# Pavise 480

Fungicide Suspension

For Control or Suppression of Listed Diseases in Barley, Borage, *Brassica carinata*, Bushberries, Canola, Chickpeas, Crambe, Low Growing Berries - except strawberries, Corn, Flax (Linseed), Lentils, Oats, Oriental Mustard, Peanut, Rapeseed, Safflower, Soybean, Sugar Beet, Sunflower, Wheat and Certain Other Small Grains.

# **COMMERCIAL (AGRICULTURAL)**

**CAUTION - POISON** 

REGISTRATION NUMBER: 35065 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: PROTHIOCONAZOLE 480 g/L

Contains 1,2-benzisothiazolin-3-one at 0.05211% as a preservative.

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Contains 1,2-benzisothiazolin-3-one at 0.04% and 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0019% and 2-methyl-4-isothiazolin-3-one at 0.00067% as preservatives.

**NET CONTENTS:** 2 - 101 LITRES and BULK

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

Albaugh LLC 1525 NE 36th Street, Ankeny, Iowa, 50021, United States 1-800-247-8013

For medical or treatment information from exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr).

For 24-hour chemical spill, leak, fire, exposure, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

AD012325

#### **GENERAL INFORMATION**

Pavise 480 is a broad-spectrum systemic fungicide for the control or suppression of listed *Ascomycetes*, *Basidiomycetes* and *Deuteromycetes* diseases on barley, bushberries, borage, *Brassica carinata*, canola, chickpeas, crambe, low growing berries - except strawberries, corn, flax (linseed), lentils, oats, Oriental mustard, peanut, rapeseed, safflower, soybean, sugar beet, sunflower, wheat and certain other small grains.

# **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry. 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.

## PROTECTIVE CLOTHING AND EQUIPMENT:

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and boots during mixing, loading, application, clean-up and repair. In addition, workers must wear protective eyewear (goggles or a face shield) during mixing, loading, clean-up and repair. Gloves are not required within a closed cab and/or cockpit.

When handing 272 L or more of product per day, wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH-approved canister approved for pesticides during mixing, loading and open-cab application. This restriction is required to minimize exposure to the worker.

#### 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 IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

IF 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.

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

### TOXICOLOGICAL INFORMATION:

Treat symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms and non-target terrestrial plants. 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.

#### **STORAGE**

- Store this product away from food and feed.
- Keep away from fire or open flame or other sources of heat.
- Do not store at temperatures below freezing.
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertilizer, plants and foodstuffs.
- Do not use or store in or around the home.
- Keep in original container during storage.

#### **DISPOSAL**

# **Recyclable Container Disposal:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

#### **Returnable Container:**

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

#### **Disposal of Unused, Unwanted Product:**

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 cleanup of spills.

# **Disposal of Unused Spray Solution:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, NOT ON THE CROP, away from water supplies, ditches, and irrigation canals. Spray buffer zones indicated in the DIRECTIONS FOR USE must also be respected.

#### **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.

# Pavise 480

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#### **GENERAL INFORMATION**

## **SECTION 1: THE PRODUCT**

Pavise 480 is a broad-spectrum systemic fungicide for the control or suppression of listed *Ascomycetes*, *Basidiomycetes* and *Deuteromycetes* diseases on barley, bushberries, *Brassica carinata*, borage, canola, chickpeas, crambe, low growing berries - except strawberries, corn, flax (linseed), lentils, oats, Oriental mustard, peanut, rapeseed, safflower, soybean, sugar beet, sunflower, wheat and certain other small grains.

# SECTION 2: SAFETY AND HANDLING - PRECAUTIONS, PROTECTIVE CLOTHING & EQUIPMENT, AND RESTRICTED-ENTRY INTERVALS.

# **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry. 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.

**DO NOT** enter or allow worker entry into treated areas during the intervals specified in the following table:

Crop	<b>Postapplication Activity</b>	REI and/or PHI
Low-growing berries (except strawberries),	Harvesting	45 days
safflowers, sunflowers	All other activities	24 hours
Canola, rapeseed, oriental mustard, Brassica	Harvesting	36 days
carinata, flax (linseed), crambe, borage	All other activities	24 hours
Wheat (spring, durum and winter), barley,	Harvesting	30 days
oats, pearl millet, proso millet, rye, triticale,	All other activities	24 hours
teosinte, buckwheat		
Sweet corn	Hand harvesting	20 days
	Mechanical harvesting	14 days
	All other activities	24 hours
Seed corn	Hand detasseling	20 days
	All other activities	24 hours
Field corn, peanuts	Harvesting	14 days
	All other activities	24 hours
Soybeans	Harvesting	20 days
	All other activities	24 hours
Chickpeas, lentils, sugar beets	Harvesting	7 days
	All other activities	24 hours
Bushberries	Harvesting	7 days
	Hand-line irrigation	3 days
	All other activities	24 hours

