

## Thief 50 SC

GROUP

1

FUNGICIDE

### COMMERCIAL Suspension Concentrate

#### ACTIVE INGREDIENT:

thiophanate-methyl

500 g/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.000904% and 2-methyl-4-isothiazolin-3-one at 0.000296 % as preservatives.

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

REGISTRATION NO.: 34499 PEST CONTROL PRODUCTS ACT

WARNING – POISON



#### **Sharda Cropchem Limited**

2nd Floor, Prime Business Park  
Dashrathlal Joshi Road Vile  
Parle (West) Mumbai - 400056,  
India

#### **Canadian Agent: Sharda Cropchem Limited**

Kingsview Blvd  
Etobicoke, Ontario, CA  
M9R1V1  
1-844-810-5720  
1-416-840-5639

Net Contents: 1 L to 50 L

If you have any questions, call the manufacturer at 1-844-810-5720 OR 1-416-840-5639 or obtain technical advice from the distributor or your provincial agricultural representative.

Label

**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.

**FIRST AID:**

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

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If 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 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:**

No specific antidote is available. Treat symptomatically.

**PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Harmful if inhaled. Avoid contact with eyes, skin or clothing. Avoid inhaling/breathing dusts or spray mists. Wash thoroughly with soap and water after handling. Wash contaminated clothes before re-use. Do not contaminate food or feed. Do not contaminate domestic or irrigation water supplies, lakes, streams and ponds.

DO NOT apply in greenhouses, unless otherwise specified in the crop-specific use directions.

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

**ENVIRONMENTAL PRECAUTIONS:**

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

Toxic to birds and small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

Toxic to earthworms.

Toxic to bees. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. To further minimize exposure to pollinators, refer to the complete guidance "Protecting Pollinators during Pesticide Spraying – Best Management Practices" on the Health Canada website ([www.canada.ca/pollinators](http://www.canada.ca/pollinators)).

Follow crop specific directions for application timing.

For cherry, peach, nectarine, plum and prune: Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the evening when most bees are not foraging.

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:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the 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.

***IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 613-996-6666***

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Booklet

**GENERAL INFORMATION:**

THIEF 50 SC is a systemic fungicide for control or suppression of certain fungal or bacterial diseases of apples, pears, lowbush blueberries, peaches, nectarines, plums, prunes, cherries, strawberries, raspberries, sugarbeets, potato seed pieces, ornamentals, greenhouse tobacco seedlings and white button mushroom casing.

**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.

**FIRST AID:**

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

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If 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 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:**

No specific antidote is available. Treat symptomatically.

**PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Harmful if inhaled. Avoid contact with eyes, skin or clothing. Avoid inhaling/breathing dusts or spray mists. Wash thoroughly with soap and water after handling. Wash contaminated clothes before re-use. Do not contaminate food or feed. Do not contaminate domestic or irrigation water supplies, lakes, streams and ponds.

DO NOT apply in greenhouses, unless otherwise specified in the crop-specific use directions.

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

Apply only when the potential for drift to areas of human habitation or areas of human activity (such as houses, cottages and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

After handling THIEF 50 SC, wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. No food, drink or tobacco should be allowed in areas of chemical storage or use. Do not apply this product in a way that will contact workers or other persons. Only protected handlers may be in the area during application.

**Personal Protective Equipment (PPE):**

For all uses (except for potato seed piece treatment):

- Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks during mixing, loading, application, clean-up and repair. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab and/or cockpit.
- If mixing and loading more than 520 L of THIEF 50 SC (260 kg a.i.) in a day, a closed mixing/loading system is required.
- For groundboom application, if applying more than 520 L of THIEF 50 SC (260 kg a.i.) in a day, a closed cab tractor is required. These restrictions are required to minimize exposure to the worker.

For potato seed piece treatment:

- Wear a long-sleeved shirt, long pants, chemical-resistant gloves, shoes and socks when treating, planting and otherwise handling treated potato seed pieces. Use a closed-cab tractor when planting. Gloves are not required within the cab.
- If it is necessary for a worker to be at the back of the planter to conduct planting activities, the worker must wear coveralls over a long-sleeved shirt, long pants, socks and chemical-resistant footwear, chemical-resistant gloves, and a NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit tested. In addition, only 50,000 kg of potato seed pieces can be planted per day with one set of workers. These restrictions are required to minimize exposure to the worker on the back of the planter. Planting may need to be performed over multiple days, or using different workers in the back of the planter who have not already been exposed that day to THIEF 50 SC by performing another task.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

DO NOT enter or allow worker entry into treated areas to perform post-application activities during the intervals specified in the following table.

