

# PERMIT TO ALLOW MINOR USE OF A REGISTERED AGVET CHEMICAL PRODUCT FOR CONTROL OF DIPTERA IN (NON-FOOD) NURSERY STOCK, INCLUDING SEEDLINGS, TUBES, PLUGS, POTTED COLOUR, TREES, SHRUBS, FOLIAGE PLANTS, PALMS, GRASSES, FRUIT PLANTS, CUT FLOWERS\* AND ORNAMENTALS

### PERMIT NUMBER – PER91812

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 the Permit Holder and any person stipulated below to claim that the product can be used in the manner specified in this permit.

#### THIS PERMIT IS IN FORCE FROM 24 MARCH 2022 TO 31 MARCH 2027

#### **Permit Holder:**

GREENLIFE INDUSTRY AUSTRALIA LIMITED c/- AGAWARE CONSULTING PTY LTD 21 Rosella Avenue STRATHFIELDSAYE VIC 3551

# Persons who can use the product under this permit:

Persons generally.

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# **CONDITIONS OF USE**

### **Products to be used:**

VERTIMEC MITICIDE/INSECTICIDE (APVMA No. 50772)

PLUS OTHER REGISTERED PRODUCTS

Containing: 18 g/L ABAMECTIN as the only active constituent.

VOLIAM TARGO INSECTICIDE (APVMA No. 81921)

PLUS OTHER REGISTERED PRODUCTS

Containing: 18 g/L ABAMECTIN and 45 g/L CHLORANTRANILIPROLE as the only active constituents.

AZAMAX INSECTICIDE (APVMA No. 61980)

PLUS OTHER REGISTERED PRODUCTS

Containing: 11.82 g/L AZADIRACHTIN as the only active constituent.

DIMILIN W.P. 250 INSECT GROWTH REGULATOR (APVMA No. 40747)

PLUS OTHER REGISTERED PRODUCTS

Containing: 250 g/kg DIFLUBENZURON as the only active constituent.

PROCLAIM OPTI INSECTICIDE (APVMA No. 83844)

PLUS OTHER REGISTERED PRODUCTS

Containing: 44 g/kg EMAMECTIN present as emamectin benzoate as the only active constituent.

ADMIRAL ADVANCE INSECT GROWTH REGULATOR (APVMA No. 67264)

PLUS OTHER REGISTERED PRODUCTS

Containing: 100 g/L PYRIPROXYFEN as the only active constituent.

#### **Directions for Use:**

Refer to the *Application Rates*, *Critical Use Comments* and *Additional Conditions* listed in **Table 1** below.

## Withholding Period:

DO NOT use on plants grown for human or animal consumption.

#### **Jurisdiction:**

All States and Territories

# **Additional Conditions:**

This permit allows for the use of a product in a manner specified on the permit. 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. Unless otherwise stated, the use of the product must be in accordance with the product label.

### To Avoid Crop Damage

Nursery stock is not known to be sensitive to the chemical insecticide products listed in this permit when used in strict accordance with the rate, conditions of use and other warnings.

However, the large number of disparate crop lines produced in commercial production nurseries means that not all these products have been fully evaluated for crop safety on all species, or in all situations where treatment may be undertaken. Some of these insecticides may demonstrate toxicity under certain situations, application methods, application rates and

weather conditions to susceptible nursery stock. Some insecticides may also leave undesirable spray residue on foliage and flowers.

If unsure of crop tolerance, users must treat a sample number of plants or a small area prior to whole crop treatment and monitor any phytotoxic effects that will compromise production goals. This action cannot guarantee crop safety as application, environmental and crop conditions may vary from test treatment to whole of crop treatment. Any instances of phytotoxic damage should be reported immediately to the permit holder.

# Resistance Management

Use insecticide products in accordance with existing *Insecticide Resistance Management Strategies* and in accordance with best practice. Insecticide products should be used as part of an integrated pest management program, which incorporates as many control options as possible to minimise pest pressure. It is important that approved insecticide products are rotated between different chemical mode of action (MoA) groups at regular intervals within a structured disease management plan.

Insecticide Resistance Management Strategies have been developed by CropLife Australia. An updated version of these strategies is available from CropLife Australia's website at: <a href="http://www.croplife.org.au/industry-stewardship/resistance-management">http://www.croplife.org.au/industry-stewardship/resistance-management</a> or search on-line for Resistance Management CropLife Australia.

Issued by the Australian Pesticides and Veterinary Medicines Authority

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<sup>\*</sup> Includes wildflower crops. Refer to Wildflower crops list in Appendix 1.

