

GROUP	3	FUNGICIDE
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Container Label

CORTINA

FUNGICIDE

SUSPENSION

For Control or Suppression of Listed Diseases in Barley, Borage, *Brassica carinata*, Canola, Chickpeas, Crambe, Corn, Flax (Linseed), Lentils, Oats, Oriental Mustard, Peanut, Rapeseed, Safflower, Sugar Beet, Sunflower, and Wheat.

COMMERCIAL (AGRICULTURAL)

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

CAUTION



POISON

REGISTRATION NO. 35312 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Prothioconazole..... 480 g/L

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: 0.5 - 1000 L

Sipcam Agro USA, Inc.
2525 Meridian Parkway, Suite 100,
Durham, NC 27713, USA
(919) 226 1195

GENERAL INFORMATION

Cortina is a broad-spectrum systemic fungicide for the control or suppression of listed *Ascomycetes*, *Basidiomycetes* and *Deuteromycetes* diseases on barley, *Brassica carinata*, borage, canola, chickpeas, crambe, corn, flax (linseed), lentils, oats, Oriental mustard, peanut, rapeseed, safflower, sugar beet, sunflower and wheat.

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 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. A restricted entry interval (REI) of 20 days is required for hand- harvesting sweet corn and for detasseling seed corn. For all other activities do not re-enter treated fields until 24 hours after application. If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Sipcam Agro USA, Inc. at (919) 226 1195.

PROTECTIVE CLOTHING AND EQUIPMENT:

1. Workers must wear long pants, long-sleeved shirts, boots and chemical resistant gloves during mixing, loading, application, clean-up and repair activities. In addition, workers must wear safety goggles or a face shield during mixing, loading, clean-up and repair.
2. Gloves are not required during application within closed cabs or cockpits.

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

1. Store this product away from food and feed.
2. Keep away from direct sunlight.
3. Keep away from fire or open flame or other sources of heat.
4. Do not store at temperatures below freezing.
5. If stored for 1 year or longer, shake well before using.
6. Store the tightly closed container away from feeds, seeds, fertilizer, plants and food.
7. Do not use or store in or around the home.
8. Keep in original container during storage.
9. In case of fire, leaking or damaged containers, contact Chemtrec at 1-800-424-9300.

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.

All products mentioned are trademarks of their respective companies.

Booklet Label

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CORTINA

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SUSPENSION

For Control or Suppression of Listed Diseases in Barley, Borage, *Brassica carinata*, Canola, Chickpeas, Crambe, Corn, Flax (Linseed), Lentils, Oats, Oriental Mustard, Peanut, Rapeseed, Safflower, Sugar Beet, Sunflower, and Wheat.

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GENERAL INFORMATION

Section 1: The Product

Cortina is a broad-spectrum systemic fungicide for the control or suppression of listed *Ascomycetes*, *Basidiomycetes* and *Deuteromycetes* diseases on barley, *Brassica carinata*, borage, canola, chickpeas, crambe, corn, flax (linseed), lentils, oats, Oriental mustard, peanut, rapeseed, safflower, sugar beet, sunflower and wheat.

SAFETY AND HANDLING

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

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 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. A restricted entry interval (REI) of 20 days is required for hand- harvesting sweet corn and for detasseling seed corn. For all other activities do not re-enter treated fields until 24 hours after application. If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Sipcam Agro USA, Inc. at (919) 226 1195.

PROTECTIVE CLOTHING AND EQUIPMENT:

1. Workers must wear long pants, long-sleeved shirts, boots and chemical resistant gloves during mixing, loading, application, clean-up and repair activities. In addition, workers must wear safety goggles or a face shield during mixing, loading, clean-up and repair.
2. Gloves are not required during application within closed cabs or cockpits.

Section 3: First Aid and Toxicological Information

FIRST AID:

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

IF 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

Storage:

- Store this product away from food and feed.
- Keep away from direct sunlight.
- 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.
- In case of fire, leaking or damaged containers, contact Chemtrec at 1-800-424-9300.

