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POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Apparent 

Chlorothalonil 900 WG

FUNGICIDE

ACTIVE CONSTITUENT: 900 g/kg CHLOROTHALONIL

GROUP M5 FUNGICIDE

For the control of fungal diseases on almonds, apricots, bananas, carrots, celery, cherries, faba beans, grapes, onions, peaches, peanuts, peas, plums, potatoes, tomatoes and vegetables as per the Directions for Use table

IMPORTANT: Read this booklet before use.

APVMA Approval No: 69310/60455

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DIRECTIONS FOR USE**RESTRAINTS:**

DO NOT mix spraying oils or wetting agents with this product.

For all stone fruit except cherries, the following additional restraints apply:

DO NOT use oils after bud-swell and during the season Apparent Chlorothalonil 900 WG is to be used after shuck fall.

DO NOT tank mix Apparent Chlorothalonil 900 WG with EC formulations when spraying after shuck fall.

DO NOT exceed 2.5 kg of Apparent Chlorothalonil 900 WG per hectare of crop.

TREE AND VINE CROPS

RATE			
In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Mixing/ Application section.			
Situation & Crop	Disease	Rate	WHP (days)
Almonds (NOT Qld, NT, ACT)	Shot-hole (<i>Stigmia carpophila</i>)	130 g/100 L Apply 2000 L/ha	-
	Stone fruit rust (<i>Tranzschelia discolor</i>)		
Apricots (NOT Qld, NT, ACT)	Brown rot - Fruit (<i>Monilinia fructicola</i>)	130 g/100 L Apply 2000 L/ha	7
	Blossom blight (<i>Monilinia laxa</i>)		
	Shot-hole (<i>Stigmia carpophila</i>)		
	Stone fruit rust (<i>Tranzschelia discolor</i>)		
Cherries	Freckle (<i>Venturia carpophila</i>)	130 g/100 L Apply 2000 L/ha	7
	Brown rot - Fruit (<i>Monilinia fructicola</i>) (NOT ACT, NT)		
	Blossom blight (<i>Monilinia laxa</i>) (NOT ACT, NT)		
	Shot-hole (<i>Stigmia carpophila</i>)		
	Stone fruit rust (<i>Tranzschelia discolor</i>)		
Grapes Note: russetting of some table grape varieties may occur	Transit rot (<i>Rhizopus stolonifer</i>)	1.5 – 1.9 kg/ha	Dessert 7 Wine 14
	Downy mildew (<i>Plasmopara viticola</i>)		
	Bunch rot (<i>Botrytis cinerea</i>)		
	Black Spot (Anthracnose) (<i>Elsinoe ampelina</i>)	175 g/100 L	
Nectarines (NOT QLD)	Shot-hole (<i>Stigmia carpophila</i>)	133 g/100 L Apply 2000 L/ha	7

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.

Apply at bud-swell, bud-burst, shuck fall, cap fall. Apply every 10 - 14 days.

Apply 1 week pre-harvest.

Apply at bud-swell, bud-burst, pink bud, full bloom. Apply no later than 35 days pre-harvest.

See also Additional Restraints for stone fruits.

Apply at bud-swell, bud-burst, pink bud, shuck fall, cap fall, then every 10 - 14 days. Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits

Apply at bud-swell, bud burst, pink bud, early blossom, full bloom. Apply 3 weeks pre-harvest and 1 week pre-harvest.

Apply at bud-swell, bud burst, pink bud, shuck fall, cap fall, then every 10 - 14 days.

Apply 1 week pre-harvest.

Apply 1 week pre-harvest.

Spray at first appearance of the foliage disease. Apply at 7 - 14 day intervals particularly during wet weather and periods of rapid growth. For bunch rot, applications at early full bloom, two weeks later, at veraisson and two weeks prior to harvest.

Table grapes - russetting of some varieties may occur. Do not apply after cap fall on these varieties.

If Black Spot has occurred in the vineyard in any of the last 3 years, apply at budburst and 14 days later when shoots are 10 – 15 cm long.

