

2024-3384  
2024-08-14

**\*Container label\***

GROUP	11	FUNGICIDE
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# SPADE II FUNGICIDE

EMULSIFIABLE CONCENTRATE

COMMERCIAL (AGRICULTURAL)

Broad spectrum fungicide for use in cereals, corn, edible-podded legume vegetables (Crop Subgroup 6-A), succulent shelled beans and peas (Crop Subgroup 6-B), dried shelled peas and beans (Crop Subgroup 6-C including pulses such as chickpea, lentils, dry field peas), soybeans, potatoes, sugar beets, flax, sunflower, rapeseed, canola, canola quality *Brassica juncea*, mustard (oilseed and condiment), bluegrasses, fescues and ryegrasses grown for seed and alfalfa for seed production (in Manitoba, Saskatchewan, Alberta and the Peace River Region of British Columbia) and Timothy

**ACTIVE INGREDIENT:** Pyraclostrobin ..... 250 g/L

**REGISTRATION NO.** 35276 PEST CONTROL PRODUCTS ACT

**READ THE LABEL AND ATTACHED BROCHURE BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**



**DANGER**

**POISON**

**SKIN AND EYE IRRITANT**

**NET CONTENTS:** 100 mL - 1000 L

**For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC 1-800-424-9300 / +1 703-527-3887**

**NewAgco, Inc.**  
320 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-844-269-3276

Distributed by:  
**AgraCity Crop & Nutrition Ltd.**  
320 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-844-269-3276

SPADE® is a trademark of AgraCity Crop & Nutrition Ltd. or its affiliates.

## PRECAUTIONS

### 1. **KEEP OUT OF REACH OF CHILDREN.**

2. Fatal or poisonous if swallowed.
3. Causes eye and skin irritation. **DO NOT** get in eyes or on skin or clothing.
4. Wash thoroughly after handling and before eating, drinking or smoking.
5. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair.

For application using ground equipment: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear. Gloves are not required during application within a closed cab.

For application using aerial equipment: Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Gloves are not required during application within a closed cockpit.

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. The pilot is allowed to load premixed chemicals with a closed system.

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

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.

6. Custom applicators must use ground boom equipment with an enclosed cab. A closed cab is a chemical resistant barrier that completely surrounds the occupant of the cab and prevents contact with the pesticide or treated surfaces outside the cab.
7. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
8. Clean spray equipment thoroughly after use.
9. 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.
10. This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms. **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
11. **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

## ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms, non-target terrestrial plants and small wild mammals. 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 filter strip between the treated area and the edge of the water body.

This product contains an active ingredient and aromatic petroleum distillates, which are toxic to aquatic organisms.

## **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. The patient should be treated symptomatically.

## **STORAGE**

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

## **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.

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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.

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**GENERAL INFORMATION**

This package contains **SPADE II FUNGICIDE**, a 250 g/L emulsifiable concentrate (EC). The active ingredient in **SPADE II FUNGICIDE** belongs to the strobilurins, a class of fungicides. Strobilurins are synthetic derivatives of a natural antifungal substance. **SPADE II FUNGICIDE**

**SPADE II FUNGICIDE** has a protective effect because it inhibits spore germination and a curative-eradicator effect due to the inhibition of mycelial growth and sporulation of the fungus on the leaf surface. While **SPADE II FUNGICIDE** can be applied in either pre- or post-infection situations, optimum disease control is achieved when **SPADE II FUNGICIDE** is applied preventatively in a regularly scheduled protective spray program and is used in an alternation program with other fungicides.

**DIRECTIONS FOR USE** (See specific sections for each crop or crop group)

Apply recommended rates of **SPADE II FUNGICIDE** as instructed by the following series of crop application rate tables. Apply **SPADE II FUNGICIDE** with ground or aerial spray equipment. Equipment should be checked frequently for proper calibration.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation, drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.



