**Container Label** 

GROUP 40 45 FUNGICIDE

# ZAMPRO® FUNGICIDE

Fungicide for use on brassica leafy vegetables, bulb vegetables, blackberries, cucurbit vegetables, fruiting vegetables, grapes, greenhouse cucumbers, greenhouse leaf lettuce, hops, leafy vegetables, spinach and potatoes

SUSPENSION

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENTS: Ametoctradin...... 300 g/L Dimethomorph.....225 g/L

Contains 1,2-benzisothiazolin-3-one at 0.0045% and 2-methyl-4-isothiazolin-3-one at 0.0045% as preservatives

REGISTRATION NO. 30321

PEST CONTROL PRODUCTS ACT

Warning, contains the allergen soy

NET CONTENTS: 0.01 L to 1000 L

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING THIS PRODUCT



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

> BASF Canada Inc. 5025 Creekbank Road Building A, 2nd Floor Mississauga, Ontario L4W 0B6 1-877-371-2273

ZAMPRO is a registered trade-mark of BASF SE, used under license by BASF Canada Inc.

# PRECAUTIONS

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab or cockpit.
- 3. Harmful or fatal if swallowed.
- 4. Wash hands before eating, drinking, smoking or using the toilet. Change out of work clothes and take a bath or shower after handling or spraying the product. Launder protective clothing before re-use.
- 5. **DO NOT** enter or allow worker entry into treated areas during the restricted entry intervals (REIs) specified in the Application Rate Tables.
- 6. Clean spray equipment thoroughly after use.
- 7. Apply only to agricultural crops when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
- 8. This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

# **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

There is no specific antidote. Treat symptomatically.

# ENVIRONMENTAL PRECAUTIONS

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

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.

# STORAGE

- 1. Store the leftover product in original tightly closed container. Protect from freezing.
- 2. Do not ship or store the product near food, feed, seed and fertilizers.
- 3. Store the product in cool, dry, locked, well-ventilated area without floor drain.
- 4. Store this product away from food or feed.

## DISPOSAL

## 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 dealer/distributor 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/territorial requirements.

## For Returnable Containers

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

## 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.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial provincial/territorial agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

# NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Booklet

GROUP 40 45 FUNGICIDE

# ZAMPRO® FUNGICIDE

Fungicide for use on brassica leafy vegetables, bulb vegetables, blackberries, cucurbit vegetables, fruiting vegetables, grapes, greenhouse cucumbers, greenhouse leaf lettuce, hops, leafy vegetables, spinach and potatoes

SUSPENSION

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENTS: Ametoctradin...... 300 g/L Dimethomorph.....225 g/L

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# **GENERAL INFORMATION**

This package contains **ZAMPRO Fungicide**, a 525 g/L SC (Suspension Concentrate) with two active ingredients ametoctradin and dimethomorph. The active ingredients in **ZAMPRO Fungicide** belong to two classes of fungicides having different modes of action, a beneficial feature to improve disease control and delay resistance. To maximize disease control, only apply **ZAMPRO Fungicide** in a preventative spray program and use in a rotation program with other fungicides having different modes of action.

# PRECAUTIONS

# 1. KEEP OUT OF REACH OF CHILDREN.

- 2. Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab or cockpit.
- 3. Harmful or fatal if swallowed.
- 4. Wash hands before eating, drinking, smoking or using the toilet. Change out of work clothes and take a bath or shower after handling or spraying the product. Launder protective clothing before re-use.
- 5. **DO NOT** enter or allow worker entry into treated areas during the restricted entry intervals (REIs) specified in the Application Rate Tables.
- 6. Clean spray equipment thoroughly after use.
- 7. Apply only to agricultural crops when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
- 8. This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

## 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

There is no specific antidote. Treat symptomatically.

# **ENVIRONMENTAL PRECAUTIONS**

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

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.

# STORAGE

- 1. Store the leftover product in original tightly closed container. Protect from freezing.
- 2. Do not ship or store the product near food, feed, seed and fertilizers.
- 3. Store the product in cool, dry, locked, well-ventilated area without floor drain.
- 4. Store this product away from food or feed.

## DISPOSAL

## 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 dealer/distributor 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/territorial requirements.

### For Returnable Containers

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

### 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.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

## NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

### DIRECTIONS FOR USE

Apply recommended rates of **ZAMPRO Fungicide** as instructed in the following crop specific application rate and timing table. Apply **ZAMPRO Fungicide** with ground or aerial equipment. Equipment should be checked frequently for proper calibration.

## TANK MIXING

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 BASF Canada Inc. at 1-877-371-2273 for information before mixing any pesticide that is not specifically recommended on this label.

Not all varieties and cultivars have been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Physical incompatibility, reduced disease control, or crop injury may result from mixing **ZAMPRO Fungicide** with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives), test the combination on a small portion of the crop to be treated to ensure that a

phytotoxic response will not occur as a result of application. Consult a BASF representative for more information concerning additives.