If wet/humid conditions persist spray again when shoots are 20 – 30 cm long to protect new growth. Some initial minimal leaf damage on the new shoots of sensitive varieties can occur if spray treatments are applied at budburst and in the first 14 days after budburst. In vineyards with no history of Black Spot, spray only at the first appearance of the disease on the foliage and then at 7 - 14 day intervals if wet/humid conditions persist. Applications up to cap-fall will not cause russetting in Table grape and dried fruit varieties.

Apply at bud-swell, pink bud, shuck fall and then repeat each 14 days if weather conditions favour disease. Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits.

TREE AND VINE CROPS continued

RATE			
In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Mixing/ Application section.			
Situation & Crop	Disease	Rate	WHP (days)
Peaches	Brown rot - Fruit (<i>Monilinia fructicola</i>) Blossom blight (<i>Monilinia laxa</i>)	130 g/100 L Apply 2000 L/ha	7
	Shot-hole (<i>Stigmia carpophila</i>) Stone fruit rust (<i>Tranzschelia discolor</i>)		
	Leaf curl (<i>Taphrina deformans</i>)		
Plums	Brown rot - Fruit (<i>Monilinia fructicola</i>) Blossom blight (<i>Monilinia laxa</i>) (NOT ACT, NT)	133 g/100 L Apply 2000 L/ha	1

NON-TREE AND VINE CROPS

Situation & Crop	Disease	Rate	WHP (days)
Artichoke - Globe	Grey Mould (<i>Botrytis cinerea</i>)	1.5 – 1.9 kg/ha	1
Bananas Do not apply to bananas within 14 days of applying an oil based spray or crop damage will occur	Leaf Spot (<i>Mycosphaerella muscolola</i>)	1.5 kg/ha (Qld, NSW, WA, NT only)	1
		1.3 kg/ha (WA only)	
	Leaf speckle (<i>Mycosphaerella Musae</i>) (Qld, NSW, WA, NT only)	2.5 kg/ha	
Beans - Broad (Faba)	Chocolate spot (<i>Botrytis fabae</i>) Rust (<i>Uromyces viciae-fabae</i>)	1.2 - 1.9 kg/ha	7
Broccoli, Brussel sprouts, Cabbages, Cauliflowers	Ring Spot (<i>Mycosphaerella brassicicola</i>)	1.5 – 3.0 kg/ha	7
Capsicums Peppers	Grey mould (<i>Botrytis cinerea</i>) Anthracnose (<i>Colletotrichum ascutatum</i>)	1.5 - 1.9 kg/ha	1
Carrots	Leaf Blight (<i>Alternaria dauci</i>)	1.5 kg/ha	7

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.

Apply at bud-swell, pink bud, early blossom and full bloom. Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits.

Apply at bud-swell and continue at 7 - 14 day intervals.

Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits.

Apply at bud-swell and continue at 7 - 14 day intervals. In QLD spray only at bud-swell.

Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits.

Apply at bud-swell, bud-burst, early blossom, pink bud and full bloom. Spray applications later than 35 days prior to harvest may result in unacceptable fruit skin damage.

See also Additional Restraints for stone fruits.

Critical Comments

Apply at 7 - 10 day intervals as required. Use the higher rate if disease pressure is high.

For North Qld - Spray every 14 days late January to end of March. Extend to 21 days after March and then 28 - 35 days in the drier months of the year.

For South Qld - Spray every 21 days from start of December to end of April.

For NSW - Spray every 21 days from end of November to end of May.

For WA - Spray every 10 - 14 days from November to end of May and extend to 14 - 21 days from May to November.

Spray schedule same as for control of leaf spot. This product will not eradicate infection already present but will prevent the spread of disease.

Apply at first sign of disease on the leaves or if weather conditions indicate likely incidence of disease. Repeat at 7 - 14 day intervals. Use the higher rate if the crop is dense and disease pressure is high.

Apply at first sign of disease on the leaves or if weather conditions indicate likely incidence of disease. Repeat at 14 day intervals. Use higher rate if disease pressure is high.

Apply at 7 - 10 day intervals as required. Use the higher rate if disease pressure is high.

Commence application at first sign of disease and then spray every 7 - 14 days.

