02-12-2010





Pacific Imidacloprid 200 SC Insecticide

ACTIVE CONSTITUENT: 200 g/L IMIDACLOPRID



For the control of various insect pests of cotton, fruit, vegetables and ornamentals as specified in the Directions for Use table

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USING THE PRODUCT

Contents: 1L (5L, 10L, 20L, 60L, 110L)

Pacific Agriscience Pty Ltd ACN: 096 082 316 Level 5 Nexus Norwest 4 Columbia Court Baulkham Hills NSW 2153 Australia Phone: 02 8860 6589

02-12-2010

STORAGE AND DISPOSAL

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

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 recycle 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 500mm below the surface in disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in accordance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

For refillable containers (110L)

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

SAFETY DIRECTIONS

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

FIRST AID

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

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet, which can be obtained from the supplier.

EXCLUSION OF LIABILITY

This product as supplied is of a high grade and suitable for the purpose for which it is expressly intended and must be used in accordance with the directions. The user must monitor the performance of any product as climatic, geographical or biological variables and/or developed resistance may affect the results obtained. No responsibility is accepted in respect of this product, save for those non-excludable conditions implied by the Trade Practices Act or any State or Federal legislation.

APVMA Approval No.: 65712/51678

In a Transport Emergency Dial 000 Police or Fire Brigade

Batch No: Date of Manufacture:

02-12-2010

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



Pacific Imidacloprid 200 SC Insecticide

ACTIVE CONSTITUENT: 200 g/L IMIDACLOPRID

GROUP **4A** INSECTICIDE

For the control of various insect pests of cotton, fruit, vegetables and ornamentals as specified in the Directions for Use table

IMPORTANT: READ THIS LEAFLET BEFORE OPENING OR USING THE PRODUCT

APVMA Approval No.: 65712/51678

Pacific Agriscience Pty Ltd ACN: 096 082 316 Level 5 Nexus Norwest 4 Columbia Court Baulkham Hills NSW 2153 Australia Phone: 02 8860 6589

DIRECTIONS FOR USE FOLIAR SPRAY APLICATIONS

Crop	Insect	Rate	WHP	Critical Comments
Cotton	Aphids 250mL/ha + Penatra Penetrant at 0.2% v/v (2mL/L water)	Penetrant at 0.2% v/v	13 weeks	The addition of Penatra Penetrant or equivalent is critical for the performance of Pacific Imidacloprid.
				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). Applications 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 Pacific Imidacloprid plus Penatra or equivalent are timed too late (see above); or
				 If existing high density aphid colonies (hotspots) are present; or
				 If aphids have established throughout the plant canopy (especially lower in the canopy); or
				If there is high re-infestation; or
				If there is rapid crop growth; or
			 If Pacific Imidacloprid plus Penatra or equivalent is used following a spray-failure (e.g. resistance to organophosphates or carbamate insecticides). Note: Where resistance to carbamates or organophosphates is suspected, Pacific Imidacloprid plus Penatra or equivalent should be used first so as not to delay control of the aphids present. 	
				Aphids treated with Pacific Imidacloprid plus Penatra 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 Pacific Imidacloprid aphids may take up to 5 days to die.
	Mirids			Apply when pest numbers reach treatment threshold levels as determined by field checks.
	Brown flea beetle			
Stone fruit	Green Peach aphid	Dilute Spraying 25mL/100L Concentrate Spraying	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
	Black peach aphid			
	Refer to			concentrate methods. Do not use in equipment that requires rates greater than 125mL/100L of water (i.e. greater than 5 X concentrate)

02-12-2010

Crop	Insect	Rate	WHP	Critical Comments
		Mixing/Application section		
Cucurbits	Green Peach Aphid	25mL/100L	1 days	Apply at first sign of aphid infestation.
Capsicum		or	7 days	
Eggplant		300mL/ha		
Potato	-			
Tomato			3 days	
Brassicas	Grey cabbage Aphid		7 days	Apply at first sign of aphid infestation. Add a wetting agent.
	Turnip Aphid			
Sweet potato	Silverleaf Whitefly including	25mL/100L	7 days	Apply at first sign of whitefly or melon thrips infestation. Apply dilute sprays (25mL/100L)
Cucumber	type B	or	1 day	to run off. Ensure thorough coverage of underside of leaves. Use of droppers will
Egg-plant	Melon Thrips	250mL/ha	7 days	improve coverage of underside of leaves.
Roses	Aphids	25mL/100L	-	Apply as a thorough spray at first sign of insect infestation.
Ornamental	Aphids			
plants	Azalea Lace Bug			
	Bronze Orange Bug			
	Harlequin Bug			
	Citrus mealy Bug			
	Greenhouse Thrips			
	Fullers Rose Weevil			
	Hibiscus Flower Beetle	50mL/100L		Spray buds and flowers as needed.
	Longtailed Mealybug	50mL/100L + surfactant		Apply 3 sprays 2 weeks apart. Use a non-ionic surfactant at label rate.
	Pysllids	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. Use a non-ionic surfactant at label rate.