#### **DIRECTIONS FOR USE:**

Table 1: Diptera control in nursery stock (non-food) and ornamentals

Including (non-food) – seedlings, tubes, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit plants (non-bearing), cut flowers\* and ornamentals.

Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Leafminer (Liriomyza sativae)	18 g/L abamectin (6) + 45 g/L chlorantraniliprole (28)	55-75 mL/100 L	<ul> <li>•Monitor crops and commence application when pest thresholds are reached.</li> <li>•Apply spray mixture to near the point of run-off to ensure thorough coverage of all plant surfaces.</li> <li>•Apply by foliar application by ground based sprayers.</li> <li>•DO NOT apply more than two applications per crop.</li> <li>•DO NOT re-apply less than 10 days after the initial treatment.</li> <li>•DO NOT apply to crops if 3 applications of a Group 28 insecticide have been applied in the current season. DO NOT apply to crops if a Group 6 insecticide has been applied in the current season.</li> <li>•DO NOT use on vegetable or herb seedlings.</li> </ul>	DO NOT apply if heavy rains or storms are forecast within 3 days.  DO NOT irrigate to the point of runoff for at least 3 days after application.  See Further Conditions for use of abamectin + chlorantraniliprole products below.

# Further Conditions for use of abamectin + chlorantraniliprole products Safety Directions:

Harmful if swallowed. Do not inhale spray mist. When opening the container, preparing spray and using the product wear: cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves, half face piece respirator with organic vapour/gas cartridge or canister. Wash hands after use. After each day's use wash gloves, respirator (if rubber, wash with detergent and warm water) and contaminated clothing. In addition, if applying by spraying equipment carried on the back of the user wear cotton overalls, over normal clothing, buttoned to the neck and wrist.

### **First Aid Instructions:**

If poisoning occurs contact a doctor or Poisons Information Centre. Phone 131 126. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

# **Re-entry Directions:**

Under field conditions the spray should be allowed to dry on the foliage before re-entry into treated areas. DO NOT allow re-entry into treated areas in glasshouse for 24 hours after treatment. When prior entry is necessary, wear cotton overalls buttons to the neck and wrist and elbow-length gloves. Clothing must be laundered after each day's use.

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# **Spray Drift Restraints**

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between three and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

# **Mandatory No-Spray Zones**

**DO NOT** apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 50 metres downwind from the application area.

# Protection of Wildlife, Fish, Crustaceans and Environment

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

# **Protection of Honey Bees and Other Insect Pollinators**

Highly toxic to bees. DO NOT apply to crops from the onset of flowering until flowering is complete unless the application is made in the time period between 2 hours prior to sunset and 8 hours prior to sunrise. DO NOT allow spray drift to flowering weeds or flowering crops in the vicinity of the treatment area. Before spraying, notify beekeepers to move hives to a safe location with an untreated source of nectar and pollen, if there is potential for managed hives to be affected by the spray or spray drift.

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# Table 1 (continued): Diptera control in nursery stock (non-food) and ornamentals

Including (non-food) – seedlings, tubes, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit plants (non-bearing), cut flowers\* and ornamentals.

Pest	Product (MoA)	Rate	<b>Critical Use Comments</b>	Additional Conditions
Leafminers ( <i>Liriomyza</i>	18 g/L abamectin (6)	60-120 mL/100 L	•Monitor crops and apply when pests are first detected.	DO NOT use if rainfall is expected before spray has dried as reduced efficacy may result.
spp.) including		OR 0.6-1.2 L/ha	•Apply foliar treatments by ground based sprayer (hydraulic sprayer equipment, backpack sprayer or	
Vegetable leafminer ( <i>Liriomyza sativae</i> )	Vegetable leafminer (Liriomyza (UN) 200-300 mL/100 L OR	equivalent)  •Use a spray volume adequate to ensure thorough coverage of all plant surfaces (300 – 1000 L/ha), near to the point of run off.		
	44 g/kg emamectin (6)	25–30 g/100 L OR 250–300 g/ha SUPPRESSION ONLY	•For foliar treatments, apply at the lower rate for low to moderate infestations, and the higher rate for high pressure or heavier infestations.	DO NOT apply spray if rainfall is imminent, or spray conditions are unfavourable.
			<ul> <li>DO NOT apply more than 2 applications per season.</li> <li>Follow up treatments may be necessary to control new infestations 7-14 days after the first application.</li> </ul>	
			•DO NOT apply less than 7 days after the initial treatment.	
			•Follow recommendations on individual product labels for spray adjuvants.	

