

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



syngenta®

ACTIVE CONSTITUENT: 720 g/L CHLOROTHALONIL

GROUP

M5

FUNGICIDE

Controls fungal diseases on Almonds, Bananas, Cucurbits, Grapes, Ornamentals, Peanuts, Stone Fruit, Tobacco and Vegetables as specified in the Directions for Use

Syngenta Crop Protection Pty Limited

Level 1, 2-4 Lyonpark Road, Macquarie Park, NSW 2113

In a transport emergency dial 000, Police or Fire Brigade

For specialist advice in an emergency only, call 1800 033 111 (24 hours)

APVMA Approval No: 54115/10-1000/0509

Item No:

TM

DIRECTIONS FOR USE

Restraints

DO NOT mix spraying oils or wetting agents with BRAVO

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

DO NOT use oils after budswell and during the season if BRAVO is to be used after shuckfall

DO NOT tank mix BRAVO with EC formulations when spraying after shuckfall

DO NOT exceed 3.2 L of BRAVO per hectare of crop

FRUITS AND VEGETABLES

Crop	Disease	State	Rate	WHP (days)	Critical Comments
Artichokes 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.
Bananas 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	Nth Qld: 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. Sth Qld: Spray every 21 days from start of December to end of April. WA: Spray every 10 to 14 days from November to end of May and extend to 14 to 21 days from May to November. NSW: 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		
Broccoli, Brussels Sprouts, Cabbages, Cauliflowers	Ring Spot (<i>Mycosphaerella brassicicola</i>)	All States	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.
Capsicums Peppers	Anthracnose (<i>Colletotrichum acutatum</i>), 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.
Carrots	Leaf Blight (<i>Alternaria dauci</i>)		1.8 L/ha	7	Commence application as soon as conditions favour the development of the disease and then apply every 7 to 14 days.
Celery	Septoria Leaf Spot (<i>Septoria apiicola</i>)			1	Apply every 7 to 14 days. Apply also to seedbeds-
	Cercospora Early Blight (<i>Cercospora apii</i>)	NSW, WA, ACT only	1.2 L/ha		Apply every 10 to 14 days-

Crop	Disease	State	Rate	WHP (days)	Critical Comments
Cucurbits Including Cantaloupe, Cucumbers, Honeydew, Muskmelon, Pumpkin, Squash, Rockmelon, Watermelon, Zucchini	Anthracnose (<i>Colletotrichum orbiculare</i>), Downy Mildew (<i>Pseudoperonospora cubensis</i>), Gummy Stem Blight (<i>Didymella bryoniae</i>), Leaf Blight (<i>Alternaria cucumerina</i>), Target Leaf Spot (<i>Cercospora citrullina</i>)	All States	1.6 to 2.5 L/ha	1	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, BRAVO will suppress Powdery Mildew.
	Belly Rot (<i>Rhizoctonia solani</i>)				If applying BRAVO for the above foliar diseases, useful suppression of Belly Rot will be obtained where fruit form on soil covered by earlier recent BRAVO spraying.
Endive	Grey Mould (<i>Botrytis cinerea</i>)	Qld, WA only	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.
Leeks Shallots	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.
Okra	Leaf Disease/Spot				Make the first application as soon as conditions favour the development of the disease. Repeat at 7 to 10 day intervals.
Onions 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.
Potatoes	Early Blight or Target Spot (<i>Alternaria solani</i>), Late Blight or Irish Blight (<i>Phytophthora infestans</i>)	All States	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.
Radish	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.
Rhubarb	Ascochyta Leaf Spot (<i>Ascochyta rhei</i>)		140 mL/ 100 L Apply 2,000 L/ha	7	Apply every 10 to 14 days. Ensure thorough coverage.
Sweet Corn	Turcicum Leaf Blight (<i>Exserohilum turcicum</i>)		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.

