:**

To reduce the runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to sleep 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.

#### **GENERAL USE INFORMATION:**

Serenade Opti is a broad spectrum, preventative product for the suppression of many plant diseases. Serenade Opti may be applied as a foliar spray alone, or in an alternating spray program with other registered crop protection products. When conditions are conducive to heavy disease pressure, use Serenade Opti in a rotational program with other registered fungicides. Serenade Opti may be applied with ground or aerial application equipment.

## **INTEGRATED PEST MANAGEMENT (IPM):**

Integrate Serenade Opti into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

#### **USE RATE DETERMINATION:**

Carefully read and follow all label directions, use rates and restrictions. Serenade Opti should be applied prior to or in the early stages of disease development. Use maximum label rates and shortened spray intervals for conditions conducive to rapid disease development. For proper application, determine the number of hectares to be treated, the recommended label use rate and select appropriate water volumes to give good canopy penetration and coverage of plant parts to be protected. Prepare only the amount of spray solution required to treat the measured acreage. Accurate spray equipment calibration is essential prior to use.

#### **DIRECTIONS FOR USE:**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where provinces/territories have more stringent regulations, they should be observed.

Use Restrictions: 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 wash water.

DO NOT apply in greenhouses.

DO NOT apply by any type of irrigation system.

DO NOT apply by aerial application equipment unless otherwise specified in crop-specific use directions.

Restricted-Entry Interval (REI): **DO NOT** allow worker entry into treated areas for 4 hours or until sprays have dried unless wearing waterproof gloves, long-sleeved shirt, long pants, socks and shoes.

Preharvest Interval: Serenade Opti can be used up to and including the day of harvest. PHI=0 days.

#### **APPLICATION INSTRUCTIONS:**

GROUND APPLICATIONS: Thorough coverage is essential for optimum disease control. To achieve good coverage, use the appropriate spray pressure, litres per hectare, nozzles, nozzle spacing and ground speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

AERIAL APPLICATIONS: Use the application rate indicated for the appropriate crop in sufficient water to achieve thorough coverage.

#### **MIXING INSTRUCTIONS:**

MIXING: Serenade Opti must be diluted with water for spray applications and may be used in spray equipment commonly used for making ground applications. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Serenade Opti to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. Maintain agitation continuously while spraying. Do not allow spray mixture to stand overnight or for prolonged periods.

## **APPLICATION RATES:**

When applied as directed (see table below), Serenade Opti will suppress the indicated diseases. Under conditions of moderate to high disease pressures, use the higher rate and shorter application interval indicated. Apply in sufficient water carrier volume to ensure good coverage.

# **Ground Application Only.**

Crop Group 1 Root tuber vegetables: Garden beet, sugar beet, carrot, celeriac, chervil, chicory, ginseng, horseradish, turnip-rooted parsley, parsnip, potato, radish, Oriental radish, rutabaga, salsify, sweet potato, and turnip.

| Disease                                | Rate (kilogram/<br>hectare) | Application Instructions  |
|--|-----------------------------|---|
| White mould (Sclerotinia sclerotiorum) | 1.1 – 2.2                   | Begin application soon after emergence and when conditions are conducive to disease development.  Repeat as necessary on a 7-10 day interval. |

#### Celery

| Disease                             | Rate (kilogram/ | Application Instructions   |
|-------------------------------------|-----------------|--|
|                                     | hectare)        |  |
| Pink Rot (Sclerotinia sclerotiorum) | 1.7 – 3.3       | Make the first application approximately 8 weeks before harvest and repeat on a 14-day interval. Apply Serenade Opti as a directed spray in sufficient water to ensure thorough coverage of the base of the plants and the |
|                                     |                 | surrounding soil surface.  |

# **Potato**

| Disease                   | Rate (kilogram/ | Application Instructions                                    |
|---------------------------|-----------------|---|
|                           | hectare)        |   |
| Early blight              | 1.1 - 2.2       | Begin application soon after emergence and when             |
| (Alternaria solani)       |                 | conditions are conducive to disease development.            |
|                           |                 | Repeat as necessary on a 7-10 day interval.                 |
| Silver Scurf              | 7 - 14 g/tonne  | Potatoes: For post-harvest application to aid in the        |
| (Helminthosporium solani) |                 | control of silver scurf. Sanitation and other cultural      |
|                           |                 | practices should also be employed to aid in control and     |
|                           |                 | minimize the potential for disease.                         |
|                           |                 |   |
|                           |                 | Conveyer Line Application:                                  |
|                           |                 | Prepare the equivalent of 350 – 700 grams of Serenade       |
|                           |                 | Opti in 100 liters of water. Spray 2 liters of the Serenade |
|                           |                 | Opti/water suspension per tonne of potatoes. Potatoes       |
|                           |                 | must rotate along the conveyor line into the storage area   |
|                           |                 | to ensure complete coverage. If needed, adjust rate of      |
|                           |                 | spray solution to ensure thorough coverage while            |
|                           |                 | maintaining recommended rate of Serenade Opti per           |
|                           |                 | tonne of potatoes.  |

