# [CONTAINER LABEL]

GROUP M04 FUNGICIDE

## **CAPTAN 480 SC**

# **Fungicide**

## Suspension

# **COMMERCIAL (AGRICULTURAL)**

ACTIVE INGREDIENT: Captan 482 g/L

Contains 1,2-benzisothiazolin-3-one at 0.02% as a preservative

# POTENTIAL SKIN SENSITIZER

## **READ LABEL BEFORE USING**

## KEEP OUT OF REACH OF CHILDREN

## REGISTRATION NO. 34551 PEST CONTROL PRODUCTS ACT

For emergency medical help and health/safety inquiries call ProPharma Group at 1.877.250.9291 (24 hours a day)

For spill, leak or fire call INFOTRAC at 1.800.535.5053 (24 hours a day)

**NET CONTENTS: 1 – 1050 L** 

ADAMA Agricultural Solutions Canada Ltd. 300 – 191 Lombard Avenue Winnipeg, Manitoba Canada R3B 0X1 1-855-264-6262

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Apply only when the potential for drift to areas of human habitation and human activity (other than golf courses) such as parks, school grounds, and playing fields, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes, goggles and 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, application, clean-up and repair.

Goggles and gloves are not required to be worn inside the cockpit. Respirators are also not required to be worn inside the cockpit as long as it is equipped with an air filtration mechanism.

When applying using groundboom, use a closed mixing/loading system or a closed-cab sprayer when handling more than 46 kg a.i./day (95 L of product). When applying using airblast, use a closed mixing/loading system or a closed-cab sprayer when handling more than 10.9 kg a.i./day (22 L of product).

The closed cab must have a chemical-resistant physical barrier and respiratory protection (i.e. dust/mist filtering and/or vapour/gas purification system) that totally surrounds the occupant and prevents contact with pesticides outside the cab. Respirators, goggles, and gloves are not required to be worn inside the closed cab but need to be available for exiting the cab.

When applying using open-cab airblast equipment or for overhead spray, also wear chemical-resistant headgear. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection.

When applying using a mechanically-pressurized handgun, also wear coveralls over a long-sleeved shirt and long pants. Also, when applying using a mechanically-pressurized handgun, do not handle more than 0.71 kg a.i (1.5 L of product) per person per day. These restrictions are in place to minimize exposure to individual applicators. Application may need to be performed over multiple days or using multiple applicators.

When preparing flower bulb dip solutions and for all related cleaning and repair tasks, workers must also wear chemical-resistant coveralls over long-sleeved shirt, long pants, goggles, socks and chemical-resistant footwear. When handling treated bulbs and when touching surfaces that have contacted or may have been contaminated by the dipping solution, workers must wear long-sleeved shirt, long pants, goggles, socks and shoes, and chemical-resistant gloves.

**DO NOT** apply using handheld mistblower/airblast or handheld fogging equipment.

DO NOT enter or allow worker entry into treated areas during the restricted entry intervals (REIs) specified on the booklet label.

## **FIRST AID**

**IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**IF 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 of doctor for treatmentadvice.

**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 small wild mammals. Toxic to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

#### **STORAGE**

Store this product away from food or feed.

### **DISPOSAL**

# For recyclable containers:

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local 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.

# For returnable containers:

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

# For containers that can be refilled for the user by the distributor/dealer:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

# Disposal of unused, unwanted product:

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

## **NOTICE TO USER**

This 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.

TM

CAPTAN 480 SC is a registered trademark of an ADAMA Group Company. All other products listed are registered trademarks of their respective companies.

GROUP M04 FUNGICIDE

## **CAPTAN 480 SC**

# **Fungicide**

## Suspension

# **COMMERCIAL (AGRICULTURAL)**

ACTIVE INGREDIENT: Captan 482 g/L

Contains 1,2-benzisothiazolin-3-one at 0.02% as a preservative

# POTENTIAL SKIN SENSITIZER

## **READ LABEL BEFORE USING**

## KEEP OUT OF REACH OF CHILDREN

## REGISTRATION NO. 34551 PEST CONTROL PRODUCTS ACT

For emergency medical help and health/safety inquiries call ProPharma Group at 1.877.250.9291 (24 hours a day)

For spill, leak or fire call INFOTRAC at 1.800.535.5053 (24 hours a day)

**NET CONTENTS: 1 – 1050 L** 

ADAMA Agricultural Solutions Canada Ltd. 300 – 191 Lombard Avenue Winnipeg, Manitoba Canada R3B 0X1 1-855-264-6262

## PRODUCT INFORMATION

CAPTAN 480 SC is an aqueous suspension suitable for dilution in water as a spray for the control of certain fungal diseases of fruit, vegetables and ornamental crops. CAPTAN 480 SC is also useful as a soil treatment for the control of certain seed-rots and damping-off diseases.