# PROTECTIVE CLOTHING AND EQUIPMENT:

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and boots during mixing, loading, application, clean-up and repair. In addition, workers must wear protective eyewear (goggles or a face shield) during mixing, loading, clean-up and repair. Gloves are not required within a closed cab and/or cockpit.

When handing 272 L or more of product per day, wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH-approved canister approved for pesticides during mixing, loading and open-cab application. This restriction is required to minimize exposure to the worker.

#### SECTION 3: FIRST AID AND TOXICOLOGICAL INFORMATION

#### 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 IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

IF 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.

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

# **TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

#### **SECTION 4: ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms and non-target terrestrial plants. 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.

#### **SECTION 5: STORAGE**

- Store this product away from food and feed.
- Keep away from fire or open flame or other sources of heat.
- Do not store at temperatures below freezing.
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertilizer, plants and foodstuffs.
- Do not use or store in or around the home.
- Keep in original container during storage.

#### **SECTION 6: DISPOSAL**

## **Recyclable Container Disposal:**

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- 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.

#### **Returnable Container:**

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

# **Disposal of Unused, Unwanted Product:**

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 cleanup of spills.

#### **Disposal of Unused Spray Solution:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, NOT ON THE CROP, away from water supplies, ditches, and irrigation canals. Spray buffer zones indicated in the DIRECTIONS FOR USE must also be respected.

# **DIRECTIONS FOR USE**

# SECTION 7: CROP, DISEASE, RATE, TIMING

CROP	DISEASE	RATE	TIMING
Barley	For suppression of Fusarium head blight or scab (Fusaiuim spp.)	Apply Pavise 480 once, at 315 to 420 mL/ha (150-200 g a.i./ha)  Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	Fusarium head blight outbreaks in barley occur when the weather is warm and wet at ear emergence. The application of Pavise 480 for protection against fusarium head blight (scab) should be considered when these environmental conditions are forecasted for this stage of barley development.  Timing of application is critical: For optimum suppression of fusarium head blight, apply Pavise 480 as a preventative spray within the time period when 70 to 100% of the barley main stem heads are fully emerged, to 3 days after full head emergence.  Application of the 420 mL/ha rate is suggested in situations where disease pressure is expected to be high. Such situations may occur when prolonged periods of warm wet weather are forecast during barley ear emergence, when barley is grown in a crop rotation that has contained corn or when susceptible cultivars are grown.  Use of the 420 mL/ha rate will typically provide highest levels of mycotoxin reduction.  Spray Coverage is essential for optimum efficacy: Spray equipment must be set up to provide good coverage to barle heads. To achieve thorough barley head coverage using ground application equipment, it is recommended to use forward and backward mounted nozzles or nozzles that have a two-directional spray. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer.
	For control of:  Net blotch (Pyrenophora teres);	Apply Pavise 480 once, at 210 to 315 mL/ha (100 -150 g a.i./ha)	Apply Pavise 480 as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Barley fields should be observed closely for early disease symptoms, particularly when susceptible varieties are
	Scald (Rhynchosporium secalis)  Spot blotch (Cochliobolus sativus)	Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	planted and/or under prolonged conditions favorable for disease development.

Note: A maximum of 2 applications (735 mL/ha) of Pavise 480, with a minimum 7-day application interval, may be applied per barley crop, per year. Do not apply within 30 days of harvest. Applications may be made by ground or aerial spray equipment.