# Tank Mix Compatibility Determination

To determine compatibility, mix all components of the finished spray in proportionate quantities in a small jar. Add components to the test jar in the following order: wettable powders and water dispersible granules, liquid flowables and suspensions, emulsifiable concentrate formulations, and solutions. If the mixture does not ball-up or form flakes, sludge, jelly, oily films or layers, or other precipitates within 2 hours after mixing and can easily be resuspended with agitation, then the tested spray-mix is compatible. Always follow the most restrictive label regarding any precautions when tank mixing.

The use of additives or adjuvant may improve the performance of **ZAMPRO Fungicide**. When applied as directed, **ZAMPRO Fungicide** will control the listed diseases, unless otherwise indicated as suppression.

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Brassica leafy vegetables Broccoli Broccoli, Chinese (gai lon) Broccoli raab (rapini) Brussel sprouts Cabbage Cabbage, Chinese (bok choy) Cabbage, Chinese (napa) Cabbage, Chinese mustard (gai choy) Cauliflower Cavalo broccoli Collards Kale Kohlrabi Mizuna Mustard greens Mustard spinach Rape greens	Downy mildew (Peronospora parasitica)	0.8 - 1.0	0	3

# Brassica Leafy Vegetables Application Rate Table (Ground and Aerial Application)

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides having a different mode of action active against downy mildew.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 7-day interval. Use the higher rate when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended, at a maximum rate of 0.125% v/v, to improve disease control performance. Non-ionic surfactants (e.g. Agral 90, Induce) are NOT recommended.

Consult local downy mildew advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
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### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

## Blackberry Rate Table (Ground Application)

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than BASF Canada under the User Requested Minor Use Label Expansion program. For these uses, BASF Canada 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	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Blackberries*	Suppression of Downy mildew ( <i>Peronospora sparsa</i> )	0.8 - 1.0	14	3

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5-7 day interval. Use the higher rate and shorter interval when disease pressure is high. The addition of a registered non-ionic surfactant at 0.125% v/v is recommended to improve disease control performance.

Consult local downy mildew advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

### **Resistance Management**

Do not make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

Do not enter treated areas within 12 hours after application.

\* Blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these)

# Bulb Vegetable Application Rate Table (Ground and Aerial Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Bulb vegetables Garlic Garlic, great headed Leek Onion, dry bulb Onion, green Onion, Welch Shallot	Downy mildew (Peronospora destructor)	1.0	0	3

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides having a different mode of action against downy mildew.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5 to 7-day interval. Use the shorter interval when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult local downy mildew advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
<u>Cucurbit vegetables</u> (includes all types and hybrids of): Cantaloupe	Downy mildew (Pseudoperonospora cubensis)	0.8 - 1.0	1	3
Chinese waxgourd Citron melon Cucumber Edible gourds Gherkin Muskmelon Pumpkin Summer squash Watermelon Winter squash Zucchini <i>Momordica</i> spp. (such as Balsam apple Balsam pear Bitter melon Chinese cucumber)	Phytophthora blight ( <i>Phytophthora capsici</i> )	1.0		

# Cucurbit Vegetable Application Rate Table (Ground and Aerial Application)

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against downy mildew and Phytophthora blight. The number of **ZAMPRO Fungicide** applications or of any other product containing group 40 fungicides cannot exceed 50% of the total number of applications intended for downy mildew control.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5 to 7-day interval. Use the higher rate and shorter interval when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult local downy mildew or blight advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

# **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

# Fruiting Vegetables Application Rate Table (Ground and Aerial Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Fruiting vegetable group Tomato Eggplant Ground cherry ( <i>Physalis</i> spp.)	Phytophthora blight (Phytophthora capsici) -suppression	1.0	4	3
Pepino Pepper (all varieties) Tomatillo	Late blight (Phytophthora infestans)			

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against Phytophthora blight or late blight.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5 to 7-day interval. Use the shorter interval when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult local blight advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

# Grape Application Rate Table (Ground Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Grapes	Downy mildew (Plasmopara viticola)	0.8 - 1.0	14	4

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against downy mildew.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 7 to 10-day interval. Use the higher rate and shorter interval when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult local downy mildew advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
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#### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas for cane turning and girdling during the restricted entry interval (REI) of 8 days. For all other activities in grapes, **DO NOT** enter or allow worker entry into treated areas during the REI of 12 hours.

DO NOT use less than 200 litres of water per hectare.

# **Greenhouse Cucumber Application Rate Table**

## DO NOT use on Greenhouse-Grown Transplants

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Greenhouse cucumber	Suppression of downy mildew caused by <i>Pseudoperonospora</i> <i>cubensis</i>	0.8 - 1.0	0	3

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5-7 day interval. Use the higher rate and shorter interval when disease pressure is high.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Apply a spray volume of 2000 L/ha water or sufficient to achieve through coverage.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application. DO NOT apply more than 50% of the total number of intended applications for disease control during one crop cycle. DO NOT exceed a maximum of 3 applications per crop cycle.

