#### CAUTION **KEEP OUT OF REACH OF CHILDREN** READ SAFETY DIRECTIONS BEFORE OPENING OR USING



ornamentals as specified in the directions for use table. IMPORTANT: Read this booklet before use

**4 FARMERS AUSTRALIA PTY LTD** 

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APVMA Approval No.: 64648/48857

Batch Number:

Date of Manufacture

## **GENERAL INSTRUCTIONS:**

# GROUP 4A INSECTICIDE

Insecticide Resistance Warning For insecticide resistance management, 4Farmers Imidacloprid 200SC Insecticide is a group 4A insecticide. Some naturally occurring insect biotypes resistant to 4Farmers Imidacloprid 200SC Insecticide and other group 4A insecticides may exist through normal generic variability in any insect population. The resistant individuals can eventually dominate the insect population if 4Farmers Imidacloprid 200SC Insecticides and other group4A insecticides are used repeatedly. The effectiveness of 4Farmers Imidacloprid 200SC insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, 4 Farmers Australia Pty Ltd accepts no liability for any losses that may result from the failure of 4Farmers Imidacloprid 200SC Insecticides to control resistant insects. 4Farmers Imidacloprid 200SC Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, 4 Farmers Australia Pty Ltd representative or local agriculture department agronomist.

## **Resistance Management Strategy**

#### **Cotton aphid in cotton**

Observe the cotton industry insecticide Resistance Management Strategy (IRMS).

Aphids, whitefly and melon thrips in various crops Do not apply 4Farmers Imidacloprid 200SC Insecticide (or other group 4A insecticides) in consecutive sprays within and between seasons. Rotate with registered insecticides from other mode of action groups.

#### Confined environments such as glasshouses:

Annuals-Do not apply more than one spray of 4Farmers Imidacloprid 200SC Insecticide (or other group 4A insecticides) to any one crop. Perennials-Rotate with registered insecticides from other groups. Use a maximum of three 4Farmers Imidacloprid 200SC Insecticides (or other group 4A insecticides) sprays in any 12-month period

#### **Mixing/Application**

Prior to pouring, shake container vigorously, then add the required quantity of 4Farmers Imidacloprid 200SC Insecticide to water in the spray vat while stirring or with agitators in

#### motion Special Instructions for stone fruit

#### 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 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 1500L/ha
- 2. Your chosen concentrate spray volume: for example 500L/ha
- 3. The concentration factor in this example is: 3X (i.e. 1500 L  $\div$  500 L=3) 4. As the dilute label rate is 25mL/100L for stone fruit, then the concentrate rate becomes
- 3x25, that is 75mL/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 a concentrate rate higher than that specified in the Critical Comments.
- For further information on concentrate spraying, users are advised to consult relevant
- industry guidelines, undertake appropriate competency training and follow industry Best Practices.

## Application (Cotton)

Thorough coverage of cotton plants is essential to achieve maximum performance for 4Farmers Imidacloprid 200SC Insecticide Plus Pulse. Equipment should be calibrated to achieve a minimum of 60 droplets/cm<sup>2</sup> on the target foliage. A droplet Volume median Diameter (VMD) for optimum performance from 4Farmers Imidacloprid 200SC