<b>Restricted-entry intervals and Preharvest intervals for Thiophanate-methyl</b>		
<b>Crop</b>	<b>Postapplication Activity</b>	<b>REI and/or PHI</b>
Apples, pears	Harvesting (hand, mechanical)	7 days
	All other activities	12 hours
Cherry, nectarine, peach, plum, prune	Hand thinning fruit	4 days
	Harvesting (hand, mechanical)	1 day
	All other activities	12 hours
Strawberry	Harvesting (hand, mechanical)	1 day
	All other activities	12 hours
Raspberry	Harvesting (hand, mechanical), tying/training, (full foliage), hand set/hand line irrigation related activities involving foliar contact	1 day
	All other activities	12 hours
Low bush blueberry	Harvesting (hand, mechanical)	60 days
	Hand set/hand line irrigation related activities involving foliar contact	1 day
	All other activities	12 hours
Sugar beets	Harvesting (hand, mechanical)	21 days
	All other activities	12 hours

White button mushrooms (casing)	Harvesting (hand, mechanical)	17 days
White button mushrooms (spawn)	Harvesting (hand, mechanical)	29 days
Outdoor roses and outdoor ornamentals grown for cut flower production	Hand harvesting, hand pruning, disbudding	2 days
	All other activities	12 hours
Outdoor roses and ornamentals not grown for cut flower production	All activities	12 hours
Greenhouse ornamentals not grown for cut flower production	All activities	12 hours
Aspen and poplar	All activities	12 hours
Greenhouse tobacco seedlings	Harvesting (hand, mechanical)	65 days
	Activities with foliar contact	6 days
	Activities with no foliar contact	12 hours

#### **ENVIRONMENTAL PRECAUTIONS:**

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

Toxic to birds and small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

Toxic to earthworms.

Toxic to bees. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. To further minimize exposure to pollinators, refer to the complete guidance “Protecting Pollinators during Pesticide Spraying – Best Management Practices” on the Health Canada website ([www.canada.ca/pollinators](http://www.canada.ca/pollinators)).

Follow crop specific directions for application timing.

For cherry, peach, nectarine, plum and prune: Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the evening when most bees are not foraging.

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:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the 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.

***IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 1-866-336-2983***

## RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that THIEF 50 SC contains a Group 1 fungicide. Any fungal population may contain individuals naturally resistant to THIEF 50 SC and other Group 1 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 THIEF 50 SC or other Group 1 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 Pest 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 Sharda Crochem Limited if reduced sensitivity of the pathogen to THIEF 50 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 advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information and to report suspected resistance, contact Sharda Crochem Limited at 1-844-810-5720 OR 1-416-840-5639.

Since the occurrence of resistance cannot be foreseen, Sharda Crochem Limited accepts no responsibility for any loss of, or damage to, crops resulting from the failure of THIEF 50 SC to control the resistant fungi strains.

## MIXING:

**SHAKE WELL BEFORE USING.** Some settling may occur during prolonged periods of non-use. When high pH tank mixes exist, the interval between mixing and application should be minimized. The buffering of tank water to pH 6-7 prior to the addition of THIEF 50 SC is recommended. Add required volume amount of THIEF 50 SC to partially fill tank (1/2 total volume), agitate by mechanical or hydraulic means, add tank mix product if used (see below), agitate again and then add remaining required amount of water. Continuous agitation is recommended to keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

Tank mixing instructions: THIEF 50 SC is compatible with most commonly used pesticides. If tank mixing with other materials, add products in the following order: wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble materials such as fertilizers. No claim of compatibility with other products is implied: Do not tank mix with copper-containing materials or with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. Consult the intended tank mix partner product label for appropriate application rates and use instructions. Follow the label directions for the most restrictive of label precautions and limitations. This product may not be mixed with any product containing a label prohibition against such mixing. Read and observe the most restrictive precautionary statements and other information appearing on product labels used in mixtures. THIEF 50 SC may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact *Sharda Cropchem Limited* at 1-844-810-5720 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.