CROP	DISEASE	RATE	TIMING
Wheat (spring, durum and winter)	For suppression of Fusarium head blight or scab (Fusaruim spp.)  For control of Glume blotch (Stagonospora nodorum)	Apply Pavise 480 once, at 315 to 420 mL/ha (150-200 g a.i./ha)  Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	Fusarium head blight outbreaks in wheat occur when the weather is warm and wet at head emergence and flowering. The application of Pavise 480 for protection against fusarium head blight (scab) should be considered when these environmental conditions are forecasted for this stage of wheat development.  Timing of application is critical: For optimum suppression of fusarium head blight or control of glume blotch, apply Pavise 480 within the time period from when at least 75% of the wheat heads on the main stem are fully emerged to when 50% of the heads on the main stem are in flower.  Application of the 420 mL/ha rate is suggested in situations where disease pressure is expected to be high. Such
			situations may occur when prolonged periods of warm, wet weather are forecast during anthesis, when wheat is grown in a crop rotation that has contained corn or when more susceptible cultivars or wheat types (i.e. durum) are grown.  Use of the 420 mL/ha rate will typically provide highest levels of mycotoxin reduction.
			Spray Coverage is essential for optimum efficacy: Spray equipment must be set up to provide good coverage to wheat heads. To achieve thorough wheat head coverage using ground application equipment, it is recommended to use forward and backward mounted nozzles or nozzles that have a two-directional spray. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer.
	For control of:  Speckled leaf blotch (Septoria tritici);  Tan spot	Apply Pavise 480 at 315 mL/ha (150 g a.i./ha) Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral	Apply Pavise 480 as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Wheat fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.
N	(Pyrenophora tritici-repentis);  Leaf rust (Puccinia recondata)	90 at 0.125% v/v	avia 480 with a minimum 7 day amplication interval may be

Note: A maximum of 2 applications (735 mL/ha) of Pavise 480, with a minimum 7-day application interval, may be applied per wheat crop per year. Do not apply within 30 days of harvest. Applications may be made by ground or aerial spray equipment.

CROP	DISEASE	RATE	TIMING
Oats	For control of Crown rust (Puccinia coronata)	Apply Pavise 480 at 315 mL/ha (150 g a.i./ha)  Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	Apply Pavise 480 as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.

Note: A maximum of 2 applications (630 mL/ha) of Pavise 480, with a minimum 7-day application interval, may be applied per oat crop per year. Do not apply within 30 days of harvest. Applications may be made by ground or aerial spray equipment.

CROP	DISEASE	RATE	TIMING
Pearl millet, Proso millet, Rye, Triticale, Teosinte, Buckwheat	For suppression of: Fusarium head blight or scab (Fusaruim spp.), except buckwheat  For control of Rust (Puccinia spp.)	Apply Pavise 480 at 315-420 mL/ha (150 - 200 g a.i./ha) Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	Apply Pavise 480 as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.

Note: A maximum of 2 applications (735 mL/ha) of Pavise 480, with a minimum 7-day application interval, may be applied per year. Do not apply within 30 days of harvest. Applications may be made by ground equipment only.

OILSEE	OILSEED CROPS (Canola, Rapeseed, Oriental Mustard, Brassica carinata)		
CROP	DISEASE	RATE	TIMING
Canola, Rapeseed, Oriental mustard, Brassica carinata	For control of Sclerotinia stem rot (Sclerotinia sclerotiorum)	Apply Pavise 480 at 315 – 368 mL/ha (150- 175 g a.i./ha)	Apply Pavise 480 when the crop is in the 20 - 50% bloom stage. Best protection will be achieved when the fungicide is applied prior to petals beginning to fall, and will allow for the maximum number of petals to be protected. The 315 mL/ha rate is the recommended rate for most oilseed crops, however, the higher rate is recommended for fields with a history of heavy disease pressure or for dense crop stands. Good spray coverage of the plants is essential.  A second application at a rate of 315 mL/ha may be applied 7-10 days later, up to full bloom, if disease persists or weather conditions are favourable for disease development. When conditions favouring disease are
Carmaia			with a history of heavy disease pressure or for dense crestands. Good spray coverage of the plants is essential.  A second application at a rate of 315 mL/ha may be applied 7-10 days later, up to full bloom, if disease persor weather conditions are favourable for disease

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, at 0.125% v/v Pavise 480. The application may be made by ground or aerial spray equipment. A maximum of two applications (683 mL/ha of Pavise 480) may be applied per year. Do not apply within 36 days of harvest.