## **PRECAUTIONS**

#### KEEP OUT OF REACH OF CHILDREN.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes, goggles and 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, application, clean-up and repair.

Goggles and gloves are not required to be worn inside the cockpit. Respirators are also not required to be worn inside the cockpit as long as it is equipped with an air filtration mechanism.

When applying using groundboom, use a closed mixing/loading system or a closed-cab sprayer when handling more than 46 kg a.i./day (95 L of product). When applying using airblast, use a closed mixing/loading system or a closed-cab sprayer when handling more than 10.9 kg a.i./day (22 L of product).

The closed cab must have a chemical-resistant physical barrier and respiratory protection (i.e. dust/mist filtering and/or vapour/gas purification system) that totally surrounds the occupant and prevents contact with pesticides outside the cab. Respirators, goggles, and gloves are not required to be worn inside the closed cab but need to be available for exiting the cab.

When applying using open-cab airblast equipment or for overhead spray, also wear chemical-resistant headgear. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection.

When applying using a mechanically-pressurized handgun, also wear coveralls over a long-sleeved shirt and long pants. Also, when applying using a mechanically-pressurized handgun, do not handle more than 0.71 kg a.i (1.5 L of product) per person per day. These restrictions are in place to minimize exposure to individual applicators. Application may need to be performed over multiple days or using multiple applicators.

When preparing flower bulb dip solutions and for all related cleaning and repair tasks, workers must also wear chemical-resistant coveralls over long-sleeved shirt, long pants, goggles, socks and chemical-resistant footwear. When handling treated bulbs and when touching surfaces that have contacted or may have been contaminated by the dipping solution, workers must wear long-sleeved shirt, long pants, goggles, socks and shoes, and chemical-resistant gloves.

**DO NOT** apply using handheld mistblower/airblast or handheld fogging equipment.

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) on the label. Employers should make every effort to schedule pesticide applications and worker tasks in order to avoid early entry of workers into treated areas. Under exceptional circumstances, certified pesticide applicators may enter treated areas for short-term tasks not involving hand

labour if at least 4 hours have passed since application and a long-sleeved shirt, long pants, rubber boots, socks, goggles, chemical-resistant gloves and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides is worn. Time spent in the treated area cannot exceed 1 hour in a 24-hour period or until restricted entry interval is over.

Change contaminated clothing daily and wash thoroughly before re-use. Wash hands, face and arms thoroughly after handling **CAPTAN 480 SC** and before drinking, eating or smoking. Shower after use or at the end of the work day. Wash clothing and gloves before re- use. Always work out of the wind during mixing and loading operations. Keep unprotected persons out of operating area or vicinity where there may be drift.

Apply only when the potential for drift to areas of human habitation and human activity (other than golf courses) such as parks, school grounds, and playing fields, 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:

Стор	Activity	REI <sup>a</sup> and/or
Greenhouse ornamentals <sup>C</sup> (non-cut flower): foliar applications to aster, camellia, carnation, chrysanthemum, dahlia, lilac, rose and tulip Rhubarb (in forcing sheds)	All activities  Harvesting All other activities	PHI <sup>b</sup> 12 hours  8 days 12 hours
Soil and greenhouse bench treatment (soil treatment): seedlings or transplants of roses and other flowers, shrubs, trees, lawn seedbeds, beans, celery, crucifers, eggplants, peas, tomatoes, pepper	All activities	12 hours
Apple and pear orchards that have high- density production where the maximum canopy width per tree is 2 m (1 m to reach center or trunk from the row alley). These tree architectural restrictions are to minimize worker contact with treated foliage.	Hand thinning fruit, hand harvesting Mechanically-assisted harvesting Hand pruning, training All other activities	15 days 8 days 6 days 2 days
Non-High-Density Apple and Pear Orchards: Apple and pear orchards that do not meet the requirements specified for high-density apple and pear	Hand thinning fruit Hand harvesting Mechanically-assisted harvesting Hand pruning, training	24 days 19 days 8 days 4 days