<b>DIRECTIONS FOR USE:</b>
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To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

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.

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

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

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

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

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

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

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

### **Use Precautions**

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

### **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 boomlabel.

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.

## 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 Application	Crop		Spray Buffer Zones (metres) Required for the Protection of:			
			Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	Sugarbeet		1	1	0	0
	Lowbush blueberry, aspen, poplar, roses, ornamental plants, strawberry, raspberry		2	1	0	0
Airblast	Roses, ornamental plants	Early growth stage	20	15	0	0
		Late growth stage	15	5	0	0
	Lowbush blueberry, aspen, poplar, raspberry	Early growth stage	25	15	0	0
		Late growth stage	15	10	0	0
	Cherry, prune, peach, nectarine, plum	Early growth stage	30	20	0	0
		Late growth stage	20	10	0	0
	Apple, pear	Early growth stage	20	10	0	0
		Late growth stage	10	5	0	0
Aerial	Lowbush blueberry	Fixed wing	45	15	0	0
		Rotary wing	40	15	0	0

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.

### RATE:

Rates for orchard spraying are shown as mL of THIEF 50 SC per 1000 litres water for dilute spraying based on a volume of approximately 3500 litres per hectare. For concentrate spraying apply the same quantity per hectare as would be applied by dilute spraying. For potato seed piece treatment, use a minimum of 1.3 L water per 280 mL of THIEF 50 SC. Use the recommended rate and use a shorter spray interval within the stated range under conditions of severe disease pressure.

### Compatibility:

THIEF 50 SC is compatible with most pesticides; do not mix with lime or other alkaline materials

**APPLES AND PEARS:**

NOTE: When using THIEF 50 SC in a tank mix, only use with a suitable protectant fungicide that is registered on the target crops at a suitable timing. Always follow label rates and the most conservative personal protective equipment, pre-harvest intervals (PHI), re- entry intervals (REI) and spray intervals of the two tank mix products.

**Control of Apple Scab (*Venturia spp.*), and Powdery Mildew (*Podosphaera leucotricha*):** Spray with ground application equipment using sufficient volume for thorough coverage. . When used with a tank mix partner, always use the most restrictive preharvest interval labelled for either tank mix partner. DO NOT APPLY BY AIR.

**British Columbia**

For apple scab and powdery mildew control in the Okanagan-Kootenay region of British Columbia, apply THIEF 50 SC at the rate of 3.15 L of product (1.58 kg ai) per hectare. Consult local authorities for timing of applications. The product may be applied twice per season with a minimal retreatment interval of 7 days. The maximum seasonal rate is 6.30 L of product (3.15 kg ai) per hectare.

**LOWBUSH BLUEBERRIES:**

**Control of Phomopsis Twig Blight (*Phomopsis vaccinii*):** Apply 1.54 L of THIEF 50 SC in 1000 L of water (0.770 kg ai) per hectare when using ground application equipment or 50 – 60 L of water for aerial applications. Commence applications at bud break. Make 2 applications at a 10 - 14-day interval. Exact interval used depends on weather conditions and disease development. Contact local extension officials. The maximum seasonal rate is 3.08 L of product (1.54 kg ai) per hectare.

**PEACHES, NECTARINES, PLUMS, PRUNES, CHERRIES:**

**Control of Brown Rot (*Monilinia spp.*):** Apply 700 mL of THIEF 50 SC per 1000 L of water, using ground application equipment, at very early stages of blossoming, and at full bloom to ensure adequate protection. In British Columbia apply at pink and full bloom stage. Based on a volume of 3500 L of water per hectare, this rate is 2.45 L of product (1.225 kg ai) per hectare for a single application. Repeat once 7 days later if wet weather conditions prevail. The maximum seasonal rate is 4.9 L of product (2.45 kg ai) per hectare. DO NOT APPLY BY AIR

**RASPBERRIES:**

**Control of Powdery Mildew (*Podosphaera macularis*) and Fruit Rots (*Botrytis cinerea*):** Apply 700 mL of THIEF 50 SC per 1000 L of water, using ground application equipment, during flowering. Based on a volume of 2200 L of water per hectare, this rate is 1.54 L of product (0.770 kg ai) per hectare for a single application. Repeat once after 7 - 10 days as necessary. The maximum seasonal rate is 3.08 L of product (1.54 kg ai) per hectare. DO NOT APPLY BY AIR.