Radish, turnips and rutabaga

| Radish, turnips and rutabaga |                 |   |
|------------------------------|-----------------|---|
| Disease                      | Rate (kilogram/ | Application Instructions                            |
|                              | hectare)        |   |
| Downy mildew                 | 1.4             | Downy mildew: Begin application when environmental  |
| (Personospora parasitica)    |                 | conditions are conducive to disease development and |
|                              |                 | repeat on 7-10 day intervals.                       |

Sugar, Garden Beet

| Disease               | Rate (kilogram/ | Application Instructions  |
|-----------------------|-----------------|---|
|                       | hectare)        |   |
| Cercospora Leaf Spot  | 0.5 -1.1        | Begin application soon after emergence and when   |
| (Cercospora beticola) |                 | conditions are conducive to disease development.  |
|                       |                 | Repeat as necessary on a 7-10 day interval.   |
|                       |                 | Serenade Opti must be applied with a non-ionic surfactant at a rate of 0.25% v/v or at labeled rates.                   |
|                       |                 | Under conditions of moderate to high disease pressures, use the higher rate and shorter application interval indicated. |

Crop Group 3 - Bulb Vegetables: Onions (all types), garlic (all types), leeks, shallots and chives

| Disease                                | Rate (kilogram/ | Application Instructions                                 |
|--|-----------------|--|
|  | hectare)        |  |
| Botrytis neck rot                      | 1.7 - 2.5       | Begin applications at the first sign of disease, or when |
| (Botrytis allii)                       |                 | conditions become conducive for disease development.     |
|  |                 | Repeat as necessary on a 7-10 day interval.              |
| Botrytis leaf blight ( <i>Botrytis</i> |                 |  |
| squamosa)                              |                 |  |
|  |                 |  |
| Downy mildew                           | 1.7 – 3.3       |  |
| (Peronospora destructor)               |                 |  |

Crop Group 4 - Leafy Vegetables (except brassica): Amaranth, arugula, Chinese celery, celtuce, chervil, corn salad, cress, dandelion, dock, endive, fennel, lettuce, orach, parsley, radicchio, and swiss chard.

| Disease                         | Rate (kilogram/ | Application Instructions                                 |
|---------------------------------|-----------------|--|
|                                 | hectare)        |  |
| Sclerotinia rot                 | 0.6 - 1.7       | Make the first application at planting (or immediately   |
| (Sclerotinia minor, Sclerotinia |                 | following planting but prior to crop emergence). Make a  |
| sclerotiorum)                   |                 | second application as a directed spray with multiple     |
|                                 |                 | nozzles per seed line in sufficient water to ensure      |
|                                 |                 | thorough coverage of lower plant leaves and              |
|                                 |                 | surrounding soil surface within 7 days of thinning.      |
|                                 |                 | Repeat applications on 10-14 day intervals if conditions |
|                                 |                 | for disease development persist.                         |
| Grey mould                      |                 | For suppression, begin applications soon after           |
| (Botrytis cinerea)              |                 | emergence or transplant and continue as necessary on a   |
|                                 |                 | 7 to 10 day interval. When environmental conditions are  |
|                                 |                 | conducive to rapid disease development, use Serenade     |
|                                 |                 | Opti in a rotational program with other registered       |
|                                 |                 | fungicides. Thorough coverage is essential.              |
| Powdery mildew                  | 1.7 - 3.3       | Begin applications at the first sign of disease, or when |
| (Erysiphe cichoracearum)        |                 | conditions become conducive for disease development.     |
|                                 |                 | Repeat as necessary on a 7-10 day interval.              |

#### Lettuce

| Disease           | Rate (kilogram/ | Application Instructions                                 |
|-------------------|-----------------|--|
|                   | hectare)        |  |
| Downy mildew      | 1.7 - 3.3       | Begin applications at the first sign of disease, or when |
| (Bremia lactucae) |                 | conditions become conducive for disease development.     |
|                   |                 | Repeat as necessary on a 7-10 day interval.              |
|                   |                 |  |

