



Company Name: CHEMTURA AUSTRALIA PTY LTD
Product Name: ARYSTA LIFESCIENCE COPPER OXYCHLORIDE 50 WP FUNGICIDE/BACTERICIDE
APVMA Approval No: 66415/103488

Label Name:	Arysta LifeScience COPPER OXYCHLORIDE 50 WP FUNGICIDE/BACTERICIDE
Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	500 g/kg COPPER PRESENT AS COPPER OXYCHLORIDE
Mode of Action:	GROUP M 1 FUNGICIDE
Statement of Claims:	For the control of certain diseases of fruit trees, vines, and vegetables as per the Directions for Use table.
Net Contents:	10kg 15kg 25kg
Restrains:	
Directions for Use:	This section contains file attachment. File Name: Arysta LifeScience Copper Oxychloride 50WP_DIRECTIONS FOR USE.docx File Size: 30485 bytes
Other Limitations:	
Withholding Periods:	WITHHOLDING PERIOD (WHP): ALL CROPS – DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

Trade Advice:	
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General Instructions:	<p>This section contains file attachment.</p> <p>File Name: Arysta LifeScience Copper Oxychloride 50WP_GENERAL INSTRUCTIONS.docx</p> <p>File Size: 21158 bytes</p>
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Resistance Warning:	<p>FUNGICIDE RESISTANCE WARNING: GROUP M1 FUNGICIDE</p> <p>For fungicide resistance management COPPER OXYCHLORIDE 50WP is a Group M1 fungicide.</p> <p>Some naturally occurring individual fungi resistant to COPPER OXYCHLORIDE 50WP 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. COPPER OXYCHLORIDE 50WP and other Group M1 fungicides will not control these resistant fungi, 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, Arysta LifeScience Australia Pty Ltd accepts no liability for any losses that may result from the failure of COPPER OXYCHLORIDE 50WP to control resistant fungi.</p>
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Precautions:	
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Protections:	<p>PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT:</p> <p>Dangerous to fish. Do not contaminate streams, rivers or waterways with the chemical or used containers.</p>
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Storage and Disposal:	<p>STORAGE AND DISPOSAL: KEEP OUT OF REACH OF CHILDREN</p> <p>Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake and empty contents into spray tank/water/dip/drench, etc. Do not dispose of undiluted chemicals on site. 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>
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Safety Directions:	<p>SAFETY DIRECTIONS:</p> <p>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 and disposable dust mask. Wash hands after use. After each day's spray use wash gloves.</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 13 11 26.</p>
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First Aid Warnings:	
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DIRECTIONS FOR USE

Tree and vine crops

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 CONTROLLED	STATE WHERE APPLICABLE	RATE/100L WATER	CRITICAL COMMENTS
For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.				
Apricots	Freckle, Shot hole	All States	250g	Apply at bud swell but before the earliest sign of leaf bud development. Apply a minimum of 1 post-harvest spray.
Cherries, Peaches, Nectarines, Plums	Shot Hole	Qld, Vic, Tas, SA, WA only		Apply when buds are swelling, but before and within one week of bud opening.
Almonds				
Apricots, Cherries	Bacterial gummosis	Qld, Vic, Tas, SA, WA only	250g	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	150g	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	250g	Apply when buds are swelling, but before and within one week of bud opening. Note: <ol style="list-style-type: none"> 1. Timing of bud opening varies with varietal difference and seasonal conditions. 2. Monitoring bud movement is therefore essential to identify precise/correct timing of application. 3. Blocks containing more than 1 variety should be treated more than once to correspond with correct timings for each variety. 4. 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.
Almonds		Qld, Vic, Tas, SA, WA only		
Stone Fruit	BlossomBlight Freckle Rust	NSW, Vic, Tas, SA, WA only	400g	Apply from late budswell to early blossom.
	Leaf Curl Shot Hole			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	750g 500g (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) (<i>Venturia inaequalis</i>) (<i>Venturia pirina</i>)	All States	250g 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 Agriculture spray charts for specific recommendations on timing, rates and precautions that may be necessary. Do not use on copper shy varieties.

