

Product Name: ISACOP 500WP FUNGICIDE

Approval No: 53597/126358

Label Name:	ISACOP 500WP FUNGICIDE
Signal Headings:	POISON
	KEEP OUT OF REACH OF CHILDREN
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent	500 g/kg COPPER PRESENT AS COPPER OXYCHLORIDE
Statements:	
Mode of Action:	GROUP M1 FUNGICIDE
	GROOT WIT TOROGODE
Statement of Claims:	FOR THE CONTROL OF CERTAIN DISEASES OF FRUIT TREES, VINES AND
	VEGETABLES AS INDICATED IN THE DIRECTIONS FOR USE IN ATTACHED LEAFLET.
Net Contents:	25kg
Restraints:	
Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Poriods:	ALL CROPS - DO NOT HARVEST FOR 1 DAY AFTER APPLICATION
Withholding Periods:	ALL CROPS - DO NOT HARVEST FOR I DAY AFTER APPLICATION
Trade Advice:	

General Instructions:

GENERAL INSTRUCTIONS

Mixing/Application (Tree and Vine crops only)
DILUTE SPRAYING (Tree and Vine crops only)

- (a) Use a sprayer designed to apply high volumes of water up to the point of runoff and matched to the crop being sprayed.
- (b) 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.
- (c) The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.
- (d) 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.

CONCENTRATE SPRAYING (Tree and Vine crops only)

- (a) Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- (b) Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- (c) Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- (d) The mixing rate for concentrate spraying can then be calculated in the following way: EXAMPLE ONLY
- (i) Dilute spray volume as determined above: For example 1500 L/ha
- (ii) Your chosen concentrate spray volume: For example 500 L/ha
- (iii) The concentration factor in this example is 3 X (ie 1500 L \div 500 L = 3)
- (iv) If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes 3×10 , that is 30 mL/100 L of concentrate spray.
- (v) The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- (vi) For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

GENERAL INSTRUCTIONS (ALL CROPS)

MIXING AND APPLICATION

Pre-mix with a small amount of water before adding to the spray vat. Agitate before and during spraying. Climatic conditions during and after application may affect both efficacy of and plant tolerance to the product alone or in combination with compatible products. The product should not be applied during abnormally hot, cold and slow drying conditions. Correct strength and timing is very important. Damage or poor control may result if sprays are carried out at incorrect times and spray concentrations.

COMPATIBILITY

Where it is recommended that summer oil be added to ISACOP Fungicide, then mix the oil at label rates with an equal volume of water prior to adding to the spray tank. Do not mix ISACOP Fungicide with lime sulphur.

Resistance Warning:

ISACOP 500WP Fungicide is a member of the Multi-site activity group of fungicides. For fungicide resistance management ISACOP 500WP is a Group M1 fungicide. Some naturally occurring individual fungi resistant to ISACOP 500WP and other Group M1 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. The resistant fungi will not be controlled by ISACOP 500WP and other Group M1 fungicides, thus resulting in a reduction in efficacy and possible yield loss. Since the occurrence of resistant fungi is difficult to detect prior to use, ISAGRO Australia Ltd

	accepts no liability for any losses that may result from the failure of ISACOP 500WP to control resistant fungi.
Precautions:	
r recautions.	
Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.
Storage and Disposal:	STORAGE AND DISPOSAL Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake empty bag into spray tank. DO NOT dispose of undiluted chemicals on site. 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.
Safety Directions:	SAFETY DIRECTIONS Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing spray wear elbow-length PVC gloves, disposable dust, mist or fume face mask covering mouth and nose. Wash hands after use. After each day's use wash gloves.
First Aid Instructions:	FIRST AID If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.
First Aid Warnings:	

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DIRECTIONS FOR USE

<u>Tree and vine crops</u> **Note for Rate column:** In the following table, all rates are given for dilute spraying.

For concentrate spraying, refer to the Mixing/Application section.

