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

TITAN
Imidacloprid 350 SC
Insecticide

ACTIVE CONSTITUENT: 350g/L IMIDACLOPRID

GROUP 4A INSECTICIDE

A soil applied treatment for the control of various canegrubs in sugar cane, certain pests in apples, citrus and various vegetable crops, and an injection treatment for the control of certain pests in bananas as specified in the Directions for Use.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 86992/125260
Contents: 1L; 5L; 10L; 20L; 110L; 200L; 1000L
**DIRECTIONS FOR USE**

**Restrains:**
DO NOT use on crops produced hydroponically or in glasshouses and other covered situations.
DO NOT apply TITAN Imidacloprid 350 SC Insecticide or any other Group 4A Insecticide as a foliar spray after soil application of TITAN Imidacloprid 350 SC Insecticide in that crop.
DO NOT apply more than one soil application of TITAN Imidacloprid 350 SC Insecticide or any other soil applied Group 4A Insecticide per crop for vegetables or sugarcane, per season for citrus or per two years for apples.
DO NOT apply more than one application of TITAN Imidacloprid 350 SC Insecticide or any other Group 4A Insecticide per crop for bananas.

**CROP** | **INSECT** | **RATE** | **CRITICAL COMMENTS**
--- | --- | --- | ---
Sugarcane (Ratoon cane only) | Greyback Canegrub | 16-22mL per 100 metres of cane row (equivalent to 1.05-1.44L/ha for single row cane with 1.52m spacing between rows) | Apply from September to November to fields which are at high risk of Greyback Canegrub damage. In areas where early flights of beetles occur, application should be early within this period. Late applications where large 3rd instar larvae dominate the grub population will not be as effective.
Application should be made while stools are small enough to avoid excessive damage. Use the high rate when high grub populations are expected, eg. an average greater than 4 grubs per stool. Apply only as a subsurface soil application behind coulters (refer to Application directions under General Instructions).

DO NOT leave TITAN Imidacloprid 350 SC Insecticide exposed to sunlight. After application ensure the TITAN Imidacloprid 350 SC Insecticide treated band is covered by at least 100mm of soil and that coulter slits are filled in completely.
DO NOT apply more than once per season.

--- | Childers Canegrub | 11-16mL per 100 metres of cane row (equivalent to 0.72-1.05L/ha for single row cane with 1.52m spacing between rows) | Begin monitoring for the presence of grubs in September, and continue to monitor at regular intervals. Apply TITAN Imidacloprid 350 SC Insecticide immediately if grub numbers have reached an economic threshold (about 3 grubs per stool). Early applications are more effective than later ones.
DO NOT apply later than November.

--- | French’s Canegrub | 16-22mL per 100 metres of cane row (equivalent to 1.05-1.44L/ha for single row cane with 1.52m spacing between rows) | Begin monitoring for the presence of grubs in September, and continue to monitor at regular intervals. Apply TITAN Imidacloprid 350 SC Insecticide immediately if grub numbers reach an economic threshold (about 3 grubs per stool). Early applications are more effective than later ones.
DO NOT apply later than November.

--- | Negatoria Canegrub | 11-16mL per 100 metres of cane row (equivalent to 0.72-1.05L/ha for single row cane with 1.52m spacing between rows) | Begin monitoring for the presence of grubs in September, and continue to monitor at regular intervals. Apply TITAN Imidacloprid 350 SC Insecticide immediately if grub numbers reach an economic threshold (about 3 grubs per stool). Early applications are more effective than later ones.
DO NOT apply later than November.

--- | Childers Canegrub, Plectris Canegrub, Rhopaea Canegrub, Southern One-Year Canegrub | 11-16mL per 100 metres of cane row (equivalent to 0.72-1.05L/ha for single row cane with 1.52m spacing between rows) | Begin monitoring for the presence of grubs in September (December for southern one-year canegrub) and continue to monitor at regular intervals. Apply TITAN Imidacloprid 350 SC Insecticide if grub numbers reach an economic threshold (eg. 3-4 grubs per stool). Early applications are more effective than later ones.

Use the high rate when grub populations are high eg. an average greater than 5 grubs per stool or if application is late (damage already visible).

Apply only as a subsurface soil application behind coulters (refer to Application directions under General Instructions).