**STRAWBERRIES:**

**Control of Fruit Rot (*Botrytis cinerea*) and Leaf Spot (*Mycosphaerella fragariae*):** Apply 700 mL of THIEF 50 SC per 1000 L of water, using ground application equipment, commencing when buds are visible in the crown. Based on a volume of 2200 L of water per hectare, this rate is 1.54 L of product (0.770 kg ai) per hectare for a single application. Repeat once after 7 - 10 days as required. During rainy periods which favour rapid development of fruit rots, reduce spray interval to 3 - 5 days. The maximum seasonal rate is 3.08 L of product (1.54 kg ai) per hectare. DO NOT APPLY BY AIR.

**SUGARBEETS:**

**Control of Cercospora Leaf Spot (*Cercospora beticola*):** Apply THIEF 50 SC at 588 – 784 mL of product (0.294 – 0.392 kg ai) per hectare (spray solution of 50 -100 L/ha), using ground application equipment, when disease first appears. Repeat once 14 – 21 days later if required. The maximum seasonal rate is 1.57 L of product (0.784 kg ai) per hectare. DO NOT APPLY BY AIR.

- FOR SUGARBEETS GROWN FOR EXPORT ONLY.
- NO SUGARBEETS OR PARTS OF SUGARBEETS ARE TO BE USED AS FODDER OR FEED IN CANADA.
- TO DELAY THE SELECTION OF RESISTANT STRAINS OF FUNGI, THIEF 50 SC SHOULD ALWAYS BE ALTERNATED WITH A FUNGICIDE OF DIFFERENT CHEMISTRY

#### OUTDOOR ROSES AND ORNAMENTAL PLANTS:

**Control of Black Spot of Roses (*Diplocarpon rosae*) and Powdery Mildew (*Sphaerotheca pannosa*):** Apply THIEF 50 SC at 700 – 1050 mL product per 1000 L of water, using ground application equipment. Based on a spray volume of 1000 L of water per hectare, the rate is 0.350 – 0.525 kg ai/ha for a single application. Repeat once after 10 – 14 days as required. The maximum seasonal rate is 1.05 kg ai per hectare. DO NOT APPLY BY AIR.

#### GREENHOUSE ORNAMENTALS PLANTS:

**Control of Powdery mildew (*Podosphaera* spp.), Botrytis blight /grey mold (*Botrytis cinerea*) and leaf spot (*Alternaria* spp., *Cercospora* spp.):** Apply THIEF 50 SC at 910 – 1190 mL per 1000 L of water, using ground application equipment. Water soil thoroughly with spray solution. Based on spray volume of 1000 L of water per hectare, the rate is 0.455 – 0.595 kg ai/ha for a single application. Repeat once after 7 days as required. The maximum seasonal rate is 1.19 kg ai per hectare.

**Control of Stem, Crown and Root Rots caused by *Fusarium* and *Rhizoctonia*:** Apply THIEF 50 SC at 910 – 1190 mL per 1000 L of water as a drench or directed spray by ground application to thoroughly soak the growing media through the root zone. Based on spray volume of 1000 L of water per hectare, the rate is 0.455 – 0.595 kg ai/ha for a single application. Repeat once after 15 days if required. The maximum seasonal rate is 1.19 kg ai per hectare.

Note: THIEF 50 SC does not control *Pythium* or *Phytophthora*.

DO NOT apply as a foliar spray to ornamentals grown for cut flowers. DO NOT allow pesticide solution to contact foliage of ornamentals grown for cut flowers.

#### ASPEN AND POPLAR:

**Control of Marssonina Leaf Spot (*Marssonina* spp.) and Septoria Leaf Spot (*Septoria populicola*):** Apply THIEF 50 SC at 1.54 L product per 1000 L of water (0.770 kg ai) per hectare, using ground application equipment. Begin in mid-June and repeat once after 10 days if required. The maximum seasonal rate is 3.08 L of product (1.54 kg ai) per hectare. DO NOT APPLY BY AIR.

