



**PERMIT TO ALLOW MINOR USE OF AN AGVET CHEMICAL PRODUCT
FOR THE CONTROL OF A RANGE OF FUNGAL DISEASES IN LEAFY, BULB,
ROOT AND TUBER, FRUITING AND LEGUME VEGETABLES AND HERBS.**

PERMIT NUMBER – PER82895

This permit is issued to the Permit Holder in response to an application granted by the APVMA under section 112 of the Agvet Codes of the jurisdictions set out below. This permit allows a person, as stipulated below, to use the product in the manner specified in this permit in the designated jurisdictions. This permit also allows any person to claim that the product can be used in the manner specified in this permit.

THIS PERMIT IS IN FORCE FROM 4 AUGUST 2017 TO 31 AUGUST 2020.

Permit Holder:

HORTICULTURE INNOVATION AUSTRALIA LTD
Level 8, 1 Chifley Square
SYDNEY NSW 2000

Persons who can use the product under this permit:

Persons generally.

CONDITIONS OF USE

Product to be used:

NUFARM ELECT 500 FLOWABLE FUNGICIDE
PLUS OTHER REGISTERED PRODUCTS

Containing: 500 g/L CHLOROTHALONIL as the only active constituent.

BRAVO WEATHER STIK FUNGICIDE
PLUS OTHER REGISTERED PRODUCTS

Containing: 720 g/L CHLOROTHALONIL as the only active constituent.

APPARENT CHLOROTHALONIL 900 WG FUNGICIDE
PLUS OTHER REGISTERED PRODUCTS

Containing: 900 g/kg CHLOROTHALONIL as the only active constituent.

Restraints

DO NOT mix spraying oils, wetting agents or products formulated as an Emulsifiable Concentrate (EC).

Observe restraints listed on product label.

Observe the re-entry period and safety directions on the product label.

Crop	Disease	State	Rate g/L Chlorothalonil Product			HARVEST WHP (days)	Critical Comments
			500g/L	720g/L	900g/L		
Herbs							
Parsley (foliage only)	Downy Mildew, Botrytis, Alternaria & Cercospora	All States	200mL/100L or (2mL/L)	140mL/100L or (1.4mL/L)	110g/100L Or (1.1g/L)	14	Do not apply to crops where seeds or roots will be used as a spice. Do not use in glasshouse/shade house situations. Do not apply more than 1650L of water /ha.

Crop	Disease	State	Rate g/L Chlorothalonil Product			HARVEST WHP (days)	Critical Comments
			500g/L	720g/L	900g/L		
Leafy Vegetables (including Brassica leafy vegetables)							
Fennel	Downy Mildew Purple Blotch (<i>Alternaria porri</i>)	All States	2.6-3.3 L/ha	1.8-2.3 L/ha	1.4-1.8 kg/ha	7	Apply with a minimum re-application interval of 7-10 days. Do not apply more than 4 applications per crop. Maximum of 2 foliar applications in a minimum of 200 L/ha
Spinach & Silverbeet	Downy mildew Alternaria leaf blight (<i>Alternaria</i> spp.), Grey mould (<i>Botrytis cinerea</i>)						
Brassica Leafy Vegetables (Refer to Crops in Attachment 1) DO NOT use in protected cropping situations.							
Bulb Vegetable							
Spring Onions	Downy mildew	All States	3.3 L/ha	2.3 L/ha	1.8 kg/ha	7	A minimum re-application interval of 14 days. Do not apply more than 2 applications per crop.
	Grey mould (<i>Botrytis cinerea</i>)		2.6-3.3 L/ha	1.8 -2.3 L/ha	1.4-1.8 kg/ha		

Crop	Disease	State	Rate g/L Chlorothalonil Product			HARVEST WHP (days)	Critical Comments	
			500g/L	720g/L	900g/L			
Root and Tuber Vegetables								
Beetroot	Alternaria spp., Botrytis spp., Cercospora leaf spot (Cercospora beticola), Phoma Leaf spot (Phoma betae)	All States	2.6-3.3 L/ha	1.8 -2.3 L/ha	1.4-1.8 kg/ha	7	A maximum of 4 applications per season.	
Celeriac	Early Blight (Cercospora apii)		1.7 L/ha	1.2 L/ha	0.9 kg/ha			Apply every 10-14 days.
Parsnip	Septoria leaf spot (Septoria apiicola)		2.6 L/ha	1.8 L/ha	1.4 kg/ha			Apply also to seed beds.
Radish	Alternaria (Alternaria brassicae & A. Brassicola), Downy Mildew (Peronospora parasitica), Grey Leaf Spot (Stemphylium solani)		2.6-3.3 L/ha	1.8-2.3 L/ha	1.4-1.8 kg/ha	1	Apply at 7-10 day intervals as required.	
	White Rust (Albugo candida)							
Fruiting Vegetables								
Cucumber (Field and Protected)	Botrytis rot (Botrytis cinerea)	All States	2.6-3.6 L/ha	1.8-2.5 L/ha	1.4-2.0 kg/ha	1	Apply a maximum of 4 applications with a minimum re-treatment interval of 7 days between applications.	
Eggplant	Grey Mould (Botrytis cinerea), Alternaria (A. brassicae & A. Brassicola), Downy Mildew (Peronospora parasitica), Grey Leaf Spot (Stemphylium solani).		2.6-3.3 L/ha	1.8-2.3 L/ha	1.4-1.8 kg/ha	3		