## **DIRECTIONS FOR USE**

#### FOLIAR SPRAY APPLICATIONS

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Cotton	Aphids Mirids,	250 mL/ha + Pulse Penetrant at 0.2% v/v (2mL/L water) or equivalent organosilicone surfactant (e.g. Freeway Gold)	13 weeks	The addition of Pulse Penetrant or equivalent is critical for the performance of 4Farmers Imidacloprid 200SC Insecticide. Apply early in the establishment of an aphid infestation when numbers are low (i.e. no more than 1 or 2 leaves per plant with honeydew present). Application made later than this may result in reduced control. Shorter residual control may be evident and a repeat application of a registered aphicide (follow the cotton insecticide Resistance Management Strategy for Cotton Aphid) may be required to achieve complete control: If application of 4Farmers Imidacloprid 200SC insecticide plus Pulse or equivalent are timed too late (see above); or If existing high density aphid colonies (hotspots) are present; or If there is high reinfestation pressure; or If there is high reinfestation pressure; or If there is a rapid crop growth; or If there is a rapid copy of 200 SC Insecticide Plus Pulse or equivalent is used following a spray-failure (e.g. resistance to organophosphate or carbamate insecticides). Note: where resistance to carbamates or organophosphates is suspected, 4Farmers Imidacloprid 200SC Insecticide plus Pulse or equivalent may still be present on the plant but will not be feeding. Control of the aphids present. Aphids treated with 4Farmers Imidacloprid 200SC Insecticide plus Pulse or equivalent may still be present on the plant but will not be feeding. Control of aphids should initially be assessed by a reduction in fresh honeydew and not on the presence of aphids on the plant. After ingesting 4Farmers Imidacloprid 200SC Insecticide, aphids may take up to 5 days to die.
	Brown flea beetle	<u>ا</u>	<u> </u>	
Stone fruit	Green peach aphid Black peach aphid	Dilute spraying 25mL/100L Concentrate spraying Refer to Mixing /Application section	21 days	Apply at first sign of aphid infestation. Apply as a full cover spray, ensuring thorough coverage. 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. Do not use in equipment that requires rates greater then 125mL/100L of water (i.e. greater than 5X concentrate).
Cucurbits	Green Peach aphid	25mL/100L or	1 day	Apply at first sign of aphid infestation
Capsicum Egg plant Potato		300mL/ha	7 days	
Tomato			3 days	
Brassicas	Grey cabbage aphid Turnip aphid	25 mL/100L or 300mL/ha	7 days	Apply at first sign of aphid infestation. Add a wetting agent
Sweet potato	Silverleaf whitefly, Including type B	25mL/100L or 250mL/ha	7 days	Apply at first sign of whitefly or melon thrips infestation. Apply dilute sprays (25mL/100L) to run off.
Cucumber		-	1 day	-
Egg plant	Melon thrips		7 days	Ensure thorough coverage of underside of leaves. Use of droppers will improve coverage of underside of leaves.
Roses	Aphids	25mL/100mL	-	Apply as a thorough cover spray at first sign of insect infestation
Ornamental plants	Aphids Azalea lace bug Bronze orange bug, Harlequin bug, Citrus Mealybug Greenhouse thrips, Fullers rose weevil			Apply as a thorough cover spray at first sign of insect infestation
I	Hibiscus flower beetle	50mL/100L		Spray Bud and flowers as needed
I	Longtailed mealybug	50mL/100L+ Surfactant		Apply 3 sprays 2 weeks apart. Use a non-ionic surfactant at label rate
I	Psyllids	25mL/100L		Spray at first sign and then a week later
	Soft scales	25mL/100L		Spray in late spring or when small scales are first seen. Apply 3 sprays 2 weeks apart. Add a wetting agent.
Duboisia	Green peach aphid	25mL/100L		Apply when aphid numbers reach spray threshold levels as determined by regular monitoring. Ensure thorough coverage of all leaves
Pandanus trees	Flatid (Jamella australiae)	Spot spray 875mL/100L of water Stem injection 1.75 L/1L of water	-	Spot spray: Spray 100 mL of mixture directly into the leaf throat of each head. Stem injection: Drill holes 0.5 to 1 cm in diameter and 10 cm deep at an angle of 30 1 to 1.5m above ground level. Drill one hole per limb (or trunk in single trunked trees). Apply 5mL of mixture in each hole and seal the hole. Do not reapply in the same holes. Uptake of 4Farmers Imidacloprid 200SC Insecticide, and therefore control of the pest in heavily infested heads already showing severe damage, will be slow and may be incomplete.

## SOIL DRENCH APPLICATIONS

CROP	PEST	RATE	CRITICAL COMMENTS
Elm	Elm leaf beetle	7 mL/25 mm of tree diameter at breast height	Mix the required does in sufficient water to adequately treat each tree. Use at least 50L of mix per tree up to a tree diameter of 400-500 mm and then 100L per tree for larger trees. Inject mix to a depth of 20-30 cm in a minimum of 4 injection sites per tree, 0.75 to 1.5 m apart, arranged in an evenly spaced grid to just beyond the drop line. Ensure root zone is adequately moist with active root growth. Keep treated area moist for 7-10 days after treatment. Treat at least 6-10 weeks prior to pest attack in late winter or early spring when roots are active. DO NOT treat if soil is waterlogged.
Azaleas in pots	Azalea lace bug	3.5 mL/250 mL water/pot	Use as a soil drench for pots up to 20L capacity. Prior to application remove mulch and dead vegetation, and moisten the soil surface. Apply 4Farmers Imidacloprid 200SC insecticide mixture, and then water it in well immediately after application
Ornamentals in pots	Scarab beetle larvae	3.5mL/5L water	Use as a soil drench. 5L of mixture will treat twenty 6L pots. Prior to application remove mulch and dead vegetation, and moisten the soil surface. Apply the 4Farmers Imidacloprid 200SC Insecticide mixture, and then water it in well immediately after application.
Roses	Aphids	3.5mL/2L water/plant	Use as a soil drench by pouring mixture evenly around drop zone. Use this rate for plants up to 1m high. For each additional meter of plant height, add 2mL extra of 4Farmers Imidacloprid 200SC Insecticide to the 2L of water. Prior to application remove mulch and dead vegetation, and moisten the soil surface. Apply the 4Farmers Imidacloprid 200SC Insecticide mixture, and then water it in well immediately after application.