NON-TREE AND VINE CROPS continued

Situation & Crop	Disease	Rate	WHP (days)
Cucurbits (including Cantaloupe, Cucumber, 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>)	1.3 - 2.1 kg/ha	1
	Belly rot (<i>Rhizoctonia solani</i>)	1.3 - 2.1 kg/ha	1
Celery	Septoria leaf spot (<i>Septoria apiicola</i>)	1.5 kg/ha	
	Cercospora early blight (<i>Cercospora apii</i>) (NSW, WA only)	1.0 kg/ha	
Endive	Grey mould (<i>Botrytis cinerea</i>)	1.5 – 1.9 kg/ha	1
Leeks, Shallots	Purple blotch (<i>Aalternaria porri</i>)	1.5 – 1.9 kg/ha	1
Okra	Leaf diseases/spot (Qld, WA only)	1.5 – 1.9 kg/ha	1
Onions (excluding spring onions)	Downy mildew (<i>Peronospora destructor</i>)	1.9 kg/ha	14
Ornamentals Chrysanth-emums, Geraniums, Iris & other ornamentals	Botrytis, Grey mould, Rust diseases, Septoria and Alternaria leaf spot diseases	80 g/100 L	-
Peanuts (NOT Vic, Tas, SA)	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>)	900 g - 1.5 kg/ha	-
Peas (Qld, Tas, WA only)	Downy mildew (<i>Peronospora viciae</i>)	900 g - 1.5 kg/ha	7
Potato	Early blight or Target spot (<i>Alternaria solani</i>) Late blight or Irish blight (<i>Phytophthora infestans</i>)	900 g - 1.5 kg/ha	-
Radish	Grey mould (<i>Botrytis cinerea</i>)	1.5 - 1.9 kg/ha	1
Rhubarb	Ascochyta leaf spot (<i>Ascochyta rhei</i>)	120 g/100 L Apply 2000 L/ha	7
Sweet corn	Turcicum leaf blight (<i>Exaerohillum turcicum</i>)	1.5 - 1.9 kg/ha	1

Critical Comments
Apply on a 7 to 14 day schedule. Apply rates towards the higher end of the recommended range 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, this product will suppress powdery mildew.
Suppression of belly rot will be obtained where fruit form on soil when sprayed using the above foliar spray program.
Apply every 7 - 14 days. Apply also to seed beds. Apply every 10 - 14 days.
Apply at 7 - 10 day intervals as required. Use the higher rate if disease pressure is high. Apply at first appearance of disease. Repeat at 7 - 10 day intervals, particularly during wet weather.
Apply at first appearance of disease. Repeat at 7 - 10 day intervals.
Apply at first sign of disease on the leaves or if weather conditions indicate likely incidence of disease. Repeat at 14 day intervals.
Apply at 7 - 14 day intervals. Use 7 day interval under severe conditions. Avoid application to blooms in azalea, hydrangea and petunia.
Use higher rate when conditions favour leaf spot or when rust appears. Do not feed peanut vines to livestock. NSW AND WA ONLY: Commence application when disease first appears and repeat as necessary to maintain control. QLD ONLY: NORTH AND SOUTH BURNETT - Commence spraying when disease appears and repeat when rain and warm moist nights are expected. ATHERTON TABLELANDS - Commence spraying 4 - 6 weeks after planting and repeat at 7 - 14 day intervals depending on conditions.
Apply at first sign of disease on the leaves or if weather conditions indicate likely incidence of disease. Repeat at 7 - 14 day intervals. Use the higher rate if the crop is dense and disease pressure is high.
Spray at first sign of foliage disease or at flowering time, whichever is earlier. Spray every 7 - 14 days until within 14 days of desiccation or harvest.
Apply at 7 - 10 day intervals as required. Use the higher rate if disease pressure is high.
Apply every 10 - 14 days.
Apply at first appearance of disease. Repeat at 7 - 10 day intervals.

