

Product Name: Surefire Zinam 500 SC Fungicide
APVMA Approval No: 85676/139259



Label Name:	Surefire Zinam 500 SC Fungicide
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT: 500 g/L FLUAZINAM
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Mode of Action:	GROUP 29 FUNGICIDE
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Statement of Claims:	For the control of white root rot in apples, club root of broccoli, brussels sprouts, cabbage, cauliflower and kohlrabi; Eutypa dieback and the pre-bud burst suppression of phomopsis cane and leaf blight in grapevines, and the control of late blight and sclerotinia in potatoes. Controls/Supresses Dollar Spot, Helminthosporium Disease and Grey Leaf Spot in Turf
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Net Contents:	CONTENTS: 1-1000L
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	WITHHOLDING PERIODS:
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HARVEST:
 Apples, Broccoli, Brussels sprouts, Cabbage, Cauliflower, Kohlrabi, grapevines: NOT REQUIRED WHEN USED AS DIRECTED.
 Potatoes: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

GRAZING:
 TREATED CROPS ARE NOT TO BE GRAZED OR FED TO ANIMALS.
 DO NOT GRAZE VINEYARDS AFTER APPLICATION.
 Turf: DO NOT GRAZE OR CUT FOR STOCK FOOD.
 DO NOT GRAZE TREATED AREAS OR FEED TURF CLIPPINGS FROM TREATED AREAS TO ANIMALS INCLUDING POULTRY.

Trade Advice:

General Instructions:	<p>GENERAL INSTRUCTIONS</p> <p>Mixing Add the required amount of product to the partly filled spray tank with the agitator in operation. Fill the tank with water and continue agitation during spraying and after a stoppage.</p> <p>Application:</p> <p>Dilute Spraying - Grapevines only</p> <ul style="list-style-type: none"> • Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. • Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. • The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. • Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off. • The required dilute spray volume will change, and the sprayer set up and operation may also need to be changed, as the crop grows. <p>Turf Application volume for leaf and crown diseases (Dollar Spot, <i>Helminthosporium</i> Disease, Grey Leaf Spot & Anthracnose) should be adequate to ensure thorough and even coverage of the turf leaves and penetration into the crowns. Ideal application volumes should be between 400 – 800 L/ha. For best results use coarse nozzles, at 5 km/h and 3 bar pressure. In higher cut turf (>15mm) a significant spray shielding effect can occur, impacting negatively on spray penetration and even coverage at low application volumes. Good control requires good coverage. Application should be made in sufficient water to ensure thorough coverage.</p>
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Resistance Warning:	<p>Fungicide Resistance Warning GROUP 29 FUNGICIDE</p> <p>For fungicide resistance management Surefire Zinam 500 SC Fungicide is a Group 29 fungicide. Some naturally occurring individual fungi resistant to the product and other Group 29 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled by this product or other Group 29 fungicides, thus resulting in a reduction in efficacy and possible yield loss.</p> <p>Since the occurrence of resistant fungi is difficult to detect prior to use, PCT Holdings Pty Ltd. accepts no liability for any losses that may result from the failure of this product to control resistant fungi.</p>
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Precautions:	<p>RE-ENTRY PERIODS</p> <p>Apples:</p>
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	<p>DO NOT allow entry into treated areas until the solution has dried on the soil surface. If prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), chemical resistant gloves and impervious boots. Clothing must be laundered after each day's use.</p> <p>Brassicas: DO NOT allow entry into treated areas until the spray has dried. When prior entry is necessary, wear impervious footwear and if handling the treated crop wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length chemical resistant gloves. Clothing must be laundered after each day's use.</p> <p>Grapevines: Persons re-entering treated vines for up to 32 days following application and who will be handling treated vines must wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length chemical resistant gloves. Clothing must be laundered after each day's use.</p> <p>Potatoes: DO NOT enter treated areas until the spray has dried after treating potatoes, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.</p> <p>Turf: DO NOT allow entry into treated areas until the spray has dried.</p>
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	<p>PROTECTION OF LIVESTOCK DO NOT graze or feed treated crops to animals.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic life. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.</p> <p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants, crops, cropping lands or pastures.</p>
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	<p>STORAGE AND DISPOSAL Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.</p> <p>Refillable containers Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
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	<p>SAFETY DIRECTIONS Harmful if inhaled. May irritate the skin. Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing spray, wear elbow-length chemical resistant gloves and goggles. If applying by boomspray equipment and open cab wear elbow-length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves and goggles.</p>
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First Aid Instructions:	<p>FIRST AID</p> <p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126, New Zealand 0800 764 766. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.</p>
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First Aid Warnings:	<p>WARNING – contains fluazinam which may cause asthma and/or respiratory sensitisation. Sensitive individuals should avoid contact with this substance.</p>
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RESTRAINTS

