



**Company Name:** CHEMTURA AUSTRALIA PTY LTD  
**Product Name:** ARYSTA LIFESCIENCE CHLOROTHALONIL FUNGICIDE

**APVMA Approval No:** 63635/103398

<b>Label Name:</b>	Arysta LifeScience CHLOROTHALONIL FUNGICIDE
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<b>Signal Headings:</b>	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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<b>Constituent Statements:</b>	720 g/L CHLOROTHALONIL
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<b>Mode of Action:</b>	<b>GROUP M5 FUNGICIDE</b>
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<b>Statement of Claims:</b>	Controls Fungal Diseases on Almonds, Bananas, Cucurbits, Grapes, Ornamentals, Peanuts, Stone Fruit, Tobacco and Vegetables as specified in the Directions for Use table.
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<b>Net Contents:</b>	10L 1L 20L 500mL
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<b>Restrains:</b>	Restrains: DO NOT mix spraying oils or wetting agents with CHLOROTHALONIL. For all stone fruit except cherries, the following additional restraints apply: DO NOT use oils after budswell and during the season if CHLOROTHALONIL is to be used after shuck-fall. DO NOT tank mix CHLOROTHALONIL with EC formulations when spraying after shuck-fall. DO NOT exceed 3.2 L of CHLOROTHALONIL per hectare of crop.
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<b>Directions for Use:</b>	This section contains file attachment. <b>File Name:</b> Arysta LifeScience Chlorothalonil_DIRECTIONS FOR USE.docx <b>File Size:</b> 34531 bytes
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<b>Other Limitations:</b>	
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<b>Withholding Periods:</b>	<p>WITHHOLDING PERIODS</p> <ul style="list-style-type: none"> <li>• Artichoke, Bananas, Capsicum, Celery, Cucurbits, Endive, Leek, Okra, Peppers, Plums, Radish, Shallot, Sweetcorn, Tomatoes, Watercress: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION</li> <li>• Apricots, Beans, Broccoli, Brussels Sprouts, Cabbages, Carrots, Cauliflowers, Cherries, Nectarines, Peaches, Peas, Rhubarb, Table Grapes: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION</li> <li>• Onions, Wine Grapes: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION</li> <li>• Beans, Peanuts, Peas: DO NOT GRAZE LIVESTOCK ON TREATED CROPS</li> <li>• Potatoes: NOT REQUIRED WHEN USED AS DIRECTED</li> </ul>
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<b>Trade Advice:</b>	
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<b>General Instructions:</b>	<p>This section contains file attachment.</p> <p><b>File Name:</b> Arysta LifeScience Chlorothalonil_GENERAL INSTRUCTIONS.docx</p> <p><b>File Size:</b> 16957 bytes</p>
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<b>Resistance Warning:</b>	<p>Fungicide Resistance Warning</p> <p>GROUP M5 FUNGICIDE</p> <p>For fungicide resistance management CHLOROTHALONIL Fungicide is a Group M5 fungicide. Some naturally occurring individual fungi resistant to CHLOROTHALONIL Fungicide and other Group M5 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 CHLOROTHALONIL Fungicide and other Group M5 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, Arysta LifeScience Australia Pty Ltd accepts no liability for any losses that may result from the failure of CHLOROTHALONIL Fungicide to control resistant fungi.</p>
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<b>Precautions:</b>	
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<b>Protections:</b>	<p>PROTECTION OF LIVESTOCK DO NOT contaminate feed or foodstuffs with this product or empty containers.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Dangerous to fish. DO NOT contaminate streams, rivers or waterways with the chemical or used container.</p>
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<b>Storage and Disposal:</b>	<p>STORAGE AND DISPOSAL</p> <p>Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.</p>
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Triple-rinse containers before disposal. Add rinsings to 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.

**Safety Directions:**

Attacks eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing when preparing and using the prepared spray. Wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, goggles and disposable face mask covering mouth and nose. If clothing becomes contaminated with product or wet with spray remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each days use, wash gloves, goggles and contaminated clothing.

**First Aid Instructions:**

FIRST AID  
If poisoning occurs contact a doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give a glass of water.