#### POTATO SEED PIECE TREATMENT:

THIEF 50 SC is a systemic fungicide formulated as a sprayable potato seed piece treatment.

**Control of Verticillium Wilt (*Verticillium albo-atrum*), Fusarium Dry Rot (*Fusarium* spp.), Silver Scurf (*Helminthosporium solani*), and Suppression of Seed Piece Decay (*Rhizoctonia solani*, *Fusarium* spp., *Erwinia carotovora*, *Pythium* spp.) and Blackleg (*Pectobacterium carotovorm*):** Use standard potato seed treatment equipment designed to apply sprayable seed treatments.

**RATE:** Mix 1.4 L of THIEF 50 SC in 6.5 L of water. Do not exceed a treatment rate of 1.4 L of THIEF 50 SC per 1400 kg of seed pieces. Based on the guarantee of 0.5 kg ai/L product, this is equivalent to 0.5 g ai/ kg of seed pieces. Use a total volume of water carrier that is adequate for complete coverage of seed pieces. Engage agitation and ensure water and product are completely mixed in the spray tank prior to beginning seed piece treatment. Maintain constant agitation during treatment.

Apply spray solution using standard equipment with calibrated spray nozzle, mounted over a belt which tumbles the seed pieces. If required, add a drying agent after treatment. Seed pieces which are pre-cut should be treated within 6 hours of cutting. If planting is to be delayed more than 1 to 2 days, the treated pieces should be stored for 2 - 3 days in open crates before bagging.

**NOTE:**

For optimum control of Silver Scurf, ensure that seed tubers are completely free of soil. *Total skin coverage is essential*. Reduced control can be expected in fields where volunteers from the previous year's crop act as a source of infection. Consult your provincial Production Guides for recommendations.

This product contains no colourant. An appropriate colourant must be added when this product is applied. Regulations pertaining to the 'Seeds Act' must be strictly adhered to when using this product.

**GREENHOUSE TOBACCO SEEDLINGS AND WHITE BUTTON MUSHROOMS:**

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Sharda Crochem Limited under the User Requested Minor Use Label Expansion program. For these uses, Sharda Crochem Limited 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.

**DIRECTION FOR USES: For Control of *Rhizoctonia* Damping-Off caused by *Rhizoctonia solani* on Greenhouse Tobacco Seedlings**

Apply 126 mL of THIEF 50 SC in 300 L water to 100 m<sup>2</sup> of seedlings as a drench or directed spray, using ground application equipment, to thoroughly soak the growing media through the root zone. Apply preventatively, when the larger leaves of the seedlings are about 1.5 cm in diameter, or at the first sign of disease. Repeat if necessary 10 - 14 days later. Do not make more than 2 applications per crop.

**DIRECTION FOR USE: For Control of *Trichoderma* Green Mould (*Trichoderma* spp.) on White Button Mushrooms (CASING)**

Mix 85 mL of THIEF 50 SC with approximately 75 L of water and apply as a drench to 100 m<sup>2</sup> of bed surface. Make application shortly after casing. Do not make more than one application to the mushroom bed as a drench. Do not apply after harvesting has started.

A maximum of one application of THIEF 50 SC per crop cycle may be made as a drench application to the casing. Please note that the drench application to the casing will not control the aggressive species of *Trichoderma* (*Trichoderma aggressivum* f. *aggressivum*).

**Resistance Management**

Do not make sequential applications of Group 1 (Benzimidazoles) fungicides. If an application of a Group 1 fungicide has been made to the casings, use a registered fungicide with a different mode of action before applying another Group 1 fungicide.

**Specific Limitations for Drench Application to the Casings:**

Any one person can only apply a casing drench containing THIEF 50 SC to a maximum of 500 m<sup>2</sup> of bed surface per day (426 mL THIEF 50 SC) when using hand held equipment.

**Environmental Precautions:**

By-products from this product are toxic to aquatic organisms. Do not store waste piles of treated mushroom compost in an area which will allow runoff into surface waters. Do not contaminate any body of water or groundwater when disposing of equipment wash water. DO NOT allow effluent or runoff from the mushroom houses containing this product to enter lakes, streams, ponds or other waters.