orchards.	All other activities	2 days
Cherry, peach, plum, prune, apricot,	Hand thinning fruit	29 days
nectarine trees	Hand harvesting	15 days
	Mechanically-assisted harvesting	8 days
	All other activities	1 day
Grape	Turning, girdling	78 days
-	Hand harvesting, training (full	55 days
	foliage), tying (full foliage), leaf	
	pulling by hand	
	Mechanically-assisted harvesting	8 days
	All other activities	12 hours
Cucumber (field grown)	Hand set/ hand line irrigation related	10 days
	activities involving foliage contact	
	Harvesting	8 days
	Training, tying	3 days
	All other activities	12 hours
Potato	Harvesting	8 days
	Hand set/ hand line irrigation related	7 days
	activities involving foliage contact	
	Rogueing	6 days
	All other activities	12 hours
Tomato (field grown – foliar	Hand set / hand line irrigation related	10 days
applications)	activities involving foliage contact	
	Harvesting	8 days
	Training, tying	7 days
	All other activities	12 hours
Strawberry (field grown)	Hand set / hand line irrigation related	9 days
	activities involving foliage contact	
	Harvesting	8 days
	All other activities	12 hours
Raspberry	Harvesting	8 days
	Hand set / hand line irrigation related	7 days
	activities involving foliage contact	
	Training / tying (full foliage)	6 days
	All other activities	12 hours
Highbush blueberry, blackberry,	Harvesting	8 days
loganberry	Hand set / hand line irrigation related	6 days
	activities involving foliage contact	
	Training / tying (full foliage)	5 days
	All other activities	12 hours
Lowbush blueberry	Harvesting	8 days
	Hand set / hand line irrigation related	6 days
	activities involving foliage contact	
	All other activities	3 days
Ginseng	Harvesting	20 days

	Hand set / hand line irrigation related	7 days
	activities involving foliage contact	-
	All other activities	12 hours
Outdoor Ornamentals: Foliar (cut	Harvesting, disbudding, hand pruning	7 days
flower)	(full foliage)	
	All other activities	1 day
Outdoor Ornamentals: Foliar (non-cut	Harvesting, disbudding, hand pruning	4 days
flower)	(full foliage)	
	All other activities	12 hours
Turf (sod farms)	All activities	12 hours
Turf (golf course)	All activities	Until
		sprays
		have dried

<sup>&</sup>lt;sup>a</sup> REI = Restricted-Entry Interval. REIs longer than 12 hours apply to hand labour tasks.

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

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

#### **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 of 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.

b PHI = Preharvest Interval.

<sup>&</sup>lt;sup>c</sup> Only applies to non-cut flower, as there is a label statement that will prohibit the use on cut flowers.

#### **ENVIRONMENTAL PRECAUTIONS**

Toxic to small wild mammals. Toxic to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

#### **STORAGE**

Store this product away from food or feed.

## **DISPOSAL**

# For recyclable containers:

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local 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.

## For returnable containers:

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

## For containers that can be refilled for the user by the distributor/dealer:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

# Disposal of unused, unwanted product:

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

#### RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that **CAPTAN 480 SC** contains a Group M04 fungicide. Any fungal population may contain individuals naturally resistant to **CAPTAN 480 SC** and other Group M04 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:

- Where possible, rotate the use of **CAPTAN 480 SC** or other Group M04 fungicides with different groups that control the same pathogens.
- Use tank-mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- 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 ADAMA
  Agricultural Solutions Canada Ltd. if reduced sensitivity of the pathogen to CAPTAN 480
  SC is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

For further information and to report suspected resistance, contact ADAMA Agricultural Solutions Canada Ltd. at 1 855-264-6262 or at www.adama.com/canada.

#### **DIRECTIONS FOR USE**

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.

## **GENERAL USE PRECAUTIONS**

Observe use limitation given on the label for specific crops. Regulations of Health Canada have established the amounts of agricultural chemicals that are permitted to remain on food crops at time of harvest. To avoid exceeding these residue tolerances, use only the recommended amounts and do not spray nearer to harvest than the number of days indicated for each crop, or not later than the stage indicated. Consult local agricultural authorities for additional information such as the timing and number of applications needed which will vary with local conditions.

<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. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

## **AERIAL APPLICATION INSTRUCTIONS**

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.