**Cereals Application Rate Table (Ground, Aerial and Pivot or Sprinkler Irrigation)**

<b>Crop</b>	<b>Disease</b>	<b>Application Rate* (L/ha)</b>
Wheat	Leaf rust ( <i>Puccinia recondita</i> ), Tan spot ( <i>Pyrenophora tritici-repentis</i> ), Septoria leaf spot ( <i>Septoria tritici</i> or <i>Leptosphaeria nodorum</i> )	0.3 - 0.6
	Spot blotch ( <i>Cochliobolus sativus</i> ), Stripe rust ( <i>Puccinia striiformis</i> ), Powdery mildew ( <i>Erysiphe graminis</i> f. sp. <i>tritici</i> )	0.4 - 0.6
Barley	Net blotch ( <i>Pyrenophora teres</i> )	0.3 - 0.6
	Spot blotch ( <i>Cochliobolus sativus</i> ), Stripe rust ( <i>Puccinia striiformis</i> ), Scald ( <i>Rhynchosporium secalis</i> )	0.4 - 0.6
Rye	Leaf rust ( <i>Puccinia recondita</i> )	0.3 - 0.6
	Powdery mildew ( <i>Erysiphe graminis</i> f. sp. <i>secalis</i> )	0.4 - 0.6
Oats	Crown rust ( <i>Puccinia coronata</i> .)	0.3 - 0.4

\*DO NOT apply more than 0.4 L/ha by aerial application.

**Leaf Diseases in Cereals**

To maximize yield in cereals it is important to protect the flag leaf from disease. Therefore, the optimum time to apply a single application of **SPADE II FUNGICIDE** is immediately after flag leaf emergence (GS 37-39).

Within the stated rate range, use the higher rate to obtain extended protection with maximum yield benefits. If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 10-14 days. Alternate with a fungicide that contains a different mode of action.

**Dried and Succulent Shelled Peas and Beans (including soybean) Application Rate Table (Ground , Aerial and Pivot or Sprinkler Irrigation)**

<b>Crop*</b>	<b>Disease</b>	<b>Application Rate** (L/ha)</b>
Lentils	Anthraco nose ( <i>Colletotrichum</i> spp.), Ascochyta blight ( <i>Ascochyta</i> spp.)	0.4
Dry field peas	Mycosphaerella blight ( <i>Mycosphaerella</i> spp.), Powdery mildew ( <i>Erysiphe</i> spp.)	0.4
	Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Dry beans <i>Phaseolus</i> , spp.	Anthraco nose ( <i>Colletotrichum</i> spp.), Powdery mildew ( <i>Erysiphe</i> spp.), Rust ( <i>Uromyces</i> spp.)	0.4
	Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Dry beans <i>Vigna</i> spp.	Anthraco nose ( <i>Colletotrichum</i> spp.), Mycosphaerella blight ( <i>Mycosphaerella</i> spp.) Powdery mildew ( <i>Erysiphe</i> spp.) Rust ( <i>Uromyces</i> spp.)	0.4
	Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Dry beans <i>Lupinus</i> spp.	Mycosphaerella blight ( <i>Mycosphaerella</i> spp.) Powdery mildew ( <i>Erysiphe</i> spp.)	0.4
	Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Faba beans	Mycosphaerella blight ( <i>Mycosphaerella</i> spp.), Powdery mildew ( <i>Erysiphe</i> spp.)	0.4
	Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Soybeans	Frog eye leaf spot ( <i>Cercospora sojina</i> ), Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6
Edible-podded legume vegetables	Angular Leaf Spot ( <i>Phaeoisariopsis griseola</i> )	0.4
Succulent shelled beans and peas	Mycosphaerella blight ( <i>Mycosphaerella</i> spp.), Rust ( <i>Uromyces</i> spp.), Ascochyta blight ( <i>Ascochyta</i> spp.), Asian soybean rust ( <i>Phakopsora pachyrhizi</i> )	0.4 - 0.6

\*Complete list of crops:

**Crop Subgroup 6-A: Edible-podded legume vegetables.** Bean (*Phaseolus* spp.) (includes runner bean, snap bean, wax bean); bean (*Vigna* spp.) (includes asparagus bean, Chinese long bean, moth bean, yardlong bean); jack bean; pea (*Pisum* spp.) (includes dwarf pea, pea (*Pisum* spp.), edible pod pea, snow pea, sugar snap pea); pigeon pea; soybean (immature seed); sword bean.

**Crop Subgroup 6-B: Succulent shelled peas and beans.** Bean (*Phaseolus* spp.) (includes lima (green)); broad bean (succulent); bean (*Vigna* spp.) (includes blackeyed pea, cowpea, southern pea); pea (*Pisum* spp.) (includes English pea, garden pea, green pea); pigeon pea.