PULSE	PULSE CROPS (Chickpeas, Lentils)			
CROPS	DISEASE	RATE	TIMING	
Chickpeas	Ascochyta blight (Ascochyta rabiei)  Apply Pavise 480 at 315 – 42 mL/ha (150-200 g a.i./ha)		Apply Pavise 480 at the first sign of disease.  After the initial application, repeat applications may be made on 10- to 14-day intervals. Apply the higher rate when conditions favour disease	
	For suppression of Grey mould (Botrytis cinerea)	Apply Pavise 480 at 420 mL/ha (200 g a.i./ha)a	development, or when growing less disease resistant varieties.  A maximum of 1260 mL/ha of Pavise 480 may be applied per crop year for chickpeas.  Maximum of three applications per year.	
Lentils	For control of Ascochyta blight (Ascochyta spp.) White mold (Sclerotinia sclerotiorum)	Apply Pavise 480 at 315 – 420 mL/ha (150-200 g a.i./ha)  After the initial application, one additional application may be made 10-14 days afterwards if conditions remain favourable for continued or increased disease development. Apply the higher rate when conditions favour disease development, or when growing less disease resistant varieties.	Apply Pavise 480 at the beginning of flowering or at first sign of disease.  After the initial application, one additional application may be made 10-14 days afterwards if conditions remain favourable for continued or increased disease development. Apply the higher rate when conditions favour disease development, or when growing less disease resistant varieties.  A maximum of 840 mL/ha of Pavise 480 may be applied per crop year for lentils.	
	For suppression of Anthracnose* (Colletrotrichum lentis)	Apply Pavise 480 at 320 – 420 mL/ha (154-200 g a.i./ha)	Maximum of two applications per year.	
	For suppression of Grey mould (Botrytis cinerea)	Apply Pavise 480 at 420 mL/ha (200 g a.i./ha)		

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480 at 0.125% v/v. Applications may be made by ground or aerial spray equipment. Do not apply within 7 days of cutting or swathing of the crop.

\* Including biotypes resistant to Group 11 (strobilurin) fungicides.

# Soybean

CROP	DISEASE	RATE	TIMING
Soybean	For control of: Asian soybean rust (Phakopsora pachyrhizi)	Apply Pavise 480 at 210 mL/ha (100 g a.i./ha)	Apply Pavise 480 when first symptoms of disease can be found or that the risk of infection is imminent.  Do not apply more than one application per year.
	Frogeye leaf spot (Cercospora sojina)		

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480at 0.125% v/v. The application may be made by ground or aerial spray equipment. Do not apply within 20 days of harvest.

Corn (fie	eld, sweet and pope	corn)	
CROP	DISEASE	RATE	TIMING
Corn (field, sweet and popcorn, including seed production)	For the control of Rusts (Puccinia sorghi, Puccinia polysora), Eyespot (Kabatiella zeae or Aureobasidium zeae), and Northern blight (Setosphaeria turcica)	Apply Pavise 480 at 315 mL/ha (150 g a.i./ha)	Apply Pavise 480 as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Fields should be observed closely for early disease symptoms, particularly under prolonged conditions favorable for disease development.  Under high disease pressure, it is recommended to use a non-ionic surfactant with Pavise 480 (do not apply a non-ionic surfactant prior to tassel emergence as crop injury may occur). Refer to the section "Note" of this table for directions.
	Provides control of all diseases listed above, plus the following:  For the control of Grey leaf spot (Cercospora zeae-maydis)  For the suppression of Fusarium and Gibberella ear rots (Fusarium spp. and Gibberella spp.)  For suppression of the stalk rot Fusarium spp., Gibberella spp. and Colletotrichum spp. which may cause stalk lodging.	Apply Pavise 480 at 420 mL/ha (200 g a.i./ha)	Fusarium ear rot outbreaks in corn occur when the weather is warm and wet during silking. It is also driven by hybrid selection and field history of severe fusarium outbreaks. The application of Pavise 480 for protection against fusarium ear rot should be considered when these conditions are forecasted for a specific corn field. Applications of Pavise 480 timed for suppression of fusarium ear rot may also reduce lodging caused by stalk rot pathogens.  Timing of application is critical: For optimum suppression of Fusarium Ear Rot apply Pavise 480 from the development stage of corn between the tip of stigmata visible (silking, BBCH 63) to the stigmata drying (silk browning, BBCH 67). Pavise 480 will reduce both disease symptoms and levels of mycotoxin in the grain.  Spray Coverage is essential for optimum efficacy: Spray equipment must be set up to provide good coverage to the cobs. To achieve thorough cob coverage using ground application equipment, it is recommended to use dropnozzles. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer.

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480at 0.125% v/v. Do not apply a non-ionic surfactant prior to tassel emergence. The application may be made by ground or aerial spray equipment. Do not apply within 14 days of harvest. Do not apply more than one application per year.