# Greenhouse Leaf Lettuce Application Rate Table

# DO NOT use on Greenhouse-Grown Transplants

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Greenhouse leaf lettuce	Suppression of downy mildew caused by <i>Bremia lactucae</i>	0.8 - 1.0	0	3

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5-7 day interval. Use the higher rate and shorter interval when disease pressure is high.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Apply a spray volume of 1000 L/ha water or sufficient to achieve through coverage.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

### Resistance Management

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application. DO NOT apply more than 50% of the total number of intended applications for disease control during one crop cycle. DO NOT exceed a maximum of 3 applications per crop cycle.

# Hops Application Rate Table (Ground Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Hops	Downy mildew (Pseudoperonospora humuli)	0.8-1.0	7	3

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against downy mildew.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 10-day interval. Use the higher rate when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult a local downy mildew advisory system if available for recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

## **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas for harvesting (mechanically-assisted) during the restricted entry interval (REI) of 7 days. For all other activities in hops, **DO NOT** enter or allow worker entry into treated areas during the REI of 12 hours.

DO NOT use less than 200 litres of water per hectare.

# Leafy Vegetables Application Rate Table (Ground and Aerial Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per Season
Leafy vegetables: Celtuce Cress (upland) Endive Lettuce (head and leaf) Radicchio (red chicory)	Downy mildew <i>(Bremia lactucae)</i>	1.0	0	3
Spinach	Downy mildew (Peronospora farinose f. sp. spinaciae)	1.0	0	3

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against downy mildew.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5 to 7-day interval. Use the shorter interval when disease pressure is high.

Consult a local downy mildew advisory system if available for recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

## DO NOT apply with adjuvant.

# Potato Application Rate Table (Ground and Aerial Application)

Сгор	Disease	Application Rate (L/ha)	PHI (Days)	Maximum Number of Applications per season
Potato	Late blight (Phytophthora infestans)	0.8 -1.0	4	3
	Tuber blight* (Phytophthora infestans)	1.0		

In order to reduce the risk of the development of fungicide resistance **ZAMPRO Fungicide** must be used in rotation with other fungicides active against blights.

Begin applications of **ZAMPRO Fungicide** prior to disease development and continue on a 5 to 10-day interval. Use the higher rate and shorter interval when disease pressure is high. The addition of a spreading/penetrating adjuvant is recommended to improve disease control performance.

Consult local late blight advisory system recommendations to determine the predicted levels of disease pressure and recommended spray interval. Apply spray to obtain thorough and complete plant coverage.

\*When used in accordance to the label recommendations, **ZAMPRO Fungicide** also reduces tuber blight when applied immediately prior to or after vine kill.

### **Resistance Management**

DO NOT make more than two sequential applications of **ZAMPRO Fungicide** before alternating to another effective fungicide with a mode of action different from **ZAMPRO Fungicide** for at least one application.

DO NOT use less than 200 litres of water per hectare for ground applications and 50 litres per hectare for aerial applications.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

# RESTRICTIONS

Plant Back Interval: A plant back restriction of 30 days is required for all crops not on the label.

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.

## 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.

# Airblast application

**DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

## 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 rotor-span.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

# Aerial 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.

## Aerial 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 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 1-877-371-BASF (2273) or obtain technical advice from the distributor or your provincial agricultural representative.

# SPRAY BUFFER ZONES

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	Crops		Spray Buffer Zones (metres) Required for the Protection of:				
		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	Cucurbit vegetables, leafy vegetables, fruiting vegetables, bulb vegetables, brassica leafy vegetables, potatoes, blackberries, spinach		1	1	1	1	
Airblast	Grapes, hops	Early growth stage	10	4	3	1	
		Late growth stage	5	2	3	1	
Aerial	Cucurbit vegetables, leafy vegetables, fruiting vegetables, bulb vegetables, brassica leafy vegetables, potatoes, spinach	Fixed or rotary wing	10	1	1	1	

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 Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca web site.

# **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

It is known that plant diseases can develop resistance when exposed to one type of product or even products of similar chemistry. Good management practices will minimize the risk of resistance development. Use cultural practices to minimize the sources of disease as well as early preventive applications of fungicides. Consult your local extension services for disease outbreak forecasts and additional integrated pest management recommendations for your area.

Any fungal population may contain individuals naturally resistant to **ZAMPRO Fungicide** and other Group 45 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:

- Avoid application of more than two consecutive sprays of **ZAMPRO Fungicide** or other fungicides in the same group in a season.
- Fungicide use should be based on an integrated disease 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, rotate the use of **ZAMPRO Fungicide** or other group 40/45 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.
- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal/bacterial populations for resistance development. Notify BASF Canada Inc. if reduced sensitivity of the pathogen to **ZAMPRO 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 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 BASF representative at 1-877-371-2273 or at www.agsolutions.ca.

# MIXING

- 1. Ensure the spray tank is clean before use. Follow the clean-out recommendations stated on the label of the product that was previously used.
- 2. Fill the tank one-half full of water and start agitation.
- 3. Add the required amount of **ZAMPRO Fungicide** to the tank.
- 4. Add the required amount of tank mix partner or adjuvant to the tank.
- 5. Continue agitation while filling the remainder of the spray tank.
- 6. After use, clean the spray tank after use.