# **Operator Precautions**

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

# **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

**Volume:** Apply the recommended rate in a minimum spray volume of 50.0 litres per hectare.

## **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	Method of pplication Crop		Spray Buffer Zones (metres) Required for the Protection of:			uired for
11			Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:	
			Less	Greater	Less	Greater
			than 1 m	than 1 m	than 1 m	than 1 m
Field	Outdoor ornamental	s (cut and	2	1	4	2
sprayer	non-cut flowers)		-			
Spray or		ush or lowbush blueberry,		1	5	2
	blackberry, loganber		2			
	Ginseng, raspberry	<i></i>	2	1	5	3
	Strawberry		3	1	5	3
	Cucumber, tomato,	ootato	3	1	10	4
	Turf (golf course, sod farms only)		5	1	10	5
Airblast	Highbush or	Early growth	25	3	35	30
	lowbush blueberry,	stage				
	blackberry,	Late growth	15	2	25	20
	loganberry	stage				
	Raspberry	Early growth	25	3	40	30
		stage				
		Late growth	20	2	30	20
		stage				
	Apple and pear	Early growth	30	4	40	30
	orchards, grape	stage				
		Late growth	20	2	30	20
		stage				
	Peach, plum,	Early growth	30	5	40	35
	prune, apricot,	stage	•			
	nectarine, cherry	Late growth	20	3	35	25
	trees.	stage	40	1	250	70
Aerial	Highbush or	Fixed wing	40	1	250	50
	lowbush blueberry	Rotary wing	30	1	125	40
	Apple and pear	Fixed wing	55	1	275	70
	orchards	Rotary wing	40	1	150	50
	Grape	Fixed wing	65	1	325	85
	Ctuoxxib ouux	Rotary wing	45	1	175	55
	Strawberry	Fixed wing	80 55	1	350 175	100 70
	D 1 1	Rotary wing		3		125
	Peach, plum,	Fixed wing	85 55		300	75
	prune, apricot, nectarine trees	Rotary wing	33	1	175	13
	nectarine trees	<u> </u>		<u> </u>	1	

Cherry trees	Fixed wing	85	3	300	125
	Rotary wing	60	1	175	75
Potatoes	Fixed wing	90	3	350	125
	Rotary wing	60	1	175	75
Cucumber, tomato	Fixed wing	100	5	350	150
	Rotary wing	70	2	200	90

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.

#### TANK MIXING AND COMPATIBILITY

# **Tank Mixtures**

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 ADAMA Agricultural Solutions Canada Ltd. at 1-855-264-6262 for information before applying any tank mix that is not specifically recommended on this label.

Alkaline materials such as spray lime, lime-sulfur and Bordeaux mixture will reduce the fungicidal activity of CAPTAN 480 SC. Do not apply CAPTAN 480 SC in combination with or immediately before or closely following oil sprays. Combinations with solvent formulation of organic phosphates should not be used. The use of spreaders which cause excessive wetting is not advised. Combinations of CAPTAN 480 SC and sulfur should not be used on crops sensitive to sulfur.

# **PLANT SAFETY**

When used at high rates or in drenching sprays, **CAPTAN 480 SC** may cause a necrotic spotting of tender, immature leaves of certain varieties of apples, peaches, plums, and cherries. This type of injury is most likely to occur in the early cover sprays during long periods of warm, cloudy, humid weather. To avoid hazard of leaf spotting under such conditions, use **CAPTAN 480 SC** and other spray materials at lowest recommended rates and avoid drenching trees.

# **MIXING INSTRUCTIONS**

1. Before using, mix contents of the container thoroughly to ensure the product is suspended.

- 2. Fill the spray tank to at least ½ capacity with clean water and begin agitation.
- 3. Pour recommended amount of CAPTAN 480 SC into the spray tank.
- 4. Before adding any optional tank mix partners, add more water and add the partner according to product labels.
- 5. Add balance of water.
- 6. Maintain agitation during filling and spraying operations. Do not allow mixture to stand.
- 7. Use a screen not finer than 50 mesh in entire system.