**Crop Subgroup 6-C: Dried shelled peas and beans (except soybean).** Dried cultivars of bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean; tepary bean; bean (*Vigna* spp.) (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea (*Pisum* spp.) (includes field pea); pigeon pea.

\*\*DO NOT apply more than 0.4 L/ha by aerial application.

Apply **SPADE II FUNGICIDE** as specified above at the beginning of flowering OR at the onset of symptoms for the more aggressive diseases (e.g. anthracnose in lentils). If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 10-14 days. Alternate with a fungicide that contains a different mode of action. Anthracnose in lentils and Asian rust in soybeans all develop quickly once established so early detection is essential to the success of any fungicide program.

The DIRECTIONS FOR USE for this product for the suppression of downy mildew in dry field peas were developed by persons other than NewAgco Inc. under the User Requested Minor Use Label Expansion program. For this use, NewAgco 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.

**Dry Field Peas Application Rate Table (Ground, Aerial and Pivot or Sprinkler Irrigation)**

Crop	Disease	Application Rate (L/ha)
Dry field peas	Downy mildew ( <i>Peronospora viciae</i> f. sp. <i>pisi</i> ) suppression	0.4 – 0.6

Apply **SPADE II FUNGICIDE** as specified above at the beginning of flowering **OR** at the onset of symptoms for the more aggressive diseases (e.g., downy mildew in dry field peas). Downy mildew in dry field peas develops quickly once established so early detection is essential to the success of any fungicide program. **SPADE II FUNGICIDE** will not suppress systemic (seed- or soil-borne) downy mildew infection in dry field peas but rather will help to manage secondary foliar infections on the leaves, stems and pods to protect yield during condition conducive to disease.  
 Maximum of one application per crop per year.  
 Pre-Harvest Interval: 30 days

**Chickpea Application Rate Table (Ground and Aerial Application)**

Crop	Disease	Application Rate*
Chickpeas	Ascochyta blight ( <i>Ascochyta rabiei</i> )	<b>SPADE II FUNGICIDE</b> must be tank mixed at a rate of 0.40 - 0.60 L/ha with LANCE® WDG Fungicide at 0.36 - 0.42 kg /ha.  Do not apply by pivot or sprinkler irrigation.

Apply **SPADE II FUNGICIDE** and LANCE WDG Fungicide as specified above at the beginning of flowering OR at the onset of symptoms for the more aggressive diseases (e.g. ascochyta blight in chickpeas). Re-application interval of 7-14 days.

Ascochyta blight in chickpeas develops quickly once established so early detection is essential to the success of any fungicide program.

**DO NOT** apply sequential applications of this tank mixture combination. Alternate to a fungicide with a mode of action other than Group 7 and 11 for at least one application. If disease conditions persist or weather conditions are favourable for disease development, apply another application of **SPADE II FUNGICIDE** tank mixed with LANCE WDG Fungicide.

Do not apply by pivot or sprinkler irrigation.

\*DO NOT apply more than 0.4 L/ha by aerial application.

**Potato Application Rate Table (Ground and Aerial Application)**

Crop	Disease	Spray Interval	Application Rate (L/ha)
Potato	Early blight ( <i>Alternaria solani</i> )	7 - 14 days	0.45 - 0.67
	Late blight ( <i>Phytophthora infestans</i> )	5 - 7 days	0.45 - 0.67

Applications of **SPADE II FUNGICIDE** for the control of early blight (*Alternaria solani*) and late blight (*Phytophthora infestans*) should begin prior to row closure or when conditions become favourable for the development of disease (whichever comes first).

Within the stated rate range, use higher rates of **SPADE II FUNGICIDE** under conditions conducive to heavy disease pressure.

In order to reduce the selection of less sensitive strains of the target fungi, for early blight control it is recommended that no more than one (1) application of **SPADE II FUNGICIDE** be made before alternating to an effective fungicide with a different mode of action for at least one application. For the control of late blight, do not make more than one application of **SPADE II FUNGICIDE** before alternating to a fungicide with a different mode of action. No more than three (3) applications of **SPADE II FUNGICIDE** should be made per year.

**Corn Application Rate Table (Ground Aerial and Pivot or Sprinkler Irrigation)**

Crop	Disease	Application Rate* (L/ha)
Corn (field, sweet, pop, seed types)	Common rust ( <i>Puccinia sorghi</i> ), Gray leaf spot ( <i>Cercospora zeae-maydis</i> )	0.4 - 0.6

\*DO NOT apply more than 0.4 L/ha by aerial application.