Crop	Disease	State	Rate	WHP (days)	Critical Comments
Tomatoes	Botrytis Rot or Grey Mould (<i>Botrytis cinerea</i>), Early Blight or Target Spot (<i>Alternaria solani</i>), Grey Leaf Spot (<i>Stemphylium solani</i>), Leaf Mould (<i>Fulvia fulva</i>)	All States	1.8 to 2.3 L/ha	1	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.
Water Cress	Cercospora Leaf Spot	Qld, WA only			Apply at 7 to 10 day intervals as required. Use the higher rate if disease pressure is high.

LEGUMES

Beans 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.
Peanuts	Early Leaf Spot (<i>Cercospora arachidicola</i>), Late Leaf Spot (<i>Cercosporidium personatum</i>), Net Blotch (<i>Didymosphaeria arachidicola</i>), Peanut Rust (<i>Puccinia arachidis</i>), Peppery Leaf Spot (<i>Leptosphaerulina trifolii</i>)	Qld, NSW, WA, NT only	1.1 to 1.8 L/ha	-	Use higher rate for Peanut Rust. South Burnett, NSW, WA: Commence application as soon as conditions favour the development of the disease and repeat as necessary to maintain control. Atherton Tableland: Commence application 6 weeks after planting and repeat every 2 weeks.
Peas	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.

MISCELLANEOUS

Ornamentals Chrysanthemums, Geraniums, Iris, other ornamentals	Alternaria Leaf Spot diseases, Botrytis, Grey Mould, Rust diseases, Septoria	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.
Tobacco	Tobacco Leaf Spot (<i>Ascochyta arida</i>)	Qld, WA only	220 mL/ 100 L		Apply every 7 days in seedbed application only.

TREE AND VINE CROPS

Rate: In the following table all rates given are for dilute spraying. For concentrate spraying, refer to the Application Section.		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. Ensure thorough coverage.			
Crop	Disease	State	Rate	WHP (days)	Critical Comments
Almonds	Shot-hole (<i>Stigmia carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>)	NSW, Vic, Tas, SA, WA, ACT only	160 mL/100 L	-	Apply at budswell, budburst, pink bud, shuckfall, capfall. Apply every 10 to 14 days. Apply 1 week pre-harvest.
	Apricots			Blossom Blight (<i>Monilinia laxa</i>), Brown Rot – Fruit (<i>Monilinia fructicola</i>)	7
	Freckle (<i>Venturia carpophila.</i>), Shot-hole (<i>Stigmia carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>)		Apply at budswell, budburst, pink bud, shuckfall, capfall, then every 10 to 14 days.		
Cherries	Blossom Blight (<i>Monilinia laxa</i>), Brown Rot – Fruit (<i>Monilinia fructicola</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>Stigmia carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>)				Apply at budswell, budburst, pink bud, shuckfall, capfall, then every 10 to 14 days. Apply 1 week pre-harvest.
	Transit Rot (<i>Rhizopus stolonifer</i>)				Apply 1 week pre-harvest.

<p><i>Rate:</i> In the following table all rates given are for dilute spraying. For concentrate spraying, refer to the Application Section.</p>					<p><i>Critical Comments:</i> 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. Ensure thorough coverage.</p>	
Crop	Disease	State	Rate	WHP (days)	Critical Comments	
<p>Grapes Note russetting of some Table Grape varieties may occur</p>	<p>Black Spot (Anthracnose) (<i>Elsinoe ampelina</i>)</p>	<p>All States</p>	<p>210 mL/ 100 L</p>	<p>Dessert 7 Wine 14</p>	<p>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 to 15 cm long. If wet/humid conditions persist, spray again when shoots are 20 to 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, make the first application as soon as conditions favour the development of the disease on the foliage and then at 7 to 14 day intervals if wet/humid conditions persist. Applications up to capfall will not cause russetting in table grape and dried fruit varieties.</p>	
	<p>Bunch Rot (<i>Botrytis cinerea</i>), Downy Mildew (<i>Plasmopara viticola</i>)</p>		<p>160 to 210 mL/ 100 L</p>		<p>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. Bunch Rot: Apply at early full bloom, 2 weeks later, at veraison and 2 weeks prior to harvest. Table Grapes: Russetting of some varieties may occur. Use only up to capfall in these varieties.</p>	
<p>Nectarines</p>	<p>Blossom Blight (<i>Monilinia laxa</i>), Brown Rot – Fruit (<i>Monilinia fructicola</i>)</p>	<p>NSW, Vic, Tas, SA, WA, ACT only</p>	<p>160 mL/ 100 L</p>	<p>7</p>	<p>Apply at budswell, budburst, pink bud, early blossom and full bloom.</p>	<p>Application later than 35 days prior to harvest may result in unacceptable fruit skin damage. See also additional Restraints for stone fruit.</p>
	<p>Shot-hole (<i>Stigmina carpophila</i>)</p>				<p>Apply at budswell, pink bud, shuckfall and then repeat every 14 days if weather conditions favour disease.</p>	