CROP	DISEASE	STATE	RATE	CRITICAL COMMENTS
Apricots	Freckle, Shot hole	All states	250 g/100 L	Apply at budswell but before the earliest sign of leaf bud development. Apply a minimum of 1 post-harvest spray
Cherries, Peaches, Nectarines, Plums	Shot hole			Apply when buds are swelling, but before and within one week of bud opening.
Almonds		Qld, Vic, Tas, SA, WA only		
Apricots, Cherries	Bacterial gummosis	Qld, Vic, Tas, SA, WA only	250 g/100 L	Autumn: Apply at 25-50% leaf fall and again at 90-100% leaf fall. Winter: Apply in mid-winter. Spring: Apply at first sign of bud movement and repeat application 7-10 days later.
		NSW, Vic, Tas, SA, WA only	150 g/100 L	Apply 1 week after petal fall and repeat application 7-10 days later. These sprays control the leaf population of bacteria in mid to late spring.
Nectarines, Peaches	Leaf curl	All states	250 g/100 L	Apply when buds are swelling, but before and within one week of bud opening.
Almonds		Qld, Vic, Tas, SA, WA only		 Note: Timing of bud opening varies with varietal difference and seasonal conditions. Monitoring bud movement is therefore essential to identify precise/correct timing of application. Blocks containing more than 1 variety should be treated more than once to correspond with correct timings for each variety. For leaf curl, spray times are: Autumn: apply at leaf fall. Spring: first sign of bud swell and repeat 7 days later. Correct timing is critical for effective control.
Stone fruit	Blossom blight, Freckle, Rust Leaf curl, Shot hole	NSW, Vic, Tas, SA, WA only	400 g/100 L	Apply from late budswell to early blossom Apply at early budswell. Additional sprays in autumn when leaves begin to fall will improve control.
	Bacterial spot, Bacterial canker, Leaf curl, Shot hole	Qld only	750 g/100 L 500 g/100 L (Apricots)	Apply at early bud movement. 7-10 days later (pink stage in apricots) and on plums only, at blossoming.
Apples, Pears	Black spot (scab)	All states	250 g/100 L and winter oil	Apply at green tip and spur burst (where necessary). Repeat 10-14 days later if conditions favour infection ie extended wet weather. Consult Department of Primary Industries spray charts for specific recommendations on timing, rates and precautions that may be necessary. Do not use on copper shy varieties.
Avocado	Anthracnose	NSW, Qld, SA, Vic, NT only	250 g/100 L	Apply from flowering to harvest at 28-day intervals. In prolonged wet weather, reduce the interval to 14 days. When using low water volume sprayers do not use less than 300 L/ha.
Citrus	Black spot, Melanose Black spot Melanose Smoky blotch	NSW, SA, Vic, WA only Qld, NT only	175 g/100 L plus summer oil 200-300 g/100 L plus 600 mL summer oil	Apply at 50-75% petal fall. Use higher rate in coastal districts. Repeat 6 and 12 weeks later where necessary Caution: DO NOT use on copper shy varieties.
Durians	Scab (lemons) Pink disease, Anthracnose Phytophthora root rot	All states	400 g/100 L	Apply as a foliar spray at 4 weekly intervals between harvests. Apply 30-50 L spray/tree before onset of Autumn rains.
Figs	Leaf spot, rust	NSW, SA, WA, Vic, Tas only	400 g/100 L	Apply when leaves are completely unfolded. Repeat one month later. Apply by dilute spraying equipment.
Guavas	Anthracnose, Algal leaf spot	Qld only NSW, NT only	500 g/100 L 250 g/100 L	Good coverage of crop and foliage is essential. Apply to trees after hedging has occurred in October.
Lychee	Parasitic algae	Qld, NSW only	400 g/100 L plus 20 mL of a 100% wetting agent	Apply to affected trunk and limbs until run-off occurs. Apply monthly during the wet season.