## APPLICATION RATES FRUIT CROPS

APPLE: Control of: Scab (Venturia inaequalis) - Sooty Blotch (Peltaster fruiticola, Leptodontium elatuius and Geastrumia polystigmatis), Fly Speck (Schizothyrium pomi), Brook's Spot (Mycosphaerella pomi), Bitter Rot (Colletotrichum gloeosporiodes and C. acutatum), Black Rot (Botryosphaeria obtusa) and Bull's Eye Rot (Gloeosporium perennans) - Initiate applications preventatively before infection becomes established. Apply 5 L/ha (2.4 kg a.i./ha) under conditions of low to moderate disease pressure only. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix CAPTAN 480 SC at the 5 L/ha (2.4 kg a.i./ha)rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Apply at a minimum of a 7-day interval. Early season sprays may cause necrotic spotting to foliage of Red Delicious, Winesap and other sensitive varieties. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

High-Density Apple Orchards: Orchards that have high-density production where the maximum canopy width per tree is 2 m (1 m to reach centre or trunk from the row alley). Do not use more than 10 applications per year.

Non-High-Density Apple Orchards: Do not use more than 2 applications per year. When hand thinning is performed, make 1 application before hand thinning fruit and 1 application after hand thinning fruit.

Tank-mix with Nova<sup>TM</sup> Fungicide (mycobutanil) for Control of Apple Scab (GROUND APPLICATION ONLY) - NOVA is a systemic fungicide. When tank-mixing, use 340 g/ha (full rate) of Nova<sup>TM</sup> Fungicide and <u>one-half</u> of the recommended rates of CAPTAN 480 SC for apple scab control. Follow all directions for Nova<sup>TM</sup> Fungicide as given on the Nova<sup>TM</sup> Fungicide label.

**APRICOT:** Control of: Brown Rot (*Monilinia fructicola*) - Apply preventatively when conditions are favourable for disease development. An application can be made, starting as soon as pink bud, up to pre-harvest. Apply 6.64 L/ha (3.2 kg a.i./ha) under conditions of low to moderate disease pressure. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 6.64 L/ha (3.2 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Do not apply more than one application per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

CHERRIES: Control of: (Sour, Sweet): Brown Rot (Monilinia fructicola) and Leaf Spot (Shot Hole) (Blumeriella jaapii) - Leaf injury may result to the Schmidt and Emperor Francis varieties of sweet cherry in post-bloom sprays. Apply preventatively when conditions are favourable for disease development. An application can be made, starting as soon as pink bud, up

to pre-harvest. Apply 6.64 L/ha (3.2 kg a.i./ha) under conditions of low to moderate disease pressure. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 6.64 L/ha (3.2 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Do not apply more than one application per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

**PEACH AND NECTARINE: Control of: Brown Rot** (*Monilinia fructicola*) and Scab (*Cladosporium carpophilus*)- Apply preventatively when conditions are favourable for disease development. An application can be made, starting as soon as pink bud, up to pre-harvest. Apply 6.64 L/ha (3.2 kg a.i./ha) under conditions of low to moderate disease pressure. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 6.64 L/ha (3.2 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Do not apply more than one application per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

**PEAR:** Control of: Scab (*Venturia pirina*) and Sooty Blotch (*Peltaster fruiticola*, *Leptodontium elatuius* and *Geastrumia polystigmatis*) - Do not use on D'Anjou pears. Initiate applications preventatively before infection becomes established. Apply 5 L/ha (2.4 kg a.i./ha) under conditions of low to moderate disease pressure only. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 5 L/ha (2.4 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Apply at a minimum of a 7-day interval. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

High-Density Pear Orchards: Orchards that have high-density production where the maximum canopy width per tree is 2 m (1 m to reach centre or trunk from the row alley). Do not use more than 10 applications per year.

Non-High-Density Pear Orchards: Do not use more than 2 applications per year. When hand thinning is performed, make 1 application before-hand thinning fruit and 1 application after hand thinning fruit.

**PLUM, PRUNE: Control of: Black Knot** (*Apiosporina morbosa*) and Brown Rot (*Monilinia fructicola*) - Apply preventatively when conditions are favourable for disease development. An application can be made, starting as soon as pink bud, up to pre-harvest. Apply 6.64 L/ha (3.2 kg a.i./ha) under conditions of low to moderate disease pressure. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 6.64 L/ha (3.2 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Do not apply more than one application per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

GRAPE: Control of: Dead Arm (*Phomopsis viticola*) (Current Season's Infections) - Use 3.3 L/ha (1.6 kg a.i./ha). Apply when new shoots are 1 to 5 centimetres long and again when 10 to 15 centimetres long. Do not apply more than 2 applications per year for dead arm. Apply at a minimum of a 7-day interval.

