

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

QUANTUM

Captan 900 WG

FUNGICIDE

ACTIVE CONSTITUENT: 900 g/kg CAPTAN

GROUP M4 FUNGICIDE

For the control of certain diseases in almonds, a range of fruit crops, turf & ornamentals as per directions for use.

APVMA Approval No.: 96625/150120

WG

Formulation Type
Water Dispersible Granule

**BE PROUDLY
AUSTRALIAN**

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 **QUANTUM
AGROSCIENCES**

DIRECTIONS FOR USE

TREE AND VINE CROPS					
<p>Rate: In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Mixing/Application section.</p>				<p>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.</p>	
CROP	DISEASE	STATES	RATE /100L	WHP	
Almonds	Anthracnose (<i>Colletotrichum acutatum</i>), Blossom blight (<i>Monolinia laxa</i>), Shot hole (<i>Wilsonomyces carpophilum</i>), Nut scab (<i>Cladosporium carpophilum</i>)	NSW, Vic & SA only	<p>Dilute spraying 180g/100L (maximum spray volume 2000L/ha)</p> <p>Concentrate spraying Refer to the Mixing/ Application section</p>	4 weeks	For anthracnose control in almonds, Quantum Captan 900 WG Fungicide should be used as part of an integrated control program using other fungicides and orchard hygiene. Apply 3 applications commencing at petal fall followed by applications at 2-3 weeks and 4-5 weeks after petal fall. Quantum Captan 900 WG Fungicide applications at these times should be preceded by applications of Barrack® at pink bud and Corvette® Flowable Fungicide at full bloom, especially for control of blossom blight. Quantum Captan 900 WG Fungicide applications at these times should be followed by applications at 2-3 week intervals until after nut set is completed with products such as Barrack® for ongoing control of anthracnose, shot hole and nut scab. Under conditions of heavy disease pressure, further applications of other fungicides may be required.
Apples	Black spot (<i>Venturia inaequalis</i>)	All States	<p>Dilute spraying 110g/100L</p> <p>Concentrate spraying Refer to the Mixing/ Application section</p>	7 days	Apply from pink stage onwards following a copper spray at green tip, then at 7 day intervals until petal fall. After petal fall apply as a cover spray at 10-14 day intervals. The risk of russet may be increased in some varieties. Where this is of concern use alternative materials between full bloom and second cover. Apply to point of run-off. Apply no more than five applications per season. DO NOT use at concentrate spray rates greater than 5X the dilute application rate.
Pears	Black spot (<i>Venturia pirina</i>)				
Grapes	Black spot (<i>Elsinoe ampelina</i>)				Apply at 50% bud-burst and repeat application 10-14 days later. Apply to point of run-off. Apply no more than five applications per season. Apply in a program of sprays applied at early flowering, 80- 100% cap fall, pre-bunch closure, veraisson and pre-harvest. Apply to point of run-off. Apply no more than five applications per season. DO NOT use at concentrate spray rates greater than 5X the dilute application rate.
	Grey mould (<i>Botrytis cinerea</i>)				Apply in a program of sprays applied at early flowering, 80- 100% cap fall, pre-bunch closure, veraisson and pre-harvest. Apply to point of run-off. Apply no more than five applications per season. DO NOT use at concentrate spray rates greater than 5X the dilute application rate.
	Downy mildew (<i>Plasmopara viticola</i>)				Apply from flowering onwards, at intervals of 10-14 days. Apply to point of run-off. Apply no more than five applications per season. DO NOT use at concentrate spray rates greater than 5X the dilute application rate.
	Phomopsis Cane and Leaf Blight (<i>Phomopsis viticola</i>)				Commence application at early budburst and repeat at 7 to 14 day intervals until prior to flowering to maintain a cover of new grape foliage. Apply no more than 5 applications per season. Use the shorter application interval where there is rapid shoot growth and conditions are favourable for Phomopsis infection (wet weather). Adjust spray application equipment to obtain a thorough coverage of grape buds and shoots. DO NOT use at concentrate spray rates greater than 5X the dilute application rate.

CROP	DISEASE	STATES	RATE /100L	WHP	CRITICAL COMMENTS
Stone Fruit (Except apricots)	Blossom blight and Brown rot (<i>Sclerotinia laxa</i> , <i>S. fructicola</i>)	All States		7 days	Apply at any of the following times as part of a spray program to control blossom blight and brown rot – pink bud, 10% blossom, full bloom, petal fall and shuck fall and pre-harvest sprays at 6, 3 and 1 week prior to harvest. Apply to point of run-off. Apply no more than five applications per season. DO NOT apply to apricots as damage to fruit and foliage may occur. DO NOT use at concentrate spray rates greater than 2X the dilute application rate.
NON-TREE AND VINE CROPS					
CROP	DISEASE	STATES	RATE /100L	WHP	CRITICAL COMMENTS
Strawberries	Grey mould (<i>Botrytis cinerea</i>), Gloeosporium fruit rot	All States	110g	1 day	Apply every 10 days commencing at blossom stage. Apply to point of run-off. Apply no more than five applications per season.
	Phytophthora fruit rot (<i>Phytophthora nicotianae</i> var. <i>parasitica</i>), Black spot (Anthracnose) (<i>Colletotrichum acutatum</i>), Scorch (<i>Diplocarpon earlianum</i>), Leaf blight (<i>Dendrophoma obscurans</i>)		180g		
Turf	Brown patch (<i>Rhizoctonia solani</i>)	All States	90-135g in 25-50 litres of water for each 100m ² of turf	–	For preventative treatment from September to April, apply every 5-6 weeks. Apply no more than five applications per season.
Seedlings (Ornamentals & Tobacco)	Damping-off (<i>Pythium</i> spp.)		110g		Use 3 litres of solution per m ² of seedbed. Apply weekly-fortnightly when weather conditions favouring the disease persists, paying particular attention to bases of the seedlings. When treating tobacco seedbeds wait until seedlings are at least 5cm high.
Roses	Black spot (<i>Diplocarpon rosae</i>)				Apply to thoroughly wet both surfaces of foliage. Apply every 7-14 days. Use the shorter interval during showery weather. Apply no more than five applications per season.