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CROP	DISEASE	STATE	RATE	CRITICAL COMMENTS
Macadamias	Husk spot	Qld, NSW, NT only	250 g/100 L	Good spray penetration of foliage is essential. Apply form nut set (late September) to December. Apply at least 3 sprays at 3-4 week intervals.
	Anthracnose, Husk rot			Good coverage inside the tree is essential. Spray from early summer (December) to May at monthly intervals.
	Pink limb blight			Good coverage of infected limbs is essential. Spray from early summer (December) to May at monthly intervals.
Mangoes	Bacterial black spot	Qld, NSW, WA only	250 g/100 L	Ensure good coverage. Apply every 4 weeks from early flowering to fruit set. DO NOT apply from a misting machine as coverage may not be adequate.
Mangosteens	Pink disease, Anthracnose, Leaf spots	All states	400 g/100 L	Apply as a foliar spray at 4 weekly intervals.
Passionfruit	Brown spot, Septoria spot	Qld only NSW, NT, SA, Tas, Vic, WA only	200 g/100 L 300-400 g/100 L	Apply every 2 weeks (4 in NSW) from October to May and 3-4 weeks (2 months in NSW) during winter.
	Phytophthora blight	Qld, NSW only	100 g/L	Mix to smooth consistency. Apply to infected area after removing dead tissue. Repeat frequently until healing commences.
Rambutans	Pink disease, Anthracnose, Leaf spots	All states	400 g/100 L	Apply as a foliar spray at 4 weekly intervals.
Vines	Downy mildew	NSW, Qld, SA, Tas, Vic, WA only	250 g/100 L	First apply when shoots are 10 cm long. Repeat at 10-14 day intervals. Use shorter interval when conditions favour infection.
Walnuts	Walnut blight	All states	300 g/100 L plus 175 mL summer oil	Apply at least 3 sprays at 7-10 day intervals. Commence application when the catkins are partially opened. Further applications would be necessary if conditions favour infection.

Non-tree and vine crops

CROP	DISEASE	STATE	RATE	CRITICAL COMMENTS
Bananas	Cercospora leaf spot	NSW, Qld, WA only	250 g/100 L plus 600 mL summer oil or 3 kg/ha	Apply at 3-4 week intervals commencing December to May when weather conditions favour disease outbreak. Use sufficient water to ensure thorough coverage.
Beans	Common blight	SA, Tas, Vic, WA only	250 g/100 L or 2.5 kg/ha	Apply at first signs of infection or as preventative spray. Repeat at 10-14 day intervals as necessary.
	Bacterial brown spot	All states		Apply the first spray within 3 weeks of emergence and repeat every 10-14 days.
	Halo blight	SA, Tas, Vic, WA only		Apply at first sign of disease or as a preventative spray. Repeat at 10-14 days.
		NSW, Qld, NT only	250-300 g/100 L or 2.5-3 kg/ha	Apply at 10-14 day intervals from the time the crop is 15 cm to 30 cm high. Use the higher does when conditions favour infection.
	Rust, Chocolate spot	SA, Vic, WA only	250 g/100 L or 3 kg/ha	Apply at first sign of disease. Repeat at 10- 14 day intervals if necessary.
Beans, Faba beans	Rust Chocolate spot	All states NSW, Qld,	250 g/100 L or 2.5	Apply at first sign of disease. Repeat at 10- 14 day intervals while conditions favour
Dearis	Chocolate spot	SA, Tas, WA	kg/ha	infection.
Brassicas	Black spot, Peppery leaf spot, Ring spot, Downy mildew	All states	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 10-14 day intervals while conditions favour disease. Cabbages: This product must not be applied to cabbages when frosts are likely to occur.
Capsicums	Bacterial spot Bacterial canker	All States NSW, Qld, SA, Tas, WA only	250 g/100 L or 2.5 kg/ha	Seedbeds: Apply every 7 days during wet weather. Field crops: Apply at first sign of disease. Repeat at 10-14 day intervals. Use the shortest interval when conditions favour infection. These applications will reduce the spread of bacterial canker but will not control seed or soil-borne infection.
Carnations	Septoria spot	Vic, SA, Tas only	400 g/100 L	Apply when disease first appears. Repeat at 7-14 day intervals.
	Bacterial leaf spot	Tas only	250 g/100 L	
Carrots	Leaf spot	All states	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 7-14 day intervals while conditions favour infection.
Celery	Septoria leaf spot Early blight	All states NSW, Vic, SA, WA, NT only	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 7-14 day intervals. When weather favours infection, apply every 7 days.