Control of: Downy Mildew (Plasmopara viticola) and Black Rot (Guignardia bidwellii) - Use

3.3 - 5 L/ha (1.6 - 2.4 kg a.i./ha). Do not apply more than 1 application per year for downy mildew or black rot. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

**RASPBERRY:** Control of: Fruit Rot (*Botrytis cinerea*) and Spur Blight (*Didymella applanate*) - Use 4.15 L of product (2 kg a.i) in 1,000 litres of water per hectare. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. <u>Do not apply by air.</u>

**BLACKBERRY: Control of: Fruit Rot** (*Botrytis cinerea*) - Use 3.73 L of product (1.8 kg a.i.) in 1,000 litres of water per hectare. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. Do not apply by air.

**LOGANBERRY:** Control of: Cane Spot (*Elsinoë veneta*), Fruit Rot (*Botrytis cinerea*), Leaf Spot (*Septoria rubi*) and Spur Blight (*Didymella applanate*) - Use 2.5 – 3.73 L (1.2 – 1.8 kg a.i) in 1,000 litres water per hectare. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. Do not apply by air.

**BLUEBERRY:** Control of: Fruit Rot (*Botrytis cinerea*) and Mummy Berry (*Monilinia vaccinii-corymbosi*) - Use 3.73 L (1.8 kg a.i) of product in 1,000 litres per hectare. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

**STRAWBERRY:** Control of: Gray-Mold Rot (*Botrytis cinerea*) and Leaf Spot (*Mycosphaerella fragariae*) - Use 1,000 litres water per hectare. Apply preventatively, when conditions are favourable to disease development. Apply 5.8 L/ha (2.8 kg a.i./ha) under conditions of low to moderate disease pressure only. If disease pressure is high or conditions are conducive for high disease pressure, either tank-mix **CAPTAN 480 SC** at the 5.8 L/ha (2.8 kg a.i./ha) rate with another fungicide registered for control of the same disease, or switch to another fungicide registered for control of the same disease. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions. **DO NOT** use on greenhouse strawberry.

RHUBARB (IN FORCING SHEDS): Control of: Grey Mold (*Botrytis cinerea*) - Use 2.1 - 3.3 L (1 - 1.6 kg a.i) of product in 1,000 litres water. Maximum spray volume of 150 L/ha. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 6 applications per year. <u>Do not apply by air.</u>

## **VEGETABLE CROPS**

**CUCUMBER: Control of: Anthracnose (***Colletotrichum orbiculare***) and Scab (***Cladosporium cucumerinum***) -** Use 3.73 - 7 L/ha (1.8 - 3.4 kg a.i./ha) in sufficient water for thorough coverage. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 3 applications per year. Use 3.73 - 5.4 L (1.8 - 2.6 kg a.i.) of product on young plants, 5.4 - 7 L (2.6 - 3.4 kg a.i.) on mature plants. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions. **DO NOT** use on greenhouse cucumber.

**POTATO:** Control of: Early Blight (*Alternaria solani*) and Late Blight (*Phytophthora infestans*) – Use 4.15 - 6.22 L/ha (2 -3 kg a.i./ha) in sufficient water for thorough coverage. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 3 applications per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions.

**TOMATO:** Control of: Anthracnose (*Colletotrichum* spp.) and Septoria Leaf Spot (*Septoria lycopersici*) - Use 4.56 - 7 L/ha (2.2 - 3.4 kg a.i./ha) in sufficient water for thorough coverage. Apply preventatively, when conditions are favourable to disease development. Apply at a minimum of a 7-day interval. Do not make more than 3 applications per year. May be applied by conventional ground equipment or aircraft. Refer to aerial application instructions. **DO NOT** use on greenhouse tomato.

# NOTICE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATION.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than ADAMA Agricultural Solutions Canada Ltd. under the User Requested Minor Use Label Expansion program. For these uses, ADAMA Agricultural Solutions Canada Ltd. 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.

#### **GINSENG**

For the control of rhizoctonia root rot (*Rhizoctonia solani*), pythium root rot and damping-off (*Pythium* spp.), phytophthora root rot (*Phytophthora cactorum*) and grey mould (*Botrytis cinerea*) and suppression of cylindrocarpon root rot (*Cylindrocarpon destructans*), apply **CAPTAN 480 SC** as a broadcast foliar spray at a rate of 4.15 L/ha (2.0 kg a.i./ha) in a spray volume of 935 to 1871 L water/ha. Begin applications prior to disease onset, when conditions are conducive to disease development with a minimum interval of 7 days. Do not apply more than 8 applications per year. Ground applications only.