Peanut			
DISEASE	RATE	TIMING	
Soil-Borne:	420 mL per hectare (200 g a.i./ha)	For Soil-Borne Diseases	
Suppression of Rhizoctonia pod rot ( <i>Rhizoctonia solani</i> )		Applications of fungicides with a different mode of action should be made prior to and following applications of Pavise 480 to discourage development of resistant strains of fungi.	
		In fields with a history of pod rot or in situations where conditions favour disease development apply Pavise 480 at about mid-season and continue Pavise 480 applications at 14-day intervals.	
		Pavise 480 must be carried by rainfall or irrigation into the root and pod zone for control of pod rot caused by <i>Rhizoctonia solani</i> . Drought conditions will decrease the effectiveness of Pavise 480 against pod rot.	
Foliar:	365 - 420 mL per hectare (175 -200 g	Foliar Disease Spray Program	
Early leaf spot (Cercospora arachidicola)	a.i./ha)	Apply the specified rate in a preventive spray schedule. Apply up to 4 sprays using a 14-day interval	
Suppression of Leaf Rust (Puccinia arachidis)		Use the higher use rate when conditions are favourable for severe disease pressure and/or when growing less disease resistant varieties.	

Note: Apply up to four (4) applications of Pavise 480 per year. When planting varieties with good to excellent levels of resistance to foliar diseases, the application interval may be extended up to 21 days in the absence of soil borne diseases. A maximum of 1.7 L per hectare of Pavise 480 may be applied per year. Pavise 480 may be applied up to 14 days before harvest. Do not feed hay or threshings or allow livestock to graze in treated areas. Applications may be made by ground spray equipment only.

Bushberry			
CROP	DISEASE	RATE	TIMING
Bushberry subgroup: Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry;	Supression of Septoria leaf spot (Septoria spp.) Suppression of Leaf rust (Thekopsora minima) and Valdensinia leaf spot (Valdensinia heterodoxa) - blueberry only	Apply Pavise 480 at 315 mL/ha (150 g a.i./ha). Apply Pavise 480 at 400 mL/ha (190 g a.i./ha)	Apply Pavise 480 at the first sign of disease. After the initial application, one additional application may be made 10-14 days afterwards if conditions remain favourable for continued or increased disease development.
juneberry (Saskatoon berry); lingonberry; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these.	Monilinia blight (Monilinia vacciniicorymbosi) – blueberry only	Apply Pavise 480 at 315-420 mL/ha (0.15 – 0.2 kg a.i./ha)	Begin applications at early bloom for fruit rot.  Make a second application of Pavise 480 or another approved fungicide 5-10 days later.

**General Comments:** Apply up to two (2) applications of Pavise 480 per year. Applications may be made by ground application equipment only. Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v. A maximum of 840 mL/ha of Pavise 480 may be applied per crop year. Do not apply within 7 days of harvest.

Low-Growing Berry, except strawberry			
CROP	DISEASE	RATE	TIMING
Low growing berry subgroup, except strawberry: Bearberry; bilberry; cloudberry; cranberry; partridgeberry; cultivars, varieties, and/or hybrids of these	Fruit rot: (Coleophoma empetri, Glomerella cingulata, Phyllosticta vaccinii, Physalospora vaccinii Allantophomopsis lycopodina, Allantophomopsis cytisporea, Fusicoccum putrefaciens, Penicillium spp., Phomopsis vaccinii, Colletotrichum acutatum, Colletotrichum coccodes)  Suppression of Septoria leaf spot (Septoria spp.)	Apply Pavise 480 at 365 mL/ha (0.175 kg a.i./ha)  Adjuvant: Apply with a non-ionic surfactant, e.g., AgSurf or Agral 90 at 0.125% v/v	Begin applications at early bloom for fruit rot.  Make a second application of Pavise 480 or another approved fungicide 5-10 days later.

**General Comments:** Apply up to two (2) applications of Pavise 480 per year. Repeat applications as needed using a 5- to 10-day spray interval if conditions remain favorable for continued or increasing disease development. Applications may be made by ground spray equipment only.

A maximum of 730 mL/ha of Pavise 480 may be applied per year. Do not apply within 45 days of harvest.