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Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions
Fungus gnats	100 g/L <b>pyriproxyfen</b>	15 mL/100 L	•Use as a drench to pots saturating the top 2 - 4 cm of soil.	DO NOT apply using spraying equipment carried on the back of the user.
(Sciaroidea)	(7C)		•Apply 25 mL of solution to the soil surface of 15 cm	DO NOT apply if rain is forecast within 48 hours
			pot.	DO NOT apply to soils where surface water is evident
			<ul> <li>Adjust volume accordingly for smaller or larger pots.</li> <li>DO NOT drench plants more than one time per crop cycle.</li> </ul>	DO NOT apply pyriproxyfen more than twice per growing season. Pyriproxyfen should be alternated with other suitable products with different modes of action.

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Pest	Product (MoA)	Rate	Critical Use Comments	Additional Conditions	
Fungus gnats (Bradysia	250 g/kg diflubenzuron (15)	Pots and containers: 3.7 g/100 L	•Monitor crops and commence application when pests are first detected.	DO NOT apply to vegetable or herbs seedlings.	
spp.) Shore Flies (Ephydridae)	Apply the following volume of a solution to the following pot size (diameter):  100 mm: 60 mL  125 mm: 120 mL  150 mm: 180 mL		<ul> <li>Repeat applications at 4-8 week intervals.</li> <li>For drench application to pots/containers, only use enough drench solution to wet the pot/container; do not over-saturate.</li> <li>Follow the insecticide resistance warning on the product label.</li> </ul>	DO NOT apply to poinsettias, hibiscus and Reiger begonia as serious crop damage can occur.  DO NOT spray if rainfall or irrigation is expected before the spray has dried.	
		200 mm: 300 mL 250 mm: 420 mL 300 mm: 600 mL Under benches and in other non-crop areas 30 – 60 g/100 L applied in a spray volume of 4–12 L/10 m <sup>2</sup> .		DO NOT allow runoff from treatment areas to enter drains or waterways.  DO NOT apply in unprotected cropping situations if heavy rains or storms are forecast within 3 days.	
Leafminers ( <i>Liriomyza</i> spp.)		30-60 g/100 L	<ul> <li>Monitor crops and commence application when pests are first detected.</li> <li>For foliar application, ensure thorough coverage of all plant surfaces, including the underside of leaves.</li> </ul>	DO NOT irrigate to the point of runoff in unprotected cropping situations for at least three days after application.	
			<ul> <li>DO NOT apply more than 4 applications per season.</li> <li>Follow the insecticide resistance warning on the product label.</li> </ul>	See Further Conditions for use of diflubenzuron products below.	

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# **Further Conditions for use of diflubenzuron products**

### **SPRAY DRIFT RESTRAINTS:**

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between three and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by boom sprayer in unprotected cropping situations.

DO NOT apply by a vertical sprayer unless the following requirements are met:

- Spray is not directed above the target canopy.
- The outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site.
- For dilute water rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas are observed (see the following table titled 'Buffer zones for vertical sprayers').

**Buffer zones for vertical sprayers:** 

Type of target canopy	Mandatory downwind buffer zones  Natural aquatic areas
All	40 metres

# **Re-entry for the General Public:**

DO NOT allow entry into treated areas until the spray has dried.

# **Re-entry for Occupational Users:**

DO NOT enter treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each days use.

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# **Safety Directions:**

May irritate the skin. Will irritate the eyes. Avoid contact with eyes and skin. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow length chemical resistant gloves and face shield. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). In addition, when using the prepared spray by hand held equipment wear elbow length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves, face shield and contaminated clothing.

#### **First Aid Instructions:**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

# **Integrated Pest Management**

Toxic to beneficial arthropods. Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.

# Protection of Wildlife, Fish, Crustaceans and Environment

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

# **Protection of Honey Bees and Other Insect Pollinators**

Harmful to bee brood. However, the use of this product as directed is not expected to have adverse effects on bees. Avoid application by surface drippers while bees are foraging in the nursery, especially on hot days as bees can use these devices as sources of water for the hive.

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# Appendix 1

# Wildflower crops

Banksia species (Banksia spp.) - cultivars and hybrids

Berzelia or button brush (Berzelia spp.)

Black kangaroo paw species (Macropidia spp.) - cultivars and hybrids

Christmas bells (*Blandfordia grandiflora*)

Christmas bush (Ceratopetalum gummiferum)

Geraldton wax, Waxflower species (Chamelaucium spp.) - cultivars and hybrids

Kangaroo paw species (Anigozanthos spp.) - cultivars and hybrids

Leucadendron species - cultivars and hybrids

Leucospermum species (*Leucospermum spp.*) - cultivars and hybrids (pincushions)

Protea species (*Protea* spp.) - cultivars and hybrids

Riceflower (Ozothamnus diosmifolius)

Waratah species (Telopea speciosissima) - cultivars and hybrids

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