<p><i>Rate:</i> In the following table all rates given are for dilute spraying. For concentrate spraying, refer to the Application Section.</p>					<p><i>Critical Comments:</i> 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. Ensure thorough coverage.</p>	
Crop	Disease	State	Rate	WHP (days)	Critical Comments	
Peaches	Blossom Blight (<i>Monilinia laxa</i>), Brown Rot – Fruit (<i>Monilinia fructicola</i>)	All States	160 mL/ 100 L	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.
	Leaf Curl (<i>Taphrina deformans</i>)				Apply at budswell and continue at 7 to 14 day intervals. Qld: Spray only at budswell.	
	Shot-hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>)				Apply at budswell and continue at 7 to 14 day intervals.	
Plums	Blossom Blight (<i>Monilinia laxa</i>), Brown Rot – Fruit (<i>Monilinia fructicola</i>)			1	Apply at budswell, budburst, early blossom, pink bud and full bloom.	
	Shot-hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>)				Apply at budswell, budburst, pink bud, shuckfall and capfall.	

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

Apricots, Beans, Broccoli, Brussels Sprouts, Cabbages, Carrots, Cauliflowers, Cherries, Nectarines, Peaches, Peas, Rhubarb, Table Grapes:

DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION

Onions, Wine Grapes:

DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

Beans, Peanuts, Peas:

DO NOT GRAZE LIVESTOCK ON TREATED CROPS

Potatoes:

NOT REQUIRED WHEN USED AS DIRECTED

GENERAL INSTRUCTIONS

BRAVO is a protectant fungicide only. BRAVO 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 BRAVO.

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 for Non Tree and Vine Crops

High Volume: 500 litres or more

Mister: 75 to 255 litres

Low Volume: 200 litres or more

Aerial Application: 20 litres or more

Application in Tree and Vine Crops

Dilute Spraying: 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 runoff. Avoid excessive runoff. 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 runoff. 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 runoff) 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*) 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 1000 L/ha
2. Your chosen concentrate spray volume: for example 500 L/ha
3. The concentration factor in this example is: 2 x (ie $1000 \text{ L} \div 500 \text{ L} = 2$)
4. If the dilute label rate is 210 mL/100 L, then the concentrate rate becomes 2 x 210, that is 420 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 relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Compatibility

BRAVO 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.

Fungicide Resistance Warning

GROUP	M5	FUNGICIDE
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For fungicide resistance management BRAVO Fungicide is a Group M5 fungicide. Some naturally occurring individual fungi resistant to BRAVO 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 BRAVO 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, Syngenta Crop Protection Pty Limited accepts no liability for any losses that may result from the failure of BRAVO to control resistant fungi.

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 the chemical or used container.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.

Refillable Containers

Empty contents fully into application equipment. Close all valves and return to point of sale for refill or storage.

Other Containers

Triple or preferably pressure 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. 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 spray and using the prepared spray wear:

- cotton overalls buttoned to the neck and wrist
- a washable hat
- elbow-length PVC gloves
- goggles
- disposable mist 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 day's use, wash gloves and goggles and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131 126. If swallowed, DO NOT induce vomiting. Give a glass of water.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required, refer to the Material Safety Data Sheet. For a copy phone 1800 067 108 or visit our website at www.syngenta.com.au

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

Syngenta has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. Syngenta accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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