Sunflower, Safflower				
DISEASE	RATE	TIMING		
Sunflower rust (Puccinia helianthi)	Apply Pavise 480 at 420 mL/ha (200 g a.i./ha)	Apply Pavise 480 when average rust severity reaches 1% on the upper 4, fully expanded leaves prior to or during bloom.		
Safflower rust (Puccinia carthami)				

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480at 0.125%. The application may be made by ground or aerial spray equipment. A maximum of one application (420 mL/ha of Pavise 480) may be applied to sunflower or safflower per year. Do not apply within 45 days of harvest.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Albaugh LLC under the User Requested Minor Use Label Expansion program. For these uses, Albaugh LLC 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	TIMING
Sunflower,	For suppression	Apply Pavise 480 at	Apply Pavise 480 when the crop is in the 10 - 50% disk
Safflower	of sclerotinia	420 mL/ha (200 g	flower bloom stage.
	head rot	a.i./ha)	
	(Sclerotinia	·	
	sclerotiorum)		

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480at 0.125% v.v. The application may be made by ground or aerial spray equipment. A maximum of one application (420 mL/ha of Pavise 480) may be applied to sunflower or safflower per year. Do not *apply* within 45 days of harvest. If applying Pavise 480 to greater than 310 ha per day of sunflower and/or safflower using open cab ground boom equipment, applicators must also wear a NIOSH/MSHA-approved respirator.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Albaugh LLC under the User Requested Minor Use Label Expansion program. For these uses, Albaugh LLC 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	TIMING
Flax (linseed), Crambe, Borage	For control of sclerotinia stem rot (Sclerotinia sclerotiorum)	Apply Pavise 480 at 315 – 368 mL/ha (150-175 g a.i./ha)	Apply Pavise 480 when the crop is in the 20 - 50% bloom stage. Best protection will be achieved when the fungicide is applied prior to petals beginning to fall, and will allow for the maximum number of petals to be protected. The higher rate is recommended for fields with a history of heavy disease pressure or for dense crop stands. Good spray coverage of the plants is essential.

Note: Pavise 480 may be applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, Pavise 480at 0.125% v/v. The application may be made by ground or aerial spray equipment. A maximum of one application (368 mL/ha of Pavise 480) may be applied per year. Do not apply within 36 days of harvest.

CROP	DISEASE	RATE	TIMING
Sugar	For control of	Apply Pavise 480 at	Apply Pavise 480 at the first sign of disease. Use the higher
beets	the foliar	315 – 415 mL/ha	rate and shorter intervals when conditions are favourable for
	disease:	(150 - 200  g a.i./ha)	severe disease pressure and/or when growing less disease-
			resistant varieties. Apply the specified rate of Pavise 480 in
	Cercospora leaf		100 – 200 L of water per hectare when using ground
	spot		application equipment. If conditions remain favorable for
	(Cercospora		continued or increasing disease development, repeat
	beticola)		applications using a 14 to 21 day spray interval depending
			on disease pressure. Use a 14-day spray interval under
			normal to heavy disease pressure and a 21-day spray
			interval under light disease pressure.
	For control of	Apply Pavise 480 at	Apply Pavise 480 at the 4-leaf to row closure growth stage.
	the soil-borne	415 mL/ha (200 g	Apply the specified rate of Pavise 480 in 50 – 100 L of
	disease:	a.i./ha)	water per hectare. Repeat applications using a 21-day spray
	Division		interval if conditions remain favorable for continued or
	Rhizoctonia		increasing disease development.
	Crown Rot		
	(Rhizoctonia		
	solani)		

Note: A maximum of 3 applications (1245 mL/ha of Pavise 480) may be applied per crop year. Do not apply within 7 days of harvest. Pavise 480 may applied with a non-ionic surfactant, e.g., AgSurf or Agral 90, at 0.125% v/v Pavise 480. The application may be made by ground or aerial application equipment. Pavise 480 is a Group 3 fungicide. To limit the potential for development of disease resistance, alternate every application of Pavise 480 with a non-Group 3 fungicide.

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.

<u>Field sprayer application</u>: **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.

<u>Airblast application</u>: 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.

<u>Aerial application</u>: **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. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

# **Spray buffer zones:**

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

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

Method of	P		Spray Buffer Zones (metres) Required for the Protection of:			
application			Aquatic Habitat of Depths:			Terrestrial Habitat
			Less than 1 m	1-3 m	Greater than 3 m	
Field sprayer	All listed crops		2	1	0	0
Airblast sprayer	Bushberries	Early growth stage	25	15	4	1
		Late growth stage	15	5	2	1
Aerial (fixed and rotary wing)	Flax (linseed), crambe, borage, soybeans		10	0	0	0
	Corn, safflower, sunflower		15	5	0	0
	Oats		20	10	0	0
	Canola, Oriental mustard, rapeseed, <i>Brassica carinata</i>		20	10	1	10
	Wheat, barley		25	10	0	10
	Lentils		30	10	0	15
	Sugarbeets		45	15	4	15
	Chickpeas		50	15	5	15

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.