**First Aid Warnings:**

## DIRECTIONS FOR USE

Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments
<b>BANANAS</b>					
<b>Bananas</b> DO NOT apply to bananas within 14 days of applying an oil based spray or crop damage will occur	Leaf Spot ( <i>Mycosphaerella musicola</i> )	Qld, NSW, WA, NT only	1.8 L/ha	1	<b>North Qld:</b> Spray every 14 days late January to end of March. Extend to 21 days after March and then 28 to 35 days in the drier months of the year. <b>South Qld:</b> Spray every 21 days from start of December to end of April. <b>WA:</b> Spray every 10 to 14 days from November to end of May and extend to 14 to 21 days from May to November. <b>NSW:</b> Spray every 21 days from end of November to end of May.
		WA only	1.5 L/ha		
	Leaf Speckle ( <i>Mycosphaerella musae</i> )	Qld, NSW, WA, NT only	3 L/ha		
<b>GRAPES</b>					
<b>Grapes</b> Note russetting of some table grape varieties may occur	Downy Mildew ( <i>Plasmopara viticola</i> ), Bunch Rot ( <i>Botrytis cinerea</i> )	All States	1.8 to 2.3 L/ha	Dessert 7 Wine 14	Make the first application as soon as conditions favour the development of the disease. Apply at 7 to 14 day intervals particularly during wet weather and periods of rapid growth. <b>Bunch Rot:</b> apply at early full bloom, 2 weeks later, at veraisson and 2 weeks prior to harvest. <b>Table Grapes:</b> russetting of some varieties may occur. Use only up to capfall in these varieties.
	Black Spot ( <i>Anthracoise</i> ) ( <i>Elsinoe ampelina</i> )		210 mL / 100 L		

Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments	
<b>LEGUMES</b>						
<b>Beans</b> Broad (Faba)	Chocolate Spot ( <i>Botrytis fabae</i> ), Rust ( <i>Uromyces viciae-fabae</i> )	All States	1.4 to 2.3 L/ha	7	Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 14 day intervals. Use the higher rate if the crop is dense and disease pressure is high.	
<b>Peanuts</b>	Early Leaf Spot ( <i>Cercospora arachidicola</i> ), Late Leaf Spot ( <i>Cercosporidium personatum</i> ), Peppery Leaf Spot ( <i>Leptosphaerulina trifolii</i> ), Peanut Rust ( <i>Puccinia arachidis</i> ), Net Blotch ( <i>Didymosphaeria arachidicola</i> )	Qld, NSW, WA, NT only	1.1 to 1.8 L/ha	-	Use higher rate for Peanut Rust. <b>South Burnett, NSW, WA:</b> commence application as soon as conditions favour the development of the disease and repeat as necessary to maintain control. <b>Atherton Tableland:</b> commence application 6 weeks after planting and repeat every 2 weeks.	
<b>Peas</b>	Downy Mildew ( <i>Peronospora viciae</i> )	Qld, Tas, WA only		7	Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 14 day intervals. Use the higher rate if the crop is dense and disease pressure is high.	
<b>ORNAMENTALS</b>						
<b>Ornamentals</b> Chrysanthemums, Geraniums, Iris, other ornamentals	Botrytis, Grey Mould, Rust diseases, Septoria, Alternaria Leaf Spot diseases	All States	100 mL / 100 L	-	Apply at 7 to 14 day intervals. Use every 7 days under severe conditions. Avoid application to blooms in Azalea, Hydrangea and Petunia.	
<b>STONEFRUIT AND NUT CROPS</b>						
<b>Almonds</b>	Shot-hole ( <i>Stigmina carpophila</i> ) Stone Fruit Rust ( <i>Tranzschelia discolor</i> )	NSW, Vic, Tas, SA, WA only	160 mL / 100 L Apply 2,000 L/ha	-	Apply at budswell, bud burst, pink bud, shuck-fall, capfall. Apply every 10 to 14 days. Apply 1 week pre-harvest.	
<b>Apricots</b>	Brown Rot - Fruit ( <i>Monilinia fructicola</i> ), Blossom Blight ( <i>Monilinia laxa</i> )			7	Apply at budswell, budburst, pink bud, full bloom.	Application later than 35 days prior to harvest may result in unacceptable fruit skin damage. See also additional Restraints for stone fruit.
	Stone Fruit Rust ( <i>Tranzschelia discolor</i> ), Shot-hole ( <i>Stigmina carpophila</i> ), Freckle ( <i>Venturia carpophila</i> )				Apply at budswell, bud burst, pink bud, shuck-fall, capfall, then every 10 to 14 days.	
<b>Cherries</b>	Brown Rot - Fruit ( <i>Monilinia fructicola</i> ), Blossom Blight ( <i>Monilinia laxa</i> )	All States			Apply at budswell, budburst, pink bud, early blossom, full bloom. Apply 3 weeks pre-harvest and 1 week pre-harvest.	
	Shot-hole ( <i>Stigmina carpophila</i> ), Stone Fruit Rust ( <i>Tranzschelia discolor</i> )				Apply at budswell, budburst, pink bud, shuck-fall, capfall, then every 10 to 14 days. Apply 1 week pre-harvest.	
	Transit Rot ( <i>Rhizopus stolonifer</i> )				Apply 1 week pre-harvest.	
<b>Nectarines</b>	Shot-hole ( <i>Stigmina carpophila</i> )	NSW, Vic, Tas, SA, WA only			Apply at budswell, pink bud, shuck-fall and then repeat every 14 days if weather conditions favour disease.	Application later than 35 days prior to harvest may result in unacceptable fruit skin damage. See

Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments	
	Brown Rot - Fruit ( <i>Monilinia fructicola</i> ), Blossom Blight ( <i>Monilinia laxa</i> )				Apply at budswell, bud burst, pink bud, early blossom and full bloom.	also additional Restraints for stone fruit.

Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments	
<b>Peaches</b>	Brown Rot - Fruit ( <i>Monilinia fructicola</i> ), Blossom Blight ( <i>Monilinia laxa</i> )	All States	160 mL / 100 L Apply 2,000 L/ha	7	Apply at budswell, pink bud, early blossom and full bloom.	Application later than 35 days prior to harvest may result in unacceptable fruit skin damage. See also additional Restraints for stone fruit.
	Shot-hole ( <i>Stigmina carpophila</i> ), Stone Fruit Rust ( <i>Tranzschelia discolor</i> )				Apply at budswell and continue at 7 to 14 day intervals.	
	Leaf Curl ( <i>Taphrina deformans</i> )				Apply at budswell and continue at 7 to 14 days intervals. <b>Qld:</b> spray only at budswell.	
<b>Plums</b>	Brown Rot - Fruit ( <i>Monilinia fructicola</i> ), Blossom Blight ( <i>Monilinia laxa</i> )			1	Apply at budswell, bud burst, early blossom, pink bud and full bloom.	
	Stone Fruit Rust ( <i>Tranzschelia discolor</i> ), Shot-hole ( <i>Stigmina carpophila</i> )				Apply at budswell, budburst, pink bud, shuck-fall and capfall.	
<b>TOBACCO</b>						
<b>Tobacco</b>	Tobacco Leaf Spot ( <i>Ascochyta arida</i> )	Qld, WA only	220 mL / 100 L	-	Apply every 7 days in seedbed application only.	
<b>VEGETABLES</b>						
<b>Artichokes</b> Globe	Grey Mould ( <i>Botrytis cinerea</i> )	All States	1.8 to 2.3 L/ha	1	Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.	
<b>Broccoli, Brussels Sprouts</b>	Ring Spot ( <i>Mycosphaerella brassicicola</i> )		1.8 to 3.5 L/ha	7	Make the first application as soon as conditions favour the development of the disease. Repeat at 14 day intervals. Use higher rate if disease pressure is high.	
<b>Capsicums</b> Peppers	Grey Mould ( <i>Botrytis cinerea</i> ), Anthracnose ( <i>Colletotrichum acutatum</i> )		1.8 to 2.3 L/ha	1	Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.	
<b>Cabbages, Cauliflowers</b>	Ring Spot ( <i>Mycosphaerella brassicicola</i> )		1.8 to 3.5 L/ha	7	Make the first application as soon as conditions favour the development of the disease. Repeat at 14 day intervals. Use higher rate if disease pressure is high.	
<b>Carrots</b>	Leaf Blight ( <i>Alternaria dauci</i> )		1.8 L/ha		Commence application as soon as conditions favour the development of the disease and then apply every 7 to 14 days.	
<b>Celery</b>	Septoria Leaf Spot ( <i>Septoria apiicola</i> )		NSW, WA only	1.2 L/ha	1	Apply every 7 to 14 days. Apply also to seedbeds.
	Cercospora Early Bight ( <i>Cercospora apii</i> )	Apply every 10 to 14 days.				
<b>Cucurbits</b> Including Cantaloupe, Cucumbers, Honeydew, Muskmelon, Pumpkin, Squash, Rockmelon, Watermelon, Zucchini	Downy Mildew ( <i>Pseudoperonospora cubensis</i> ), Gummy Stem Blight ( <i>Didymella bryoniae</i> ), Anthracnose ( <i>Colletotrichum orbiculare</i> ), Leaf Blight ( <i>Alternaria cucumerina</i> ), Target Leaf Spot ( <i>Cercospora citrullina</i> )	All States	1.6 to 2.5 L/ha		Apply on a 7 to 14 day schedule. Apply rates towards the higher end of the recommended range and at 7 day intervals when disease pressure is high. Commence spray program early, at first true leaf and before vining or flowering. When used at these rates, CHLOROTHALONIL will suppress Powdery Mildew.	
	Belly Rot ( <i>Rhizoctonia solani</i> )				If applying CHLOROTHALONIL for the above foliar	

Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments
					diseases, useful suppression of Belly Rot will be obtained where fruit form on soil covered by earlier recent CHLOROTHALONIL spraying.
<b>Endive</b>	Grey Mould <i>(Botrytis cinerea)</i>		1.8 to 2.3 L/ha		Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.
<b>Leeks Shallots</b>	Purple Blotch <i>(Alternaria porri)</i>				Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 10 day intervals, particularly during wet weather.



Crop/Situation	Disease	State	Rate	WHP (days)	Critical Comments
<b>Okra</b>	Leaf Disease/Spot	Qld, WA only	1.8 to 2.3 L/ha	1	Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 10 day intervals.
<b>Onions</b> excluding Spring Onions	Downy Mildew ( <i>Peronospora destructor</i> )	All States	2.3 L/ha	14	Make the first application as soon as conditions favour the development of the disease. Repeat at 14 day intervals.
<b>Potato</b>  <b>potato (cont'd)</b>	Early Blight or Target spot ( <i>Alternaria solani</i> ), Late Blight or Irish Blight ( <i>Phytophthora infestans</i> )		1.1 to 1.8 L/ha	-	Commence applications at flowering time or earlier if weather conditions are favourable for disease infection. Spray every 7 to 14 days until within 14 days of desiccation or harvest.
<b>Rhubarb</b>	Ascochyta Leaf Spot ( <i>Ascochyta rhei</i> )		140 mL / 100 L Apply 2,000 L/ha	7	Apply every 10 to 14 days.
<b>Radish</b>	Grey Mould ( <i>Botrytis cinerea</i> )		1.8 to 2.3 L/ha	1	Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.
<b>Sweetcorn</b>	Turcicum Leaf Blight ( <i>Exserohilum turcicum</i> )				Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 10 day intervals.
<b>Tomato</b>	Early Blight or Target Spot ( <i>Alternaria solani</i> ), Leaf Mould ( <i>Fulvia fulva</i> ), Grey Leaf Spot ( <i>Stemphylium solani</i> ), Botrytis Rot or Grey Mould ( <i>Botrytis cinerea</i> )			Make the first application as soon as conditions favour the development of the disease. Spray at 7 to 14 day intervals. Continue into the picking season to obtain best results against Leaf Mould and Botrytis Rot.	
<b>Watercress</b>	Cercospora leaf Spot	Qld, WA only			Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.

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

**GENERAL INSTRUCTIONS**

CHLOROTHALONIL is a protectant fungicide only. CHLOROTHALONIL must be applied before diseases occur/become established to be highly effective. Use disease warning services or past history to determine timing of first spray. If diseases are already present then an eradicant product should be used first and mixed with CHLOROTHALONIL.

**Mixing**

Invert container several times to ensure uniform mixture. Mix the required quantity of product with water in the spray tank with the agitator operating.

**Application**

Apply by high volume, low volume or through mister or aircraft spray equipment. Thorough uniform coverage is essential for effective disease control.

Suggested spray volumes per hectare:

High volume: 500 litres or more. Mister: 75 to 255 litres.

Low volume: 200 litres or more. Aerial application: 20 litres or more.

**Compatibility**

CHLOROTHALONIL is compatible with wettable powder formulations of the most commonly used fungicides, insecticides and miticides. DO NOT combine with oil-based emulsifiable or flowable pesticides, unless prior experience has shown the combination to be physically compatible and non-injurious to your crop. This product should not be mixed with spraying oils or sprayed onto crops that have been sprayed with oil for at least 10 days after the oil spray. Oils should not be sprayed on crops treated with this product for at least 10 days after the last spray. Wetting agents have not improved performance. Under some conditions, certain surfactants may cause plant injury.