Section 6: DISPOSAL

Recyclable Container Disposal:

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

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

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

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

CEREALS (Barley, Wheat and Oats)			
CROP	DISEASE	RATE	TIMING
Barley	For suppression of Fusarium Head Blight (<i>Fusarium</i> spp.), or Scab	Apply Cortina once, at 315 to 420 mL/ha (150-200 g a.i./ha) Adjuvant: Apply with a non-ionic surfactant, AgSurf or Agral 90 at 0.125% v/v	<p>Fusarium head blight outbreaks in barley occur when the weather is warm and wet at ear emergence. The application of Cortina for protection against Fusarium head blight (scab) should be considered when these environmental conditions are forecasted for this stage of barley development.</p> <p>Timing of application is critical: For optimum suppression of Fusarium head blight, apply Cortina 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.</p> <p>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.</p> <p>Use of the 420 mL/ha rate will typically provide highest levels of mycotoxin reduction.</p> <p>Spray Coverage is essential for optimum efficacy: Spray equipment must be set up to provide good coverage to barley 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.</p>
	For control of: Net Blotch (<i>Pyrenophora teres</i>); Scald (<i>Rhynchosporium secalis</i>) Spot Blotch (<i>Cochliobolus sativus</i>)	Apply Cortina once, at 210 to 315 mL/ha (100 -150 g a.i./ha) Adjuvant: Apply with a non-ionic surfactant, AgSurf or Agral 90 at 0.125% v/v	Apply Cortina 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 planted and/or under prolonged conditions favorable for disease development.
<p>Note: A maximum of 2 applications (735 mL/ha) of Cortina, 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 equipment only.</p>			

CROP	DISEASE	RATE	TIMING
<p>Wheat (spring, durum and winter)</p>	<p>For suppression of Fusarium Head Blight (<i>Fusarium</i> spp.), or Scab</p> <p>For control of Glume blotch (<i>Stagonosora nodorum</i>)</p>	<p>Apply Cortina once, at 315 to 420 mL/ha (150-200 g a.i./ha)</p> <p>Adjuvant: Apply with a non-ionic surfactant, AgSurf or Agral 90 at 0.125% v/v</p>	<p>Fusarium head blight outbreaks in wheat occur when the weather is warm and wet at head emergence and flowering. The application of Cortina for protection against Fusarium head blight (scab) should be considered when these environmental conditions are forecasted for this stage of wheat development.</p> <p>Timing of application is critical: For optimum suppression of Fusarium head blight or control of Glume blotch, apply Cortina 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.</p> <p>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.</p> <p>Use of the 420 mL/ha rate will typically provide highest levels of mycotoxin reduction.</p> <p>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.</p>
	<p>For control of :</p> <p>Speckled Leaf Blotch (<i>Septoria tritici</i>);</p> <p>Tan spot (<i>Pyrenophora tritici-repentis</i>);</p> <p>Leaf Rust (<i>Puccinia recondata</i>)</p>	<p>Apply Cortina at 315 mL/ha (150 g a.i./ha)</p> <p>Adjuvant: Apply with a non-ionic surfactant, AgSurf or Agral 90 at 0.125% v/v</p>	<p>Apply Cortina 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.</p>
<p>Note: A maximum of 2 applications (735 mL/ha) of Cortina, 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 equipment only.</p>			

CROP	DISEASE	RATE	TIMING
Oats	For control of Crown Rust (<i>Puccinia coronata</i>)	Apply Cortina at 315 mL/ha (150 g a.i./ha) Adjuvant: Apply with a non-ionic surfactant, AgSurf or Agral 90 at 0.125% v/v	Apply Cortina 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 Cortina, 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 equipment only.			

OILSEED CROPS (Canola, Rapeseed, Oriental Mustard, <i>Brassica carinata</i>)			
CROP	DISEASE	RATE	TIMING
Canola, Rapeseed, Oriental mustard, <i>Brassica carinata</i>	For control of Sclerotinia stem rot (<i>Sclerotinia sclerotiorum</i>)	Apply Cortina at 315 – 368 mL/ha (150-175 g a.i./ha)	Apply Cortina 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 severe, use the shorter interval.
Note: The lowest labelled rate of a non-ionic surfactant, AgSurf or Agral 90, may be tank-mixed with Cortina. The application may be made by ground or aerial spray equipment. A maximum of two applications (683 mL/ha of Cortina) may be applied per crop year. Do not apply within 36 days of harvest. Do not use Cortina on InVigor® L160S Canola hybrid.			