For optimal disease control, begin applications of **SPADE II FUNGICIDE** prior to disease development. If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 10-14 days. Alternate with a fungicide that contains a different mode of action. Within the stated rate and interval range, use the higher rate and shorter interval when conditions are conducive to high disease pressure.

**Sugar Beet Application Rate Table (Ground and Pivot or Sprinkler Irrigation Application)**

Crop	Disease	Application Rate (L/ha)
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Sugar beets	Cercospora leaf spot ( <i>Cercospora beticola</i> ), Powdery mildew ( <i>Erysiphe betae</i> )	0.67 - 0.9
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Apply **SPADE II FUNGICIDE** at the onset of disease to control cercospora leaf spot and powdery mildew. Within the stated rate range, use the higher rate when conditions are conducive to high disease pressure. If disease persists or weather conditions are favourable for disease development, apply again. Maximum of four applications per year. Re-application interval of 14 days. Alternate with a fungicide that contains a different mode of action.

#### Grasses Grown for Seed Application Rate Table (Ground, Aerial and Pivot or Sprinkler Irrigation)

Crop	Disease	Application Rate* (L/ha)
Bluegrasses, fescues, ryegrasses grown for seed	Leaf and stem rust ( <i>Puccinia recondita</i> and <i>Puccinia graminis</i> ), Powdery mildew ( <i>Erysiphe graminis</i> ) suppression	0.4 - 0.67

\*DO NOT apply more than 0.4 L/ha by aerial application.

For optimal disease control, begin applications prior to disease development **SPADE II FUNGICIDE**. If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 14-21 days. Alternate with a fungicide that contains a different mode of action. Within the stated rate and interval range, use the higher rate and shorter interval when disease pressure is high.

#### Alfalfa Application Rate Table (Ground, Aerial and Pivot or Sprinkler Irrigation)

Alfalfa grown for seed production in Manitoba, Saskatchewan, Alberta, and the Peace River Region of British Columbia

Crop	Disease	Application Rate (L/ha)
Alfalfa for seed production	Common Leaf Spot ( <i>Pseudopeziza medicaginis</i> )	0.4

For optimal disease control, apply **SPADE II FUNGICIDE** at the beginning of flowering (10-30% bloom) or the onset of disease. Do not make more than 1 application per year.

#### Rapeseed, canola, canola quality *Brassica juncea*, mustard (oilseed and condiment) Application Rate Table (Ground Aerial and Pivot or Sprinkler Irrigation) application

Crop	Disease	Application Rate (L/ha)
Rapeseed, canola, canola quality <i>Brassica juncea</i> , mustard (oilseed and condiment)	Black spot ( <i>Alternaria brassicae</i> and <i>Alternaria raphani</i> ), Blackleg ( <i>Leptosphaeria maculans</i> )	0.3 - 0.4

Do not make more than two (2) applications per year.

**Leaf Diseases**

Apply **SPADE II FUNGICIDE** once to control blackleg at the 2 to 6-leaf (rosette) stage. Apply **SPADE II FUNGICIDE** to control alternaria black spot at 20-50% bloom to early pod stage (90% bloom) in canola. Within the stated rate range, use the higher rate to obtain extended protection with maximum yield benefits. An application at 20-50% bloom will suppress alternaria black spot whereas applications at early pod stage will control alternaria black spot.

**Fungicide Tank Mixes in Canola**

**SPADE II FUNGICIDE** can be tank mixed with **LANCE WDG Fungicide** at 350 g/ha at 20-50% flowering to control sclerotinia stem rot (*Sclerotinia sclerotiorum*) and suppress black spot (*Alternaria brassicae* and *Alternaria raphani*). Re-application interval of 7-14 days. This tank mix will provide multiple modes of action for disease and fungicide resistance management.

**Herbicide Tank Mixes in Canola**

**SPADE II FUNGICIDE** can be tank mixed with the following canola herbicides at registered rates and timings:

POAST® ULTRA Liquid Emulsifiable Herbicide in canola

Liberty® Herbicide (150 SN or 200 SN) in glufosinate ammonium tolerant canola (e.g. LibertyLink® canola)

Registered glyphosate herbicides in glyphosate tolerant canola (e.g. Roundup® Ready)

Do not apply by pivot or sprinkler irrigation.