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CROP	DISEASE	STATE	RATE	CRITICAL COMMENTS
Cucurbits ie Rockmelon, Watermelon, Cucumber	Angular leaf spot, Bacterial leaf spot	All states	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 10- 14 day intervals while conditions favour infection.
Lettuce	Downy mildew, Bacterial leaf spot	All states	250 g/100 L or 2.5 kg/ha	Spray thoroughly at first sign of disease and repeat every 7-10 days as necessary. Alternate with Mancozeb. Caution: Do not apply if frosts are expected.
	Anthracnose	NSW, SA, Tas, Vic, WA only		Apply on 7-10 day schedule.
Onions	Downy mildew	All states	250 g/100 or 2.5 kg/ha	Apply at first sign of disease. Repeat at 10 day intervals.
Ornamentals (flowers & shrubs)	Fungal leaf spots, Downy mildew	All states	300 g/100 L or 3 kg/ha	Apply at first sign of disease. Repeat at 7-14 day intervals as required. Small-scale phytotoxicity tests are recommended as some varieties may be sensitive under certain conditions.
Parsnips	Leaf spot	SA, Vic, WA only	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 10- 14 day intervals while conditions favour infection.
Peas	Asochyta blight, Bacterial blight	All states	250 g/100 L or 2.5 kg/ha	Apply at first sign of disease. Repeat at 10- 14 day intervals.
Potatoes	Target spot, Irish blight	All states	220-250 g/100 L or 2.5 kg/ha	Apply from crop emergence to crop maturity at 7- 14 day intervals. Use the higher rate when conditions are particularly favourable to disease development.
Red beet	Downy mildew, Rust	All states	250 g/100 L or 2.5 kg/ha	Apply at 10-14 day intervals, from seedling stage until maturity while conditions allow infection.
Rhubarb	Crown rot, Downy Mildew	All states	250 g/100 L or 2.5 kg/ha	Apply at 14 day intervals while conditions allow infection.
Roses	Black spot	Qld only NSW, NT, SA, Tas, Vic, WA only	500 g/100 L 300 g/100 L	Apply when disease first appears. Repeat at 7-14 day intervals as necessary.
Silver beet, Spinach	Downy mildew	All states	250 g/100 L or 2.5 kg/ha	Apply at 10-14 day intervals, from seedling stage until maturity while conditions allow infection.
Strawberries	Leaf spot, leaf scorch	Qld, NSW, NT, SA, Tas, Vic, WA only	250 g/100 L	Apply at 14 day intervals in wet weather.
Tomatoes	Bacterial spot	All states	220-250 g/100 L or 2.5 kg/ha	Commence spray applications at first sign of disease and repeat every 7-10 days depending on weather conditions and severity of disease.
	Bacterial speck			Apply every 7-14 dqays depending on weather conditions and severity of disease.
	Bacterial canker			This product will reduce the spread of bacterial canker but will not control seed or soil-borne infections.
	Target spot/Early blight			Seedbeds: Apply every 7 days under wet weather conditions. Minimise use on seedlings to avoid retardation of growth.
	Septoria leaf spot, Irish blight/Late blight			Use the higher rate when conditions are particularly favourable to disease development.

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