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

#### WITHHOLDING PERIODS

DO NOT HARVEST FOR 13 WEEKS AFTER APPLICATION Cotton: DO NOT GRAZE OR CUT FOR STOCK FOOD DO NOT HARVEST FOR 1 DAY AFTER APPLICATION Cucurbits:

Insecticide plus Pulse is dependent on equipment and is defined below. Do not apply when unfavorable environmental conditions may reduce the quality of spray coverage. Ground Application (Cotton)

Application using ground equipment should be made using hollow cone nozzles with a minimum spray volume of 100L/ha. Hollow cone nozzles are recommended but if flat fan nozzles are used, higher water volumes will be required and nozzles should be configured to ensure thorough coverage. A droplet VMD of 150-180 microns must be used. Where multiple nozzles per row are used, they should be of the same specification to ensure that each nozzle contributes to an equal proportion of the required dose. Where multiple nozzles per row are used (particularly for banded application) ensure the correct nozzle overlap pattern is achieved on the target foliage. Banded application less than 100% are not recommended beyond the 15 node crop stage. Aerial Application (Cotton)

Apply in a minimum spray volume of 25L/ha. A droplet VMD of 120-150 microns must be used. Do not exaggerate swath width or exceed a swath width of 20 to 22m. Do not apply 4Farmers Imidacloprid 200SC Insecticide plus Pulse using Ultra Low Volume (ULV) methods. The use of large droplet placement equipment is not recommended.

#### Compatability

4Farmers Imidacloprid 200SC Insecticide is compatible with Antracol, Baycor, Nitrofol. Do not mix concentrates together but add each to the spray tank separately. As formulation of other manufacturers products are beyond the control of 4Farmers, all mixtures should be tested prior to mixing commercial quantities. As changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, 4Farmers cannot be responsible for the behavior of such mixtures

#### **Export of treated Produce**

Growers should note that MRL's or import tolerances do not exist in all markets for edible produce treated with 4Farmers Imidacloprid 200SC Insecticide. If you are growing edible produce for export, please check with 4Farmers for the latest information on MRL's and mport tolerances before using 4Farmers Imidacloprid 200SC Insecticide

#### **Note on Ornamentals**

4Farmers Imidacloprid 200SC Insecticide has been used on a wide range of ornamental plant species without damage. However, some species and varieties are particularly sensitive to chemical sprays and as this is often related to local conditions it is advisable to treat only a small number of plants first, in order to ascertain their reaction before treating the whole crop.

#### DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION Tomatoes:

Brassicas, Capsicum, Eggplant, Potatoes, Sweet potatoes:

DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION Stone Fruit: DO NOT HARVEAST FOR 21 DAYS AFTER APPLICATION

DO NOT graze any treated area, or cut for stock food.

DO NOT feed produce harvested from treated area to animals, including poultry.

#### **PROTECTION OF LIVESTOCK**

Dangerous to bees. DO NOT spray any plants in flower while bees are foraging. DO NOT graze any treated area, or cut for stock food.

DO NOT feed produce harvested from treated area to animals including poultry.

#### **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND** ENVIRONMENT

DO NOT contaminate streams, rivers, waterways with the chemical or used containers. A spray drift minimization strategy should be employed at all times when aerially applying sprays. The strategy envisaged is exemplified by the cotton industry's Best Management Practices Manual.

#### **STORAGE AND DISPOSAL**

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

Triple or preferably pressure rinse containers before disposal. Add rinsings or 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 empty containers in a local authority landfill. If no landfill is available, bury the containers to 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.

Emergency Sp Dial 000 Police or Fire Brigade	becial Poisons Advice: 13 11 26
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#### SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Wash hands after use. When preparing product for use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. After each days use, wash gloves, goggles and contaminated clothing.

#### **FIRST AID**

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

#### SAFETY DATA SHEET

For further information please refer to the Safety Data Sheet. For a copy visit our website at www.4farmers.com.au

#### CONDITIONS OF SALE

The use of this product is beyond the control of 4 Farmers Australia Pty Ltd. No warranty is expressed or implied regarding the suitability or efficiency for any purpose for which the buyer uses it. 4 Farmers Australia Pty Ltd accepts no responsibility for any consequences resulting from the use of this product 4 Farmers Australia Ptv I to will not be held liable for any loss, injury or damage arising from the sale, supply or use of this product, whether through negligence or otherwise. No responsibility will be accepted for any consequences whatsoever resulting from the use of this product.