Consult the label of the tank mix partner for weed species controlled, rates, timings, recropping restrictions, grazing interval restrictions, and directions for use and precautions.

**Sunflowers Application Rate Table (Ground Aerial and Pivot or Sprinkler Irrigation)**

Crop	Disease	Application rate (L/ha)
Sunflowers	Rust ( <i>Puccinia helianthi</i> )	0.4

**Leaf Diseases in Sunflowers**

Apply **SPADE II FUNGICIDE** to suppress rust in sunflowers. For optimal disease suppression, apply **SPADE II FUNGICIDE** prior to disease development. If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 10-14 days. Alternate with a fungicide that contains a different mode of action.

**Flax (including low linolenic acid varieties) Application Rate Table (Ground, Aerial and Pivot or Sprinkler Irrigation Application)**

<b>Crop</b>	<b>Disease</b>	<b>Application rate (L/ha)</b>
Flax (including low linolenic acid varieties)	Pasmo ( <i>Septoria linicola</i> )	0.3 - 0.4

Apply **SPADE II FUNGICIDE** at the mid-flower stage (7-10 days after the initiation of flowering). If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 10-14 days. Alternate with a fungicide that contains a different mode of action. Within the stated rate and interval range, use the high rate and shorter interval where conditions conducive to severe disease are expected. Do not make more than two applications of **SPADE II FUNGICIDE** or other strobilurin fungicide per year.

The DIRECTIONS FOR USE for this product for the use described below were developed by persons other than NewAgco Inc. under the User Requested Minor Use Label Expansion program. For this use, NewAgco 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.

**Timothy (Ground and Aerial)**

<b>Crop</b>	<b>Disease</b>	<b>Application Rate* (L/ha)</b>
Timothy	Brown stripe ( <i>Cercosporidium graminis</i> ), Leaf streak ( <i>Drechslera phlei</i> ), Purple eye spot ( <i>Cladosporium phlei</i> )	0.4 - 0.67

For optimal disease control, begin applications prior to disease development **SPADE II FUNGICIDE**. Within the stated rate range, use the higher rate when conditions are conducive to high disease pressure. If disease persists or weather conditions are favourable for disease development, apply a second time. Re-application interval of 14 days. Alternate with a fungicide that contains a different mode of action. In the absence of an alternative fungicide registered for the specific diseases to be treated, for resistance management purposes, the maximum number of applications is limited to one.

\*DO NOT apply more than 0.4 L/ha by aerial application

**Ground Application**

Apply **SPADE II FUNGICIDE** at rates listed in application rate and timing table (crop specific) when conditions are favourable for the development of disease. Use a minimum water volume of 100 L/ha on cereals, soybeans, legume vegetables, pulses, corn, alfalfa, grasses grown for seed and flax and 200 L/ha on potatoes and sugar beets. Ensure thorough coverage of foliage. Consult nozzle manufacturers recommendation for spray pressures for specific nozzles.

**Field sprayer application**

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

### **Chemigation**

**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. Applications **MUST** be conducted **WITHOUT** the use of end guns.

### **Aerial Application**

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

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

### **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

### **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-844-269-3276 or obtain technical advice from the distributor or your provincial agricultural representative.



## SPRAY BUFFER ZONES

A spray buffer zone is NOT required for:

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

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of Application	Crop		Spray Buffer Zones (metres) Required for the Protection of:			
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer and chemigation	Cereals (wheat, barley, rye, oats), legumes, pulses, soybean, corn, grasses for seed, sunflower, flax, alfalfa (for seed), rapeseed, canola, mustard, timothy		5	1	1	1
	Potatoes, sugar beet		10	3	1	1
Aerial	Rapeseed, canola, mustard, alfalfa (for seed production)	Fixed and rotary wing	80	10	1	1
	Cereals (wheat, barley, rye, oats), legumes, pulses, soybean, corn, sunflower, flax, grasses for seed, timothy	Fixed and rotary wing	95	10	3	1
	Potatoes (early blight)	Fixed and rotary wing	275	30	10	10
	Potatoes (late blight)	Fixed and rotary wing	325	30	10	10

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 website.

### Pivot or Sprinkler Irrigation

**Sprayer Preparation:** Chemical tank and injector system should be thoroughly cleaned. Flush System with clean water.

**Application instructions:** Apply **SPADE II FUNGICIDE** at rates and timings described above. Only products registered for application by pivot or sprinkler irrigation can be tank mixed with **SPADE II FUNGICIDE**.