Spinach

| Spinach               |                 |  |
|-----------------------|-----------------|--|
| Disease               | Rate (kilogram/ | Application Instructions                                 |
|                       | hectare)        |  |
| White rust            | 0.6 - 1.1       | Begin applications at the first sign of disease, or when |
| (Albugo occidentalis) |                 | conditions become conducive for disease development.     |
|                       |                 | Repeat as necessary on a 7-10 day interval.              |

Crop Group 5 - Brassica Leafy Vegetables : Broccoli, Chinese broccoli, Broccoli raab, Brussels sprouts, cabbage (all types), cauliflower, cavalo broccoli, collards, kale, kohlrabi, mizuna, mustard greens,

mustard spinach, rape greens.

| Disease                                    | Rate (kilogram/<br>hectare) | Application Instructions  |
|--|-----------------------------|---|
| Sclerotinia rot (Sclerotinia sclerotium)   | 1.7 – 3.3                   | Make the first application at emergence, or immediately following transplanting. Repeat applications on 10-14 |
| Downy mildew (Peronospora parasitica)      | 1.1 – 1.7                   | day intervals if conditions for disease development continue.   |
| Pin rot (Alternaria / Xanthomonas Complex) |                             |   |

Crop Group 6 – legume Vegetables: Bean (*Lupinus* spp., *Phaseolus* spp., and *Vigna* spp.), chickpea, lentil,

and pea (all types)

| Disease                                | Rate (kilogram/<br>hectare) | Application Instructions   |
|--|-----------------------------|--|
| White mould (Sclerotinia sclerotiorum) | 1.7 – 3.3                   | Make the first application at planting (or immediately following planting but prior to crop emergence). Make a second application as a directed spray with multiple nozzles per seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface within 7 days of thinning. Repeat applications on 7-14 day intervals if conditions for disease development persist. |
| Botrytis pod rot (Botrytis cinerea)    | 1.7 – 3.3                   | Begin applications at the first sign of disease, or when conditions become conducive for disease development. Repeat as necessary on a 7-10 day interval.  |

**Soybeans** 

| Disease                  | Rate (kilogram/ | Application Instructions                         |
|--------------------------|-----------------|--|
|                          | hectare)        |  |
| White mould              | 0.6 - 2.0       | Begin application soon after emergence and when  |
| (Sclerotinia sclerotium) |                 | conditions are conducive to disease development. |
| Brown spot               | 0.1 - 0.5       | Repeat as necessary on a 7-10 day interval.      |
| (Septoria glycines)      |                 |  |
|                          |                 |  |
| Frog-eye leaf spot       |                 |  |
| (Cercospora sojina)      |                 |  |

**Asparagus** 

| Disease                            | Rate (kilogram/<br>hectare) | Application Instructions  |
|------------------------------------|-----------------------------|---|
| Botrytis blight (Botrytis cinerea) | 1.7 – 3.3                   | Begin applications at the first sign of disease, or when conditions become conducive for disease development. Repeat as necessary on a 7-10 day interval. |

# Crop Group 8 - Fruiting Vegetables: Eggplant, ground cherry, okra, pepino, peppers (all varieties), tomatillo and tomatoes

| Disease                                | Rate (kilogram/ | Application Instructions   |
|--|-----------------|--|
|  | hectare)        |  |
| Early blight (Alternaria solani)       | 2.5             | Make the first application when plants are 6-10 cm high, or when conditions are conducive for disease development. Repeat applications on an interval of 5-7 days. |
| Botrytis grey mould (Botrytis cinerea) | 1.7 – 3.3       |  |

**Tomato, Peppers** 

| Disease                  | Rate (kilogram/ | Application Instructions                                |
|--------------------------|-----------------|---|
|                          | hectare)        |   |
| Powdery mildew           | 1.7 - 3.3       | Begin application soon after emergence or transplant,   |
| (Erysiphe orontii,       |                 | and repeat on an interval of 7-10 days.                 |
| Leveillula taurica)      |                 |   |
| Bacterial spot           | 0.6 - 1.7       | Begin application soon after emergence or transplant,   |
| (Xanthomonas campestris) |                 | when conditions are conducive to disease development.   |
|                          |                 | Repeat as necessary on a 7-10 day interval. When        |
|                          |                 | environmental conditions and plant stage are conducive  |
|                          |                 | to rapid disease development, use Serenade Opti in a    |
|                          |                 | rotational program with other registered bacteriacides. |

Crop Group 9 - Cucurbit Vegetables: Canteloupe, Chinese waxgourd, cucumber, gherkin, edible gourd, melon, muskmelon, pumpkin, squash, and watermelon.