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

WITHHOLDING PERIODS:

STRAWBERRIES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

APPLES, GRAPES, PEARS, STONE FRUIT: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

DO NOT USE TREATED PRODUCE FOR STOCK FOOD WITHIN 7 DAYS OF TREATMENT.

ALMONDS: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.

DO NOT USE TREATED PRODUCE FOR STOCK FOOD WITHIN 4 WEEKS OF TREATMENT.

DO NOT GRAZE ANY TREATED AREA OR CUT FOR STOCKFOOD.

GENERAL INSTRUCTIONS

MIXING

Quantum Captan 900 WG Fungicide mixes readily with water and should not be premixed.

Slowly add the required amount of product to the water under agitation in the spray vat. Maintain agitation throughout spraying. After a stoppage, thoroughly re-mix before recommencing spraying.

COMPATIBILITY AND CROP SAFETY

Mixtures of Quantum Captan 900 WG Fungicide with commonly used wettable powders and suspension concentrate insecticides and fungicides should not cause any problems. Apart from the products listed below mixtures with emulsifiable concentrates are not recommended.

If tank mixes are to be used observe all directions, precautions and limitations on all products to be used. Caution should also be exercised when spraying any mixtures on varieties of fruit trees or vines where there has been no previous experience of mixtures with Quantum Captan 900 WG Fungicide.

A mixture of Quantum Captan 900 WG Fungicide with more than one of these products or with any other product may be ineffective or may cause serious damage. The use of such a mixture is not recommended without prior advice, and would therefore be entirely at the user's risk. If other mixtures or 3 way mixtures of any of these products are being considered consult your Quantum Agrosiences dealer or representative for advice.

Mixtures of Quantum Captan 900 WG Fungicide with Lorsban® 500EC or Nimrod® may leave an oily residue on the inside of spray vats which may be difficult to remove. Quantum Captan 900 WG Fungicide should not be combined with Bordeaux mixture, spray lime, lime sulphur or oils. Do not apply Quantum Captan 900 WG Fungicide in combination with or within 14 days before or after winter or summer oil sprays. Combinations of captan and sulphur should not be used on crops sensitive to sulphur.

Quantum Captan 900 WG Fungicide mixed with Folidol® M500 may be phytotoxic to many varieties of apples and pears. If it is necessary to use both Quantum Captan 900 WG Fungicide and Folidol M500 in a spray program, sprays of these products must be at least 7 days apart.

On pears tank mixtures of Quantum Captan 900 WG Fungicide plus Omite® 300WG and Quantum Captan 900 WG Fungicide and Gusathion® (without calcium nitrate) plus Omite® 300WG have been found to be phytotoxic.

DO NOT tank mix these products, for use on pears.

Caution should be taken when applying chemical mixtures to all crops. Varieties within crop groups may react differently therefore a small area should be tested prior to application to crop.

APPLICATION

For ground application: These rates are for high volume spraying to point of run-off.

DO NOT apply by aircraft.

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 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 100L 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.

Almonds: A maximum spray volume of 2000L/ha to be used in almonds for dilute spraying.

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 1000 L/ha.
2. Your chosen concentrate spray volume: For example 500 L/ha.
3. The concentration factor in this example is: $2 \times$ (i.e. $1000\text{L}/500\text{L} = 2$).
4. If the dilute label rate is 125g/100L, then the concentrate rate becomes 2×125 , that is 250g/100L of concentrate spray.

The chosen spray volume, amount of product per 100L of water, and the sprayer set up and operation may need to be changed as the crop grows.

DO NOT use at a concentration rate higher than that specified in the Critical Comments as crop safety has not been assessed. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

FUNGICIDE RESISTANCE WARNING

Quantum Captan 900 WG Fungicide is a member of the multi-site activity action group of fungicides. For fungicide resistance management the product is a Group M4 fungicide. Some naturally occurring individual fungi resistant to Quantum Captan 900 WG Fungicide and other Group M4 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 Quantum Captan 900 WG Fungicide or other Group M4 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, QUANTUM AGROSCIENCES HOLDINGS PTY LTD accepts no liability for any losses that may result from the failure of Quantum Captan 900 WG Fungicide to control resistant fungi.

GROUP M4 FUNGICIDE

PRECAUTIONS

Re-entry Periods: DO NOT allow entry into treated areas until the spray has dried. When prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

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

Harmful if inhaled or swallowed. May irritate the nose and throat. May irritate the skin. Will damage eyes. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. When opening the container, mixing, loading and preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), a washable hat, elbow-length chemical resistant gloves and a face shield or goggles. If product on skin, immediately wash area with soap and water. If product or spray in eyes, wash it out immediately with water. Wash hands after use. After each days use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet (SDS) which is available from the supplier.

CONDITIONS OF SALE: Quantum Agrosociences Holdings Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Quantum Agrosociences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosociences Holdings Pty Ltd has any authority to add to or alter these conditions.

Additional information required under the Globally Harmonised System (GHS) classification of the substance/mixture: **May cause an allergic skin reaction. Causes serious eye damage. Toxic if inhaled. Suspected of causing cancer. Very toxic to aquatic life.**
Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection and face protection. Avoid breathing dust/fumes. Avoid release to the environment. Do not handle until all safety precautions have been read and understood. Contaminated work clothing should not be allowed out of the workplace.