Crop	Disease	State	Rate g/L Chlorothalonil Product			HARVEST WHP (days)	Critical Comments
			500g/L	720g/L	900g/L		
Legume Vegetables							
Garden peas	Black Spot (Ascochyta pisi, Mycosphaerella pinodes, Phoma medicaginis var. Pinodella)	WA only	1.6-2.6 L/ha	1.1-1.8 L/ha	0.8-1.4 kg/ha	7	Apply a maximum of 4 applications per season.
Snow peas & sugar snap peas	Downy mildew (Peronospora viciae) & Chocolate spot (Botrytis fabae)	All States					

Critical Use Comments:

- Make the initial spray application as soon as conditions favour disease infection and development.
- Chlorothalonil is a protective fungicide and for effective disease control, good leaf coverage must be achieved before a widespread disease outbreak occurs.
- Repeat applications at 7-14 day intervals (excluding spinach, silverbeet, spring onions and for White Rust on radish)
- Apply by foliar application
- The volume of water applied should increase as the plants grow in size to maintain adequate cover.
- Use higher rate if disease pressure is high or for the control of Septoria
- Apply sufficient water to cover the crop near to the point of run-off. Ensure even and thorough coverage of all foliage.
- Observe Restraint(s) listed on the product label.
- Observe the *Re-entry period* and *Safety Directions* on the product label

Withholding Period - GRAZING:

Brassica Leafy Vegetables, Radish, Eggplant, Garden Peas, Snow & Sugar Snap Peas:

DO NOT cut for stockfeed.

DO NOT allow livestock to graze crops or stubble that have been treated with chlorothalonil.

Jurisdiction:

ALL States except Vic

WA only for Garden Peas

(Note: Victoria is not included in this permit because their 'control-of-use' legislation means that a permit is not required to legalise this off-label use in VIC).

Disease Management:

A regular protective program is necessary to prevent disease establishment. Chlorothalonil has protective fungicidal action, and is most effective when applied as a scheduled application at short spray intervals prior to wet weather. Cool temperature conditions (around 15°C) following a rain event are highly favourable for disease infection, and prolonged leaf wetness in early spring is particularly conducive for Anthracnose infection in lettuce. Chlorothalonil primarily inhibits spore germination and has limited or no curative action. Use of chlorothalonil following an infection period will therefore not effectively control Anthracnose.

Apply chlorothalonil as part of an overall resistance management program in rotation with fungicides from other chemical groups.

Additional Conditions:

This Permit provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.

Persons who wish to prepare for use and/or use products for the purposes specified in this permit must read, or have read to them, the details and conditions of this permit.

TO AVOID CROP DAMAGE:

The sensitivity of some species and varieties of the crops to be treated under this permit has not been fully evaluated. It is advisable, therefore, to only treat a small number of plants to ascertain their reaction before treating the whole crop.

EXPORT OF TREATED PRODUCE:

Exported produce must have appropriate residue tolerance limits established in the importing countries and any residues must not exceed the tolerance limits.

Issued by Issued by Australian Pesticides and Veterinary Medicines Authority

ATTACHMENT 1

Brassica leafy vegetables covered by this permit are:

Asian names	Common names	Scientific names
Bok choy	Chinese white cabbage Chinese chard	<i>B. rapa var chinensis</i> <i>B. chinensis var communis</i>
Pak choy	Chinese white cabbage Chinese chard	<i>B. rapa var chinensis</i> <i>B. sinensis</i>
Choi sum	Chinese flowering cabbage	<i>B. rapa var parachinensis</i> <i>B. campestris var parachinensis</i>
Gai lum Gai lan Kai lan	Chinese broccoli	<i>B. oleraceae var alboglabra</i>
Kai choi	Indian mustard cabbage	<i>B. juncea</i>
Wong bok Pet sai Haksukai	Chinese cabbage	<i>B. rapa var pekinensis</i>
Mizuna	Mizuna greens	<i>B. rapa var japonica</i>
Amsoi	Red mustard	<i>B. juncea var rugosa</i>
Taishona	Curled mustard	<i>B. juncea</i> variety unknown
Komatsuma	Mustard spinach	<i>B. pervirdes</i>
Tatsoi	Chinese flat cabbage	<i>B. rapa var rosularis</i>
Gai choy Kai choi Am soi	Chinese mustard Indian mustard	<i>B. juncea var rugosa</i>
Unknown	Turnip greens	<i>B. rapa var rapa</i>
Unknown	Mustard greens	<i>B. juncea</i> unknown variety
Unknown	Rutabaga greens	Unknown
Mibuna	Unknown	<i>B. rapa var nipposinica</i>
Unknown	Kale	<i>B. oleracea convarcephala var acphala</i>
Unknown	Rocket	<i>Eruca sativa</i>
Unknown	Wild Rocket	<i>Diplotaxis tenuifolia</i>