| Disease   | Rate (kilogram/ | Application Instructions  |
|---|-----------------|---|
|   | hectare)        |   |
| Powdery mildew (Erysiphe cichoracearum, Sphaerotheca fuliginea) | 1.7 – 3.3       | Begin application soon after emergence or transplant, when conditions are conducive for disease development. Repeat applications on an interval of 7-10 days.   |
| Downy mildew (Pseudoperonospora cubensis)                       | 0.6 – 1.7       | Begin application soon after emergence or transplant, when conditions are conducive to disease development. Repeat as necessary on a 7-10 day interval. When environmental conditions and plant stage are conducive to rapid disease development, use Serenade Opti in a rotational program with other registered fungicides. |

Crop Group 11 - Pome Fruit: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental pear, Quince, and non-

bearing pome fruit trees

| Disease                  | Rate (kilogram/ | Application Instructions                             |
|--------------------------|-----------------|--|
|                          | hectare)        |  |
| Fire blight              | 1.1 - 1.7       | Begin applications at 1-5% bloom and repeat on 7-10  |
| (Erwinia amylovora)      |                 | days interval. During periods of rapid bloom         |
|                          |                 | development and frequent infection periods, spray    |
|                          |                 | intervals of 4-7 days may be required.               |
| Scab                     | 1.7 - 3.3       | Begin application at green tip or when environmental |
| (Venturia inaequalis; V. |                 | conditions become favorable for primary scab         |
| pirina)                  |                 | development, and repeat on 7-10 day intervals.       |

**Apples** 

| Disease                   | Rate (kilogram/ | Application Instructions                                     |
|---------------------------|-----------------|--|
|                           | hectare)        |  |
| Powdery Mildew            | 1.7 - 3.3       | Begin application at tight cluster, or sooner, if conditions |
| (Podosphaera leucotricha) |                 | are conducive to disease development. Repeat                 |
|                           |                 | applications on a 7-10 day interval. Additional sprays       |
|                           |                 | beyond second cover may be needed on susceptible             |
|                           |                 | varieties or under heavy disease pressure.                   |

Crop Group 12 – Stone Fruit: Apricot, cherry, nectarine, peach, plum, plumcot, and prune

| Crop Group 12    | Stop Stoup 12 Stone I full repriest, energy, necturine, peach, plant, planted, and prane |  |  |
|------------------|--|--|--|
| Disease          | Rate (kilogram/  | Application Instructions                                 |  |
|                  | hectare)   |  |  |
| Brown Rot        | 1.1 - 1.7  | Begin application at early bloom and repeat as necessary |  |
| (Monilinia spp.) |  | through petal fall on a 7-day interval.                  |  |

Crop Group 13 – Small Fruit & Berries: Bayberry; bearberry; blackberry; highbush and lowbush blueberry; chokecherry; currant; elderberry; gooseberry; huckleberry; lingonberry; loganberry, mulberry; pincherry; raspberry; salal; Saskatoon berry; sea buckthorn; wild raspberry

| Disease                | Rate (kilogram/ | Application Instructions                                |
|------------------------|-----------------|---|
|                        | hectare)        |   |
| Botrytis grey mould    | 1.7 - 3.3       | Begin applications at the first sign of disease or when |
| (Botrytis cinerea)     |                 | conditions become conducive for disease development.    |
|                        |                 | Repeat as necessary on a 7-10 day interval.             |
| Bacterial blight       | 0.6 - 1.7       | Apply before fall rains and again during dormancy       |
| (Pseudomonas syringae) |                 | before spring.  |

Crop Group 13-07 – Berry and Small Fruit: Blackberry or raspberry, highbush blueberry, elderberry or mulberry, grape, strawberry, and fuzzy kiwifruit

| Disease                   | Rate (kilogram/ | Application Instructions                           |
|---------------------------|-----------------|--|
|                           | hectare)        |  |
| Botrytis grey mould mould | 1.7 - 3.3       | Begin application prior to disease development and |
| (Botrytis cinerea)        |                 | repeat on 7-10 day intervals.                      |

Grapes

| Grapes                 |                 |   |
|------------------------|-----------------|---|
| Disease                | Rate (kilogram/ | Application Instructions                                  |
|                        | hectare)        |   |
| Powdery mildew         | 1.7 - 3.3       | Begin application when new shoots are 1-3 cm high.        |
| (Erysiphe necator syn. |                 | Make a repeat application when shoots are 6-10 cm         |
| Uncinula necator)      |                 | high, and when shoots are 18-20 cm high, then at 7-10     |
|                        |                 | day intervals thereafter.                                 |
| Grey mold              | 1.7 - 3.3       | Make the first application at bloom, then repeat at bunch |
| (Botrytis cinerea)     |                 | closure, at veraison and pre-harvest.                     |
|                        |                 |   |
| Sour rot*              |                 | *Note that sour rot disease is caused by various yeast,   |
| (a complex of various  |                 | fungal and bacterial pathogens, and that Serenade Opti    |
| pathogens)             |                 | has not been tested for control of all of these agents.   |