02-12-2010

4/9

Crop	Insect	Rate	WHP	Critical Comments
Turf	First instar larvae of: African Black Beetle, Argentinian Scarab, Pruinose Scarab	 2.5L/ha or 25mL/100L Spray with at least 400 L water per hectare to ensure even coverage. Preferably spray on to wet or dewy grass. Irrigate with 12 mm of water commencing within one hour of 		Apply at peak egg hatch that is mid Spring to mid Sumer depending on species.
	Larvae of Billbug	application.		Monitor adult activity through late Spring and early Summer. Spray when numbers peak, or when small larvae (4mm) are found in the thatch or surface soil. Early application is essential to minimise grass damage due to feeding.
Duboisia	Green Peach Aphid	25mL/100L		Apply when aphid numbers reach spay threshold as determined by regular monitoring. Ensure thorough coverage of all leaves.
Pananus trees	Flatid (<i>Jamella australiae</i>)	Spot Spray 875mL/100L of water Stem Injection 1.75L/1L of water		Spot Spray : Spray 100mL of mixture directly into the leafy throat of each head. Stem Injection : Drill holes 0.5 to 1cm in diameter and 10cm deep at an angle of 30°, 1 to 1.5 m 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 re-apply in the same holes. Uptake of Pacific Imidacloprid 200 SC Insecticide, and therefore control of the pest in heavily infested heads already showing severe damage, will be slow and may be incomplete.

SOIL DRENCHED APPLICATIONS

Сгор	Insect	Rate	Critical Comments	
Apples	Woolly aphid	Chemical control 12mL/1L of water/tree	For trees up to 7 years of age. During late summer or autumn, apple trees with woolly aphid colonies or damage should be identified and marked for treatment the following	
(e.g. <i>Aphelinus mali</i> plus F Imidacloprid 200 SC) 3mL		(e.g. <i>Aphelinus mali</i> plus Pacific Imidacloprid 200 SC) 3mL/1L of	season. At green tip to petal fall, apply 1 litre of the prepared Pacific Imidacloprid mixture to moist soil immediately around the base of the tree trunk. Ensure the mixture infiltrates the soil around the trunk and does not run-off the soil. Control weeds before application. Do not remove or disturb soil around the trunk during the season. If aerial colonies are present at application, maximum effectiveness may not be achieved until the following present at application around the trunk area on a present at application.	
Elm	Elm leaf beetle	water/tree 7mL/25mm of tree diameter at breast height	the following season. Do not treat more tan once in any 3 year period.Mix the required dose in sufficient water to adequately treat each tree. Use at least50L of mix per tree up to a tree diameter of 400-500mm and then add 100L per tree	

02-12-2010

5/9

Сгор	Insect	Rate	Critical Comments
			for larger trees. Inject mix to a depth of 20-30cm in a minimum of 4 injection sites per tree 0.75 to 1.5m apart, arranged in an evenly spaced grid to just beyond the dripline.
			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 the late winter or early spring when roots are active. DO NOT treat if the soil is waterlogged.
Seedling Eucalyptus	Chrysomelid Beetle	2.5mL/plant	Mix in water up to 0.5L per 3 L pot and apply to soil. Use less water for smaller pots.
(to 1 m high) in pots	larvae, Psyllids		DO NOT dilute to the point where mix runs out the bottom of pots.
Azaleas in pots	Azalea Lace Bug	3.5 mL/250mL water per 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 the Pacific Imidacloprid mixture, and then water it in well immediately after application.
Ornamentals in pots	Scarab Beetle larvae	3.5 mL/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 Pacific Imidacloprid mixture, and then water it in well immediately after application.
Roses	Aphids	3.5 mL/2L water per plant	Use as a soil drench by pouring mixture evenly around drip zone. Use this rate for plants up to 1m high. For each additional metre of plant height, add 2mL extra of Pacific Imidacloprid to 2L of water. Prior to application remove mulch and dead vegetation, and moisten the soil surface. Apply the Pacific Imidacloprid mixture, and then water it in well immediately after application.

For soil drench treatments, remove mulch and dead vegetation, and moisten the soil surface first. Apply Pacific Imidacloprid mixture, then water it in well immediately after application.