DO NOT apply Surefire Zinam to home lawns (turf) or any other residential turf.

DO NOT apply with aircraft.

DO NOT apply Surefire Zinam through any type of irrigation system or ultra-low volume spray system.

DO NOT apply Surefire Zinam to turf using backpack.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 km/h at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

FOR TURF USE ONLY

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a COARSE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas are observed (see the 'Mandatory downwind buffer zone' section of the following table titled 'Buffer zones for boom sprayers').

Table 1. Buffer zones for boom sprayers

Application rate	Mandatory downwind buffer zone
	Natural aquatic areas
Up to maximum label rate	100 metres

DIRECTIONS FOR USE

Crop	Disease	Rate	WHP	Critical Comments															
Apples	White Root Rot (<i>Rosellinia necatrix</i>)	50 mL/ 100 L	-	<p>Pre-Planting: Prepare planting holes with a 30 cm diameter to a depth of about 1 m.</p> <p>Remove all larger roots from the excavated soil. Apply 30 L of a prepared suspension of Surefire Zinam 500 SC and water per tree by mixing with the planting hole soil in the planting operation. Apply in 3 stages, adding 10 L of the prepared suspension to each third of the excavated soil. Form a barrier of treated soil around each tree to contain the Surefire Zinam 500 SC suspension and prevent other soil from contaminating the area around the tree.</p> <p>Established Trees: During following winter dormant periods each year, re-treat with 30 L/tree of Surefire Zinam 500 SC water suspension by using a soil injector, comprised of a hollow metal rod approximately 2.5 metres in length attached to a pressure pump.</p> <p>Maintain liquid pressure at 10-15 psi during application. Insert the rod into the soil at 8-12 points around the base of the tree to a depth of 1-2 metres, removing the rod each time when the suspension appears on the surface.</p>															
Broccoli Brussels sprouts Cabbage Cauliflower Kohlrabi	Clubroot (<i>Plasmodiophora brassicae</i>)	Seedling drench 25-50 mL per 1000 plants	-	<p>Use the high rate in fields where severe club root has occurred previously.</p> <p>According to the dilution table shown below, apply the required amount of the diluted mixture immediately after transplanting around the base of each plant to ensure thorough wetting of the collar region.</p> <table border="1"> <thead> <tr> <th>Rate of Surefire Zinam 500 SC per 1000 plants</th> <th>Amount of Surefire Zinam 500 SC per 100 L of water</th> <th>Volume of mixture to apply per 1000 plants</th> </tr> </thead> <tbody> <tr> <td>25 mL</td> <td>25 mL</td> <td>100 L</td> </tr> <tr> <td>25 mL</td> <td>12.5 mL</td> <td>200 L</td> </tr> <tr> <td>50 mL</td> <td>50 mL</td> <td>100 L</td> </tr> <tr> <td>50 mL</td> <td>25 mL</td> <td>200 L</td> </tr> </tbody> </table> <p>OR</p> <p>Pre transplant soil incorporated band 3 L/ha</p> <p>This method of application is most suitable for use in soils with low infiltration rates.</p> <p>Apply in a minimum band width of 23 cm along the planting row and incorporate to a soil depth of 15-20 cm with a precision incorporator in the same operation. Apply in a water volume of at least 500 L/ha.</p> <p>Disease control depends on protection of the taproot from infection.</p> <p>Note: This product may delay the start of harvest by up to 8 days and shorten the harvest period, without adverse effects on final yield.</p>	Rate of Surefire Zinam 500 SC per 1000 plants	Amount of Surefire Zinam 500 SC per 100 L of water	Volume of mixture to apply per 1000 plants	25 mL	25 mL	100 L	25 mL	12.5 mL	200 L	50 mL	50 mL	100 L	50 mL	25 mL	200 L
