



For the Control of a Range of Insect Pests in Turf and Ornamental situations



Tirem 200 SC Insecticide

Technical Brief

Active Ingredient:	200 g/L imidacloprid
Mode of Action Group:	4A – Neonicotinoids (Nicotinic acetylcholine receptor – Nerve action)
Formulation:	Suspension Concentrate (SC)
Mode of Action:	Agonist of the nicotinic acetylcholine receptor, affecting the synapses in the insect's central nervous system. Acts by blocking the receptor sites in the nervous system of target pests. The message sent from the preceding nerve is not received by the next nerve, or it receives an incomplete message. Insects that have ingested or absorbed imidacloprid become immobile and stop feeding very soon after ingesting or coming in contact with imidacloprid. Insecticide with contact, stomach and systemic activity.
Behaviour in Plants:	Rapidly taken up into the plant and transported acropetally (upwards) in the xylem. Exhibits excellent trans-stemic (translaminar & systemic) movement in the plant tissue.

Benefits

- High level of efficacy against turf, ornamental and tree pests
- Control of African Black Beetle, Argentinian Scarab and Billbug larvae (grubs) in turf
- Suitable for use on broad-acre turf areas such as turf farms, sporting fields, parks, ovals and fairways
- Remains in the turf plant for approximately 90 to 110 days.
- Broad spectrum control
- Strong residual activity
- High level of safety to the applicator and the environment
- Reliable, high quality aqueous concentrate formulation
- Low use rates
- Low to no odour
- Low poison schedule (Schedule 5-CAUTION)

How to get the most out of your application

- Correctly identify the pest and determine life-cycle stage
- Monitor population levels
- *For Turf:* Must be incorporated to the soil after application to be effective, through rainfall or irrigation. Once absorbed by the roots, imidacloprid moves within the plant to protect it. As grubs feed on the roots they ingest imidacloprid and stop feeding immediately.
- *For Turf:* Spray applications should be watered-in within 24 hours following application as the product is otherwise subject to degradation from sunlight. Preferably spray on to wet or dewy grass. Irrigate with 5 - 12 mm of water commencing within 1 to 24 hours of application.

Application

Application (Turf)

Spray with at least 400 L water per hectare to ensure even coverage.

Preferably spray on to wet or dewy grass.

Irrigate with 5 - 12 mm of water commencing within 1 to 24 hours of application.

1st instar larvae of African black beetle, Argentinian scarab & Pruinose scarab: Apply at peak egg hatch, that is mid-spring to mid-summer depending on species.

Larvae of Billbug: Monitor adult activity through late spring and early summer. Spray when numbers peak, or when small larvae (4 mm) are found in the thatch or surface soil. Early application is essential to minimise grass damage due to feeding.

Residual Pest Control in Turf

Provides outstanding residual control. Incorporation through watering or irrigation is required to maximise the effectiveness of imidacloprid. Watering in is recommended soon after application as the product is otherwise subject to degradation from sunlight.

Insect Management

Turf—Foliar Spray Application

Situation	Pest	Rate	Critical Comments
Turf	1 st instar larvae of: African black beetle, Argentinean scarab, Pruinose scarab	2.5 L/ha or 25 mL/100 m ² Spray with at least 400 L water per hectare (4 L water per 100m ²) to ensure even coverage.	Apply at peak egg hatch, that is mid-spring to mid-summer depending on species.
	Larvae of Billbug	Preferably spray on to wet or dewy grass. Irrigate with 5 - 12 mm of water commencing within 1 to 24 hours of application.	Monitor adult activity through late spring and early summer. Spray when numbers peak, or when small larvae (4 mm) are found in the thatch or surface soil. Early application is essential to minimise grass damage due to feeding.

Note: The above table represents only a modified extract from the full registered label. Always read the full product label before use.

Ornamentals—Foliar Spray Applications

Application

Foliar Spray Applications

Start treatments prior to establishment of high pest populations.

Apply as a thorough cover spray.

For long-tailed mealybug control add a surfactant.

Situation	Pest	Rate	Critical Comments
Roses	Aphids	25 mL/100 L	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		
	Hibiscus flower beetle	50 mL/100 L	Spray buds and flowers as needed.
	Longtailed mealybug	50 mL/100 L plus surfactant	Apply 3 sprays 2 weeks apart. Use a 1000 g/L non-ionic surfactant at label rate.
	Psyllids	25 mL/100 L	Spray at first sign and then a week later.
	Soft scales		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		Apply when aphid numbers reach spray threshold levels as determined by regular monitoring. Ensure thorough coverage of all leaves.
Pandanus trees	Flatid <i>(Jamella australiae)</i>	Spot Spray 875 mL/100 L of water Stem injection 1.75 L/1 L of water	Spot spray: Spray 100 mL of mixture directly into the leafy 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 1.5 m above ground level. Drill one hole per limb (or trunk in single trunked trees). Apply 5 mL of mixture in each hole and seal the hole. DO NOT reapply in the same holes. Uptake of Tirem 200 SC Insecticide, and therefore control of the pest in heavily infested heads already showing severe damage, will be slow and may be incomplete.

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Ornamentals—Soil Drench Applications

Application

Soil Drench Applications

Apply to moist media. With potted plants, use sufficient drench solution to wet most of the potting medium without loss of liquid from the bottom of the container.

Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching. Remove mulch and dead vegetation, and moisten the soil surface first. Apply the Tirem 200 SC Insecticide mixture, then water it in well immediately after application.

Situation	Pest	Rate	Critical Comments
Elm	Elm leaf beetle	7 mL/25 mm of tree diameter at breast height	Use as a soil drench application. Mix the required dose in sufficient water to adequately treat each tree. Use at least 50 L of mix per tree up to a tree diameter of 400 - 500 mm and then 100 L 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 drip 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.
Seedling Eucalypts (to 1 m high) in pots	Chrysomelid beetle larvae, Psyllids	2.5 mL/plant	Use as a soil drench. Mix in water up to 0.5 L per 3 L pot and apply to soil. Use less water for smaller pots. DO NOT dilute to the point where mix runs out the bottom of pots.
Azaleas in pots	Azalea lace bug	3.5 mL/250 mL water / pot	Use as a soil drench for pots up to 20 L capacity.
Ornamentals in pots	Scarab beetle larvae	3.5 mL/5 L water	Use as a soil drench. 5 L of mixture will treat twenty 6 L pots.
Roses	Aphids	3.5 mL/2 L water / plant	Use as a soil drench by pouring mixture evenly around drip zone. Use this rate for plants up to 1 m high. For each additional metre of plant height, add 2 mL extra of Tirem 200 SC Insecticide to the 2 L of water.
For soil drench treatments, remove mulch and dead vegetation, and moisten the soil surface first. Apply the Tirem 200 SC Insecticide mixture, then water it in well immediately after application.			

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Packaging

Pack size: 1L, 10L