PULSE CROPS (Chickpeas, Lentils)			
CROPS	DISEASE	RATE	TIMING
Chickpeas	For control of Ascochyta blight (<i>Ascochyta rabiei</i>)	Apply Cortina at 315 – 420 mL/ha (150-200 g a.i./ha)	Apply Cortina 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 development, or when growing less disease resistant varieties. A maximum of 1260 mL/ha of Cortina may be applied per crop year for chickpeas. Maximum of three applications per year.
Lentils	For control of: Ascochyta blight (<i>Ascochyta spp.</i>)	Apply Cortina at 315 – 420 mL/ha (150-200 g a.i./ha)	Apply Cortina 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.

			<p>A maximum of 840 mL/ha of Cortina may be applied per crop year for lentils.</p> <p>Maximum of two applications per year.</p>
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Note: The lowest labelled rate of a non-ionic surfactant, AgSurf or Agral 90, may be tank-mixed with Cortina. Applications may be made by ground spray equipment only. Do not apply within 7 days of cutting or swathing of the crop.

Corn (field, sweet and popcorn)			
CROP	DISEASE	RATE	TIMING
Corn (field, sweet and popcorn, including seed production)	For the control of Rusts (<i>Puccinia sorghi</i> , <i>Puccinia polysora</i>), Eyespot (<i>Kabatiella zae</i> or <i>Aureobasidium zae</i>), and Northern Blight (<i>Setosphaeria turcica</i>)	Apply Cortina at 420 mL/ha (200 g a.i./ha)	<p>Apply Cortina 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.</p> <p>Under high disease pressure, it is recommended to use a non-ionic surfactant with Cortina (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.</p>
	<p>Provides control of all diseases listed above, plus the following:</p> <p>For the control of Grey Leaf Spot (<i>Cercospora zae-maydis</i>)</p> <p>For the suppression of Fusarium and Gibberella ear rots (<i>Fusarium</i> spp. and <i>Gibberella</i> spp.)</p>	Apply Cortina at 420 mL/ha (200 g a.i./ha)	<p>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 Cortina for protection against Fusarium Ear Rot should be considered when these conditions are forecasted for a specific corn field.</p> <p>Timing of application is critical: For optimum suppression of Fusarium Ear Rot apply Cortina from the development stage of corn between the tip of stigmata visible (silking, BBCH 63) to the stigmata drying (silk browning, BBCH 67). Cortina will reduce both disease symptoms and levels of mycotoxin in the grain.</p> <p>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 drop-nozzles. Nozzles should be operated within the spray pressure recommendations suggested by the manufacturer.</p>

Note: The lowest labelled rate of a non-ionic surfactant, AgSurf or Agral 90, may be tank-mixed with Cortina. Do not apply a non-ionic surfactant prior to tassel emergence. The application may be made by ground spray equipment only. Do not apply within 14 days of harvest. Do not apply more than one application per season.

Peanut		
DISEASE	RATE	TIMING
Soil-Borne: Suppression of Rhizoctonia pod rot (<i>Rhizoctonia solani</i>)	420 mL per hectare (200 g a.i./ha)	For Soil-Borne Diseases Applications of fungicides with a different mode of action should be made prior to and following applications of Cortina 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 Cortina at about mid-season and continue Cortina applications at 14-day intervals. Cortina 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 Cortina against pod rot.
Foliar: Early Leaf Spot (<i>Cercospora arachidicola</i>) Suppression of Leaf Rust (<i>Puccinia arachidis</i>)	365 - 420 mL per hectare (175 -200 g a.i./ha)	Foliar Disease Spray Program Apply the specified rate in a preventive spray schedule. Apply up to 4 sprays using a 14-day interval 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 Cortina 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 Cortina may be applied per year. Cortina 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.		

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

CROP	DISEASE	RATE	TIMING
Flax (linseed), Crambe, Borage	For control of Sclerotinia stem rot (<i>Sclerotinia sclerotiorum</i>)	Apply Cortina at 315 – 368 mL/ha (150-175 g a.i./ha)	Apply Cortina 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: The lowest labelled rate of a non-ionic surfactant, AgSurf or Agral 90, may be tank-mixed with Cortina. The application may be made by ground or aerial spray equipment. A maximum of one application (368 mL/ha of Cortina) may be applied per crop year. Do not apply within 36 days of harvest.			
Sugar beets	For control of foliar diseases: Cercospora Leaf Spot (<i>Cercospora beticola</i>)	Apply Cortina at 315 – 415 mL/ha (150 – 200 g a.i./ha)	Apply Cortina at the first sign of disease. Use the higher rate and shorter intervals when conditions are favourable for severe disease pressure and/or when growing less disease-resistant varieties. Apply the specified rate of Cortina in 100 – 200 L of water per hectare when using ground application