The application rate should be based on 4.15 L product per hectare applied in the appropriate volume of carrier to achieve thorough coverage of all plant surfaces. For example, if you apply 1000 litres of water per hectare, thoroughly mix 4.15 L of product in 1000 litres of water and apply thorough coverage of all above-ground plant surfaces for optimal disease control. Use care in mixing and application to avoid exceeding rates of 4.15 L product per hectare regardless of spray volume.

## TURF AND ORNAMENTAL USES

**SOIL AND GREENHOUSE BENCH TREATMENT:** Use as a soil treatment for the control of damping-off and fungus root rot diseases of seedlings or transplants of roses (and other shrubs, trees, flowers), lawn seedbeds, and vegetables (beans, peas, celery, crucifers, eggplants, pepper, tomato). Use 2.5 L (1.2 kg a.i.) per 1,000 litres water and apply at rates of 50 to 85 litres per 100 square metres. Work into the upper 7.5 to 10 centimetres of soil before planting. Do not apply more than one application per year. <u>Do not apply by air.</u>

TURF (golf courses and sod farms only): Control of: Brown Patch (Rhizoctonia solani),

Damping-Off (*Pythium*, *Rhizoctonia*, and *Fusarium* spp.), Leaf Spot and Melting-Out (*Bipolaris*, *Drechslera*, and *Exserohilum* spp.) and Root Rot (*Pythium* spp.) - Use 100 mL (48.2 g a.i.) in 20 L of water per 100 square metres. Apply preventatively, when conditions are favourable to disease development. Do not make more than one application per year. Do not apply to home lawns, parks, schools, sport fields and other recreation areas. <u>Do not apply by air.</u>

**OUTDOOR ORNAMENTALS: Foliar (cut flower) precautions**: Do not apply more than one application per year at a maximum of 2.5 L/ha (1.2 kg a.i./ha).

**CAMELLIA:** Control of: Petal Blight (*Ciborinia camelliae*) - Use 2.1 L (1 kg a.i.) in 1,000 litres water. Apply preventatively, when conditions are favourable to disease development. Apply to foliage and soil around plants. Re-apply on 7- to 10-day intervals if disease pressure continues, or if environmental conditions are conducive to disease development. Do not apply more than 6 applications per year. **DO NOT** use on greenhouse cut flowers. <u>Do not apply by air.</u>

CARNATION: Control of: Leaf Spot (Alternaria dianthicola, A. dianthi), CHRYSANTHEMUM: Botrytis Flower Blight (Botrytis cinerea) and Septoria Leaf Spot (Septoria chrysanthemi, S. chrysanthemella). ROSE: Control of: Black Spot (Diplocarpon rosae) - Use 2.1 – 2.5 L (1 – 1.2 kg a.i.) in 1,000 litres water. Apply to give even coverage of upper and lower leaf surface. Apply preventatively, when conditions are favourable to disease development. Re-apply on 7- to 10-day intervals if disease pressure continues, or if environmental conditions are conducive to disease development. Do not apply more than 6 applications per year. Do not apply by air. DO NOT use on greenhouse cut flowers.

**ASTER, DAHLIA, LILAC, ROSE, TULIP: Control of: Botrytis Flower Blight** (*Botrytis cinerea*) – Use 2.1 L (1 kg a.i.) in 1,000 litres water. Apply preventatively, when conditions are favourable to disease development and re-apply on 7- to 10-day intervals if disease pressure continues, or if environmental conditions are conducive to disease development. Do not apply more than 6 applications per year. <u>Do not apply by air.</u> **DO NOT** use on greenhouse cut flowers.

**BEGONIA** (TUBEROUS), DAFFODIL, DAHLIA, GLADIOLUS, IRIS (Bulbous), NARCISSUS, TULIP: Control of: Damping-Off, Bulb Rots (*Pythium, Rhizoctonia*, and *Fusarium* spp.) – Use 6.22 – 15.77 L (3 – 7.6 kg a.i.) in 1,000 litres water. Before storage, dip and allow to dry. DO NOT dip flower bulbs by hand. Only mechanical or automated dipping equipment must be used (for example, conveyor belt, forklift). <u>Do not apply by air.</u> **DO NOT** use on greenhouse cut flowers.

## **NOTICE TO USER**

This 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.

TM

CAPTAN 480 SC is a registered trademark of an ADAMA Group Company.

NOVA is a trademark of Corteva Agriscience LLC.