CROP	DISEASE CONTROLLED	STATE WHERE APPLICABLE	RATE/100L WATER	CRITICAL COMMENTS
<p>For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.</p>				
Avocado	Anthracnose	NSW, Qld, SA, Vic, NT only	250g	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 300L/ha.
Citrus	Black Spot Melanose	NSW, SA, Vic, WA only	175g plus summer oil	Apply at 50-72% petal fall. Use higher rate in coastal districts. Repeat 6 and 12 weeks later where necessary. Caution: Do not use on copper shy varieties.
	Black Spot	Qld, NT only	200-300g plus 600mL summer oil	
	Melanose			
	Smoky Blotch Scab (lemons)			
Durians	Pink Disease Anthracnose	All States	400g	Apply as a foliar spray at 4 weekly intervals between harvests.
	Phytophthora Root Rot			Apply 30-50L spray/tree before onset of Autumn rains.
Figs	Leaf Spot Rust	NSW, SA, WA, Vic, Tas only	400g	Apply when leaves are completely unfolded. Repeat one month later. Apply by dilute spraying equipment.
		Qld only	500g	
Guavas	Anthracnose Algal Leaf Spot	NSW, NT only	250g	Good coverage of crop and foliage is essential. Apply to trees after hedging has occurred in October.
Lychee	Parasitic algae	Qld, NSW only	400g plus 20 mL of a 100% wetting agent	Apply to affected trunk and limbs until runoff occurs. Apply monthly during the wet season.
Macadamias	Husk spot	Qld, NSW, NT only	250g	Good spray penetration of foliage is essential. Apply from 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	250g	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 Athracnose Leaf Spots	All States	400g	Apply as a foliar spray at 4 weekly intervals.
Passionfruit	Brown Spot Septoria Spot	Qld only	200g	Apply every 2 weeks (4 in NSW) from October to May and 3-4 weeks (2 months in NSW) during winter.
		NSW, NT, SA, Tas, Vic, WA only	300-400g	
	Phytophthora Blight	Qld, NSW only	100g	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	400g	Apply as a foliar spray at 4 weekly intervals.
Vines	Downy Mildew	NSW, Qld, SA, Tas, Vic, WA only	250g	First apply when shoots are 10cm long. Repeat at 10-14 day intervals. Use shorter interval when conditions favour infection.
Walnuts	Walnut Blight	All States	300g plus 175mL 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 CONTROLLED	STATE WHERE APPLICABLE	RATE/100L WATER	CRITICAL COMMENTS
Bananas	Cercospora Leaf Spot	NSW, QLD, WA only	250g plus 600 mL summer oil or 3kg/ha	For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. 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	250g (or 2.5kg/ha)	Apply at first signs of infection or as a 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 the first sign of disease or as a preventative spray. Repeat at 10-14 days
		NSW, Qld, NT only	250-300g (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 dose when conditions favour infection.
	Rust	SA, Vic, WA only	250g (or 3kg/ha)	Apply at first sign of disease. Repeat at 10-14 day intervals if necessary.
	Chocolate Spot			
Beans Faba Beans	Rust	All States	250g/100L or (2.5kg/ha)	Apply at first sign of disease. Repeat at 10-14 day intervals while conditions favour infection.
	Chocolate Spot	NSW, Qld, SA, Tas, WA only		
Brassicas	Black Spot	All States	250g/100L or (2.5g/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.
	Peppery Leaf Spot			
	Ring Spot			
	Downy Mildew			
Capsicums	Bacterial Spot	All States	250g (or 2.5kg/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.
	Bacterial Canker	NSW, Qld, SA, Tas, WA only		
Carnations	Septoria Spot	Vic, SA, Tas only	400g	Apply when disease first appears. Repeat at 7-14 day intervals.
	Bacterial Leaf Spot	Tas only	250g	
Carrots	Leaf Spot	All Staes	250g (or 2.5 kg/ha)	Apply at first sign of disease. Repeat at 7-14 day intervals while conditions favour infection.

CROP	DISEASE CONTROLLED	STATE WHERE APPLICABLE	RATE/100L WATER	CRITICAL COMMENTS
For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.				
Celery	Septoria Leaf Spot	All States	250g (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.
	Early Blight	NSW, Vic, SA, WA, NT only		
Cucurbits ie. Rockmelon, Watermelon, Cucumber	Angular Leaf Spot Bacterial Leaf Spot	All States	250g (or 2.5 kg/ha)	Apply at first sign of disease. Repeat at 10 -14 day intervals, while conditions favour infection.
Lettuce	Downy Mildew	All States	250g (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.
	Bacterial Leaf Spot	All States		
	Anthracnose	NSW, SA, Tas, Vic, WA only		Apply on a 7-10 day schedule.
Onions	Downy Mildew	All States	250g (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	300g (or 3kg/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	250g (or 2.5 kg/ha)	Apply at the first sign of disease. Repeat at 10-14 day intervals while conditions favour infection.
Peas	Ascochyta Blight Bacterial Blight	All States	250g (or 2.5 kg/ha)	Apply at the first sign of disease. Repeat at 10-14 day intervals.
Potatoes	Target Spot Irish Blight	All States	220-250g (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	250g (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	250g (or 2.5 kg/ha)	Apply at 14 day intervals while conditions allow infection.
Roses	Black Spot	Qld only	500g	Apply disease first appears. Repeat at 10-14 day intervals as necessary.
		NSW, NT, SA, Tas, Vic, WA only	300g	
Silver Beet Spinach	Downy Mildew	All States	250g (or 2.5 kg/ha)	Apply at 10-14 day intervals, from seedling stage until maturity, while conditions allow infection.

CROP	DISEASE CONTROLLED	STATE WHERE APPLICABLE	RATE/100L WATER	CRITICAL COMMENTS
Strawberries	Leaf Spot Leaf Scorch	Qld, NSW, NT, SA, Tas, Vic, WA only	250g	Apply at 14 day intervals in wet weather.
Tobacco seed beds	Wildfire Angular Leaf Spot	Qld, NSW, Vic only	400g	Apply every 7 days from seedling stage while weather conditions favour disease development.
	Algae	Qld only		Apply when algae first appears.
Tomatoes	Bacterial Spot	All States	220-250g (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 days 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 each 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 AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

MIXING AND APPLICATION (Tree and Vine crops only):

DILUTE SPRAYING (Tree and Vine crops only):

- Use a sprayer designed to apply high volumes of water up to the point of runoff 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.

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 runoff) 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 (i.e. $1500 \text{ L} \div 500 \text{ L} = 3$)

(iv) If the dilute label rate is 250g/100 L, then the concentrate rate becomes 3 x 250, that is 750g/ 100 L of concentrate spray.

(e) 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.

(f) Do not use a concentrate rate higher than that specified in the Critical Comments.

(g) 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 concentration.

COMPATIBILITY:

The product may be mixed with one of the following products: - Albarol, Rogor, Endosulfan, Malathion, Summer and Winter Oils, Zineb, Thiram, Ziram. When combined with Thiram or Ziram, do not leave in spray vat overnight. DO NOT mix with lime sulphur.