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Crop	Disease	Rate	WHP	Critical Comments
Grape vines	Phomopsis Cane and Leaf Blight (<i>Phomopsis viticola</i>)	Dilute Application 100 mL / 100 L	-	<p>Apply one application at 1 to 4 weeks prior to budburst after pruning to dormant spurs and/or canes. Mixing with 2% summer or winter oil may assist in coverage and penetration of the spray onto diseased wood. Adjust spray application equipment to thoroughly wet all one-year-old wood on the vines after pruning.</p> <p>Apply by dilute application spray equipment that only directs spray solution to the dormant canes and spurs on the cordons. Use of a fixed wand or short boom with single or multiple nozzles directing a narrow band of spray solution onto dormant buds, spurs and canes along the cordon wire(s) is recommended.</p> <p>When using orchard sprayers, ensure that only nozzles directing spray solution onto the dormant canes and spurs along the cordon wire(s) are operational.</p> <p>Follow the pre-budburst application of Surefire Zinam 500 SC Fungicide with post-budburst applications (where required) of other products (e.g. dithianon or mancozeb) registered for the control of phomopsis in grapevines. Application of these products must be in accordance with the directions stated on the registered label of the product used.</p>
	Eutypa dieback (<i>Eutypa lata</i>)			<p>Apply as a dormant treatment to grapevines within 24 hours of pruning.</p> <p>Application should be made as a directed spray in a water volume that ensures thorough coverage of the pruning cuts.</p>
Potatoes	Late blight (<i>Phytophthora infestans</i>) Sclerotinia (<i>Sclerotinia</i> spp.)	250 mL/ha	14 days	Apply as a protectant fungicide treatment before late blight or sclerotinia becomes established in the crop. Early application before row closure is useful for the control of sclerotinia in potatoes. Apply in a spray volume of 250 to 500 L/ha using nozzles that provide a medium droplet size and repeat at 7-to-10-day intervals. Use the shorter interval when wet conditions favour late blight development. If early blight (target spot) is present, include an appropriate fungicide for the control of this disease in the spray program such as a difenoconazole fungicide or Penncozeb® 750DF Fungicide.
Turf including but not limited to bowling greens, fairways, golf greens, racetracks, sports fields and tees	Dollar Spot (<i>Sclerotinia homeocarpa</i>) Helminthosporium Disease (<i>Bipolaris</i> spp., <i>Drechslera</i> spp. and <i>Exserohilum</i> spp.) Grey Leaf Spot (<i>Pyricularia grisea</i>) Anthracnose (<i>Colletotrichum</i> spp.)	1 – 1.5 L/ha in 400-800 L of water	-	<p>Surefire Zinam should be applied as a preventative treatment.</p> <p>Spray when conditions are favourable for disease development and/or as soon as possible after first symptoms are detected.</p> <p>Make a second application 7 to 14 days later if conditions continue to favour disease development. Use rates towards the higher end of the range and shorten intervals.</p> <p>DO NOT mow or water treated area until turf or lawn is thoroughly dry, ideally allow 24 hours.</p>

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL
UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**