# **Rotation restrictions:**

Treated areas may be replanted with any crop specified on this label as soon as practical after the last application. For crops not listed on this label, do not plant back within 30 days of last application.

## **Section 8: Resistance Management**

Resistance Management Recommendations:

For resistance management, Pavise 480 contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to Pavise 480 and other Group 3 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:

- Alternate with fungicides having a different mode of action other than Group 3 every 7 to 10 days after each application of Pavise 480.
- Do not apply more than the indicated maximum number of applications per year specified for each crop in the DIRECTIONS FOR USE, Section 7 table.
- Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an integrated 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 Albaugh LLC if reduced sensitivity of the pathogen to Pavise 480 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.
- 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 Albaugh LLC at 1-800-247-8013.

#### **Section 9: Application Precautions**

# **GROUND APPLICATION:**

- 1. Use well-maintained and calibrated conventional spray equipment, which provides adequate and uniform coverage.
- 2. Apply Pavise 480 in a minimum of 100 L water/ha, unless otherwise specified in DIRECTIONS FOR USE, Section 7.
- 3. Spray screens should be no finer than 50 mesh.
- 4. Ensure that the by-pass line discharges at the bottom of the tank to minimize foaming.
- 5. Maintain pressure at no less than 275 kPa to ensure good foliage penetration and coverage.
- 6. Provincial spray buffer zones that are greater than the spray buffer zones indicated in the DIRECTIONS FOR USE, Section 7, should be respected.
- 7. If spray mixture remains in the tank overnight, or for long periods during the day, agitate thoroughly prior to application.

#### **AERIAL APPLICATION-GENERAL INFORMATION:**

- 1. 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.
- 2. 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. If you have questions, call 1-800-247-8013 or obtain technical advice from the distributor or your provincial agricultural representative.
- 3. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.
- 4. Apply Pavise 480 in a minimum of 50 L of water/ha.
- 5. To ensure proper coverage and distribution and to minimize drift, check to see that swath width and droplet size are adequate, and that wind velocities are low.
- 6. Use mechanical flaggers only.

## **AERIAL APPLICATION-USE PRECAUTIONS:**

- 1. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage.
- 2. 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 APPLICATION- OPERATOR PRECAUTIONS:**

- 1. **DO NOT** allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.
- 2. It is desirable that the pilot has communication capabilities at each treatment site at the time of application.
- 3. 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.
- 4. All personnel on the job site must wash hands and face thoroughly before eating and drinking.
- 5. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
- 6. Read and understand the entire label before opening this product. If you have questions, call the manufacturer or obtain technical advice from the distributor or your provincial agricultural representative.

# **Section 10: Mixing Instructions**

### 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 Albaugh LLC at 1-800-247-8013 for information before applying any tank mix that is not specifically recommended on this label.

# **Mixing Instructions:**

Pavise 480 must be applied with properly calibrated, clean equipment. Prior to adding Pavise 480 to the spray tank, ensure that the spray tank is thoroughly clean.

# Pavise 480 applied alone:

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the required quantity of Pavise 480 to the water and complete filling with water to the required total volume.
- Maintain agitation throughout mixing and spraying.
- Pavise 480 should be thoroughly dispersed prior to the addition of a nonionic surfactant. Pavise 480 is recommended to be used with a registered non-ionic surfactant, such as Agral 90 or AgSurf, at 0.125% vol/vol (1.25 L/1000 L water).

# **Section 11: Pre-harvest Intervals**

Стор	PHI (days)
Wheat (spring, durum and winter), Barley, Oats,	30
Pearl Millet, Proso Millet, Rye, Triticale, Teosinte,	
Buckwheat	
Canola, Rapeseed, Oriental Mustard, Brassica	36
carinata, Flax (Linseed), Crambe, borage	
Corn (field, sweet, popcorn)	14
Chickpea, Lentils	7
Soybean	20
Sugar Beet	7
Bushberry	7
Peanut	14
Low-Growing Berries (except strawberries),	45
Safflower, Sunflower	

### **Section 12: Notices**

#### **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.