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

WITHHOLDING PERIODS

- Apples: NOT required when used as directed
- Cotton: DO NOT harvest for 13 weeks after application DO NOT graze or cut for stock food
- Cucurbits: DO NOT harvest for 1 day after application
- Tomatoes: DO NOT harvest for 3 days after application
- Brassicas, Capsicum, Egg Plant, Potatoes, Sweet potatoes: DO NOT harvest for 7 days after application
- Stone fruit: DO NOT harvest 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.

02-12-2010

INSECTICIDE

GENERAL INSTRUCTIONS: INSECTICIDE RESISTANCE WARNING: GROUP 4A

For insect resistance management Pacific Imidacloprid 200 SC Insecticide is a Group 4A Insecticide. Some naturally occurring insect biotypes resistant to Pacific Imidacloprid 200 SC Insecticide and other group 4A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Pacific Imidacloprid 200 SC Insecticide or other Group 4A insecticides are used repeatedly. The effectiveness of Pacific Imidacloprid 200 SC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Pacific Agriscience Pty Ltd accepts no liability for any losses that may result from the failure of Pacific Imidacloprid 200 SC Insecticide to control resistant insects

Pacific Imidacloprid 200 SC Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, Pacific Agriscience Pty Ltd representative or local agricultural department agronomist.

INSECTICIDE 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 Pacific Imidacloprid 200 SC 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 Pacific Imidacloprid 200 SC Insecticide (or other Group 4A insecticides) to any one crop.

Perennials – Rotate with registered insecticides from other groups. Use a maximum of three Pacific Imidacloprid 200 SC Insecticide (or other Group 4A insecticides) sprays in any 12 month period.

MIXING/APPLICATION

Prior to pouring, shake container vigorously, then add the required amount of Pacific Imidacloprid 200 SC Insecticide to water in the spray vat while stirring or with agitators in motion.

Special instructions for Stone Fruit

Dilute Spraying (Stone fruit)

- 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.

Concentrate Spraying (Stone fruit)

- 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 volume.
- Determine the 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 can then be calculated in the following way:

Example Only

- 1. Dilute spray volume as determined above: For example 1,500L/ha.
- 2. Your chosen spray volume: For example 500L/ha.

- The concentrate factor in this example is: 3 x (i.e. 1,500L divided by 500L = 3)
- 4. If the dilute label rate is 10mL/100L, then the concentrate rate becomes 3 x 10, that is 30mL/100L of concentrate spraying.
- 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 from Pacific Imidacloprid 200 SC Insecticide plus Gullf Ag Penatra Penetrant. Equipment should be calibrated to achieve a minimum of 60 droplets/cm² on the target foliage. A droplet Volume Median Diameter (VMD) for optimum performance from Pacific Imidacloprid 200 SC Insecticide plus Penatra is dependent on equipment and s defined below. Do not apply when unfavourable 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 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 applications less than 100% are not recommended beyond the 15-node 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 of 20 to 22 m. Do not apply Pacific Imidacloprid plus Penatra using Ultra Low Volume (ULV) methods. The use of large droplet placement equipment is not recommended.

EXPORT OF TREATED PRODUCE

Growers' should note that MRLs or import tolerances do not exist in all markets for edible produce treated with Pacific Imidacloprid 200 SC. If you are growing produce for export, please check with Pacific Agriscience Pty Ltd for the latest information on MRLs and import tolerances before using Pacific Imidacloprid.

NOTE ON ORNAMENTALS

Pacific Imidacloprid 200 SC 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.

COMPATIBILITY

Pacific Imidacloprid 200 SC Insecticide is compatible with propineb, bitertanol or methamidophos. Do not mix concentrates together but add each to the spray tank separately, as formulations of other manufactures' products are beyond the control of Pacific Agriscience Pty Ltd, 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, Pacific Agriscience Pty Ltd cannot be responsible for the behaviour of such mixtures.

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. DO NOT graze treated turf of feed turf clippings from any treated area to poultry or livestock.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways and drains with this chemical or used containers. A spray-drift minimisation 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 containers in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

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 recycle 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 500mm below the surface in disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in accordance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

For refillable containers (110L)

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

SAFETY DIRECTIONS

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

FIRST AID

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

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet, which can be obtained from the supplier.

EXCLUSION OF LIABILITY

This product as supplied is of a high grade and suitable for the purpose for which it is expressly intended and must be used in accordance with the directions. The user must monitor the performance of any product as climatic, geographical or biological variables and/or developed resistance may affect the results obtained. No responsibility is accepted in respect of this product, save for those non-excludable conditions implied by the Trade Practices Act or any State or Federal legislation.

In a Transport Emergency Dial 000 Police or Fire Brigade