Highbush blueberry, lowbush blueberry

| inghbush bluebelly, lowbush bluebelly |                 |  |
|---------------------------------------|-----------------|--|
| Disease                               | Rate (kilogram/ | Application Instructions                       |
|                                       | hectare)        |  |
| Mummy berry                           | 2.0 -3.3        | Begin applications at the bud break stage of   |
| (Monilinia vaccinii-                  |                 | development. Repeat as necessary on a 7-14 day |
| corymbosi)                            |                 | interval.                                      |

**Strawberry** 

| Disease             | Rate (kilogram/ | Application Instructions                                |
|---------------------|-----------------|---|
|                     | hectare)        |   |
| Botrytis gray mould | 1.7 - 3.3       | Begin application at the first sign of disease, or when |
| (Botrytis cinerea)  |                 | conditions become conducive for disease development.    |
|                     |                 | Repeat as necessary on a 7-10 day interval.             |

Crop Group 19 – Herbs and Spices: Anise, balm, basil, borage, chamomile, caraway, catnip, celery seed, chervil, chive, coriander, costmary, dill, fennel, fenugreek, horehound, juniper berry, lavender, lemongrass, lovage, marigold, mustard (seed), nasturtium, parsley, rosemary, sage, savory, sweet bay, thyme, wintergreen, woodruff, and wormwood including transplants

| _ ,                           | /               | 8 1   |
|-------------------------------|-----------------|---|
| Disease                       | Rate (kilogram/ | Application Instructions                              |
|                               | hectare)        |   |
| Botrytis gray mould (Botrytis | 1.7 - 3.3       | Begin application when environmental conditions are   |
| cinerea);                     |                 | conducive to disease development. Repeat as necessary |
|                               |                 | on a 7- to 10-day interval.                           |
| White mould (Sclerotinia      |                 | •   |
| sclerotiorum)                 |                 |   |

# **Peanut**

| 1 cuitat                   |                 |  |
|----------------------------|-----------------|--|
| Disease                    | Rate (kilogram/ | Application Instructions                             |
|                            | hectare)        |  |
| Leaf spot                  | 0.6 - 1.7       | Begin application soon after emergence or transplant |
| (Cercospora arachidicola,  |                 | and when conditions are conducive to disease         |
| Cercosporidium personatum) |                 | development. Repeat as necessary on a 7-10 day       |
|                            |                 | interval.  |

# Ground and Aerial application.

Crop Group 20A - Rapeseed Subgroup. Representative commodity: rapeseed (canola varieties only) borage, crambe, cuphea, echium, flax seed, gold of pleasure, hare's ear mustard, lesquerella, lunaria, meadowfoam, milkweed, mustard seed, oil radish, poppy seed, rapeseed, sweet rocket, cultivars, varieties and/or hybrids of these

| Disease   | Rate (kilogram/ hectare) | Application Instructions  |
|---|--------------------------|---|
| Sclerotinia stem rot (Sclerotinia sclerotiorum) | 0.3 -0.9                 | Begin application at 20%- 30% bloom. A second application may be made 7-10 days later, at approximately 50% bloom and prior to significant petal fall, if conditions for disease development remain favorable. Use higher rates in fields with a history of heavy disease pressure.  Aerial Spray Volume: minimum 50 L/ha |

### **Aerial Application Instructions**

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. 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 by using appropriate marking devices and/or electronic guidance equipment.

#### **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only when meteorological conditions are in compliance with local and/or provincial authorities.

# **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 the mixer/loaders must wear the personal protective equipment described in the PRECAUTIONS section of this 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.

# **MINOR USES:**

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience Inc. under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

| Crop    | Disease  | Rate (kilogram/<br>hectare) | Application Instructions  |
|---------|--|-----------------------------|---|
| Hops    | Downy mildew (Pseudoperonospora humuli)  Partial suppression | 3.3                         | Downy mildew: Begin application when environmental conditions are conducive to disease development and repeat on 7-10 day intervals. Use the shorter application intervals under conditions of moderate to high disease pressure.   |
| Alfalfa | Blossom blight (Botrytis cinerea) Suppression                | 1.7 – 3.3                   | Begin application prior to disease development when environmental conditions are conducive to disease development. Use higher rate and shorter application intervals under conditions of moderate to high disease pressure. Repeat as necessary on a 7- to 10-day interval. |

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