			equipment. Repeat 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 soil-borne diseases: Rhizoctonia Crown Rot (<i>Rhizoctonia solani</i>)	Apply Cortina at 415 mL/ha (200 g a.i./ha)	Apply Cortina at the 4-leaf to row closure growth stage. Apply the specified rate of Cortina in 50 – 100 L of water per hectare. Repeat applications using a 21-day spray interval.
Note: A maximum of 3 applications (1245 mL/ha of Cortina) may be applied per crop year. Do not apply within 7 days of harvest. The lowest labelled rate of a non-ionic surfactant (AgSurf or Agral 90 at 0.125% v/v) may be tank-mixed with Cortina. The application may be made by ground application equipment only. DO NOT apply by air. Cortina is a Group 3 fungicide. To limit the potential for development of disease resistance, alternate every application of Cortina with a non-Group 3 fungicide.			
Sunflower, Safflower	For suppression of Sclerotinia head rot (<i>Sclerotinia sclerotiorum</i>)	Apply Cortina at 420 mL/ha (200 g a.i./ha)	Apply Cortina when the crop is in the 10 - 50% disk flower bloom stage.
Note: The lowest labelled rate of a non-ionic surfactant, AgSurf or Agral 90, may be tank-mixed with Cortina. The application may be made by ground or aerial spray equipment. A maximum of one application (420 mL/ha of Cortina) may be applied to sunflower or safflower per crop year. Do not <i>apply</i> within 45 days of harvest. If applying Cortina to greater than 310 ha per day of sunflower and/or safflower using open cab groundboom equipment, applicators must also wear a NIOSH/MSHA-approved respirator.			

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) 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.

Spray Buffer Zones:

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

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	Crop	Spray Buffer Zones (metres) Required for the Protection of:
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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
Aerial (fixed and rotary wing)	Flax (linseed), crambe, borage	10	0	0	0
	safflower, sunflower	15	5	0	0
	Canola, Oriental mustard, rapeseed, <i>Brassica carinata</i>	20	10	1	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.

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, Cortina contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to Cortina 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 Cortina.
- 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 Sipcam Agro USA, Inc. if reduced sensitivity of the pathogen to Cortina 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 a Sipcam Agro USA, Inc. representative at (919) 226 1195.

Section 9: Application Precautions

GROUND APPLICATION:

1. Use well-maintained and calibrated conventional spray equipment, which provides adequate and uniform coverage.
2. Apply Cortina 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/territorial 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:

- 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. If you have questions, call 1-855-462-9621 or obtain technical advice from the distributor or your provincial agricultural representative.
- Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.
- Apply Cortina in a minimum of 50 L of water/ha.
- 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.
- Use mechanical flaggers only.

AERIAL APPLICATION-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 APPLICATION- 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 has communication capabilities at each treatment site at the time of application.
- The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent

label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

- All personnel on the job site must wash hands and face thoroughly before eating and drinking.
- Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
- Read and understand the entire label before opening this product. If you have questions, call the manufacturer at (919) 226 1195 or obtain technical advice from the distributor or your provincial agricultural representative.

Section 10: Mixing Instructions

Mixing Instructions:

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

Cortina applied alone:

1. Add one-half of the required amount of water to the spray or mixing tank and start agitation.
2. Add the required quantity of **Cortina** to the water and complete filling with water to the required total volume.
3. Maintain agitation throughout mixing and spraying.
4. Cortina should be thoroughly dispersed prior to the addition of a non- ionic surfactant. Cortina is recommended to be used with a registered non-ionic surfactant, such as Agral 90 or AgSurf, at 0.125% vol/vol.

Section 11: Pre-harvest Intervals

Crop	PHI (days)
Wheat (spring, durum and winter), Barley, Oats	30
Canola, Rapeseed, Oriental Mustard, <i>Brassica carinata</i> , Flax (Linseed), Crambe, borage	36
Corn (field, sweet, popcorn)	14
Chickpea, Lentils	7
Sugar Beet	7
Peanut	14
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.

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