## **Use Precautions for Sprinkler Irrigation Applications**

- Apply this product only through overhead sprinkler irrigation systems including center pivot and lateral move containing low pressure drop nozzles. Do not apply this product through any other type of irrigation system.
- Add this product to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. In continuous moving systems, inject this product-water mixture continuously, applying the labeled rate per acre for that crop. Do not exceed 0.64 cm (1/4) inch (63,500 litres) per hectare. In stationary or non-continuous moving systems, inject the product-water mixture in the last 15-30 minutes of each set allowing sufficient time for all of the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop. Do not apply when wind speed causes non-uniform distribution and/or favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control. Good agitation should be maintained during the entire application period.
- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label- prescribed safety devices for public water systems are in place.
- Do not apply by chemigation if the area to be treated is within 100 metres of a residential area or park.

## **Specific Instructions for Public Water Systems**

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced- pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

### **Restrictions**

**DO NOT** apply during periods of dead calm or when winds are gusty. **DO NOT** over spray nontarget terrestrial or aquatic habitats. **DO NOT** contaminate aquatic habitats when cleaning and rinsing spray equipment or containers.

### **Additives**

Do not use additives or adjuvants unless otherwise specified.

### **MIXING**

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

### **TANK MIXES**

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 AgraCity Crop & Nutrition Ltd at 1-844-269-3276 for information before applying any tank mix that is not specifically recommended on this label.

## RESTRICTIONS AND LIMITATIONS

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

2. Crop preharvest interval and application limitation:

Crop	Application to harvest interval (days)	Maximum number of applications per year	Maximum number of sequential applications
Barley, oats, Barley, oats, rye and wheat	Apply no later than the end of flowering	2	1
Dry beans  ( <i>Phaseolus</i> , <i>Vigna</i> and <i>Lupinus</i> <i>spp.</i> ), faba beans, lentils, dry field peas	30	2	1
Rapeseed, canola, canola quality <i>Brassica</i> <i>juncea</i> , mustard (oilseed and condiment), sunflower, flax	21	2	1
Chickpeas	30	2	1
Bluegrasses, fescues and ryegrasses grown for seed	14	2	1
Corn	7	2	1
Edible-podded legume vegetables	7	2	1
Potatoes	3	3	1
Soybeans	21	2	1
Succulent shelled beans and peas	7	2	1
Sugar beets	7	4	1
Timothy	14	2	1
Alfalfa grown for seed	Not applicable	1	Not applicable

3. DO NOT feed alfalfa hay or forage to livestock. All other crops can be grazed or fed to livestock. DO NOT graze treated corn crops within 6 days of last application.

## RESISTANCE-MANAGEMENT RECOMMENDATIONS

### Mode of Action

Pyraclostrobin, the active ingredient of **SPADE II FUNGICIDE**, belongs to the group of respiration inhibitors classified as Quinone Outside Inhibitors (QoI), or Target Site of Action Group 11 Fungicides.

### Resistance management

For resistance management, **SPADE II FUNGICIDE** contains pyraclostrobin, a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to **SPADE II 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.

To delay fungicide/bactericide resistance:

**Applications: DO NOT** apply more than one (1) application before rotating to another mode of action for at least one application. Adhere to the label instructions regarding the consecutive use of **SPADE II FUNGICIDE** or other target site of action Group 11 fungicides that have a similar site of action on the same pathogens. To maintain the performance of **SPADE II FUNGICIDE** in the field, do not exceed the total number of sequential applications of **SPADE II FUNGICIDE** and the total number of applications of **SPADE II FUNGICIDE** per year as stated below in the Restrictions and Limitations table.

Use tank mixtures with fungicide from a different group that is effective on the target pathogen when such use is permitted.

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, make use of predictive disease models to effectively time fungicide applications.

Monitor treated fungal populations for resistance development. Notify NewAgco, Inc. if reduced sensitivity of the pathogen to **SPADE II 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 site of action, if available.

Consult your local extension specialist, certified crop advisor and/or AgraCity Crop & Nutrition Ltd. for additional IPM strategies established for your area.

For further information and to report suspected resistance, contact AgraCity Crop & Nutrition Ltd at 1-844-269-3276 or at [www.agracity.com](http://www.agracity.com).

### 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.

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