NON-TREE AND VINE CROPS continued

Situation & Crop	Disease	Rate	WHP (days)
Tobacco (Qld, WA only)	Tobacco leaf spot (<i>Ascochyta arida</i>)	180 g/100 L	-
Tomato	Early blight or Target blight (<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>)	1.5 - 1.9 kg/ha	1
Watercress (Qld, WA only)	Cercospora leaf spot	1.5 – 1.9 kg/ha	1

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

WITHHOLDING PERIODS:

Artichoke, bananas, capsicum, celery, cucurbits, endive, leek, okra, peppers, plums, radish, shallots, sweet corn, tomatoes, watercress:	DO NOT HARVEST FOR 1 DAY AFTER APPLICATION
Beans, broccoli, brussels sprouts, cabbages, cauliflowers, rhubarb: Apricots, carrots, cherries, nectarines, peaches, table grapes, peas:	DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION
Wine grapes, onions:	DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION
Beans, Peanuts, Peas:	DO NOT GRAZE LIVESTOCK ON TREATED CROPS.
Potatoes, Peanuts (Harvest)	NOT REQUIRED WHEN USED AS DIRECTED

Critical Comments

Apply every 7 days in seed bed application only.

Spray at first appearance of the foliage disease. Spray at 7 - 14 day intervals. Continue into the picking season to obtain best results against leaf mould and Botrytis rot.

Apply at 7 - 14 day intervals as required. Use the higher rate if disease pressure is high.

GENERAL INSTRUCTIONS

This product is a protectant fungicide for the control of a range of diseases in fruit and vegetables. For effective disease control a good leaf cover must be achieved before a widespread disease outbreak occurs.

APPLICATION

Dilute Spraying:

- 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 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:

- 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.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine an appropriate dilute spray volume (see dilute spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY:

1. Dilute spray volume as determined above: For example 1500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha
3. The concentration factor in this example is: $3 \times$ (ie $1500 \text{ L} / 500 \text{ L} = 3$)
4. 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.

- 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.
- For further information on concentrate spraying, users are advised to consult the relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

MIXING

Half fill spray vat and with agitation system running, add the required amount of product. Top up with water to the required volume. The product must be kept in suspension at all times by continuous agitation. Where prepared spray mixes have been allowed to stand, thoroughly re-agitate before using.

Application rates per hectare:

Low Volume - 200 litres or more.

High Volume - 500 litres or more.

Aerial Application - 20 litres or more.

Mister - 75 to 255 litres.

The volume of water applied should increase as the plants grow in size to maintain adequate cover.

COMPATIBILITY

This product is compatible with wettable powder and flowable formulations of most commonly used fungicides, insecticides and miticides. Unless experience in your area has shown other combinations to be physically compatible and non-injurious to your crop do not combine with other chemicals, especially oil-based emulsifiable or flowable pesticides. 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 last spray.

Wetting Agents: The addition of surfactants does not improve this product's efficiency and under some conditions may cause plant injury.

FUNGICIDE RESISTANCE WARNING

GROUP M5 HERBICIDE

Apparent Chlorothalonil 900 WG Fungicide is a member of the multi-site activity group of fungicides. For fungicide resistance management the product is a Group M5 fungicide. Some naturally occurring individual fungi resistant to Apparent Chlorothalonil 900 WG Fungicide and other Group M5 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 Apparent Chlorothalonil 900 WG Fungicide or 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, Apparent Pty Ltd accepts no liability for any losses that may result from the failure of Apparent Chlorothalonil 900 WG Fungicide to control resistant fungi.

CAUTION

Enclosed cabs (with closed windows and filters) for airblast application. DO NOT use human flaggers unless they are protected by engineering controls such as enclosed cabs.

Re-entry - DO NOT re-enter treated areas until the spray has dried. If prior entry is required, wear chemical resistant gloves.

PROTECTION OF LIVESTOCK

DO NOT contaminate feed or foodstuffs with this product or empty containers.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish. Do NOT contaminate streams, rivers or waterways with chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool well ventilated area. Do not store for prolonged periods in direct sunlight.

Plastic containers - Triple or preferably pressure 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 bury containers at a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

Plastic bag in cardboard container - Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Cardboard container may be recycled.

SAFETY DIRECTIONS

Will damage eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield and goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield. If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia: 131126. If swallowed, do NOT induce vomiting. Give a glass of water.

SAFETY DATA SHEET

For further information, refer to the Safety Data Sheet (SDS) which is available from the supplier.

CONDITIONS OF SALE

The use of Apparent Chlorothalonil 900 WG Fungicide being beyond the control of the manufacturer no warranty expressed or implied is given by Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Apparent Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

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