--- | Greyback Canegrub | 16-22mL per 100 metres of cane row (equivalent to 1.05-1.44L/ha for single row cane with 1.52m spacing between rows) | Moderate – high pressure (2 or more grubs/stool expected).
**August – November applications from planting to hilling-up.**
Apply at planting, or at first working, or at half-open drill stage, or at fill-in or final hilling. Apply at final hilling only if sufficient soil cover can be applied. Use the high rate where heavy canegrub infestation is expected. Apply in a narrow spray band in the planted row. Treated soil must be covered immediately.

Refer to Application directions under General Instructions.

--- | All sugarcane areas | 11mL per 100 metres of cane row (equivalent to 720mL/ha for single row cane with 1.52m spacing between rows) | Low pest pressure (less than 2 grubs/stool expected).
**September – November applications at fill-in and hilling-up only.**
Apply at fill-in or final hilling only. Apply at final hilling only if sufficient soil cover can be applied.
Apply in a narrow spray band in the planted row. Treated soil must be covered immediately.

Refer to Application directions under General Instructions.
<table>
<thead>
<tr>
<th>CROP</th>
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<th>RATE</th>
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<tbody>
<tr>
<td>Sugarcane (plant cane) Southern Queensland (Bundaberg and South) and NSW only</td>
<td>Childers Canegrub, Negatoria Canegrub, Plectris Canegrub, Rhopaea Canegrub, Southern One-year Canegrub</td>
<td>11-16mL per 100 metres of cane row (equivalent to 0.72-1.05L/ha for single row cane with 1.52m spacing between rows)</td>
<td>Apply generally in spring or summer either at planting, or at first working, or at half-open drill stage, or at fill-in or final hilling. Apply at final hilling only if sufficient soil cover can be applied. If larvae are likely to be present at or soon after planting (e.g. in a plough out/ replant situation) then early application is recommended. If larvae pressure is not anticipated until the crop is established, then application at the later recommended timing ie closer to the first Canegrub larvae presence may be more effective; for example, autumn plantings, application should generally be delayed until spring. Use the high rate where heavy Canegrub infestation is expected, or to obtain longer residual activity. Apply in a narrow spray band in the planted row. Treated soil must be covered immediately. Refer to Application directions under General Instructions.</td>
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<tr>
<td>Capsicums, cucurbits, eggplant, sweet potato, tomatoes</td>
<td>Silverleaf Whitefly, including type B</td>
<td>14mL/100 metres of row</td>
<td>Sub-surface trickle irrigation injection Apply once only 5-7 days after planting (or 5-7 days from seed emergence if planted from seed). Begin injection only after water has reached the furthest drip points and soil is partially wetted up. After TITAN Imidacloprid 350 SC Insecticide injection is completed, continue irrigation only until lines are flushed, not longer than 1 hour. DO NOT apply TITAN Imidacloprid 350 SC Insecticide using surface trickle irrigation or any other type of above ground irrigation system. Subsequent irrigations should occur only when soil moisture measurements indicate the need for addition of water. DO NOT over irrigate or cause run-off. In situations where root development in the crop is slow, evidence of control may be delayed.</td>
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<td>Capsicums, eggplant, tomatoes</td>
<td></td>
<td>14mL/100 metres of row (Mix with water, using at least 2 litres of spray mixture per 100m row)</td>
<td>Furrow spray pre-plant Apply to open furrow not earlier than 5 days prior to planting as a narrow band of spray centred under the plant row. DO NOT leave TITAN Imidacloprid 350 SC Insecticide exposed to sunlight. Sprayed soil should be covered immediately. After final shaping of the planting bed, the treated layer of soil should be approximately 100mm below the soil surface. At planting, steps should be taken to ensure workers do not contact treated soil.</td>
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<tr>
<td>Potatoes</td>
<td>Silverleaf Whitefly, including type B</td>
<td>14mL/100 metres of row (Mix with water using 1.5-3.0 litres of spray mixture per 100m of row)</td>
<td>Green Peach Aphid 9mL/100 metres of row (Mix with water using 1.5-3.0 litres of spray mixture per 100m of row)</td>
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<tr>
<td>Apples</td>
<td>Woolly Aphid</td>
<td>Chemical control 3.5mL/1L of water/tree</td>
<td>Beneficial insect plus chemical control (eg. Aphelinus mali plus TITAN Imidacloprid 350 SC Insecticide) 1.75mL/1L of water/tree</td>
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<tr>
<td>Bananas – Cavendish</td>
<td>Banana Rust Thrips (Nth QLD, NT, Nth WA only)</td>
<td>2.5 or 3.5mL/stool Inject undiluted, diluted 50:50 with water</td>
<td>The higher rate may give improved control in some situations.</td>
</tr>
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</table>
|                             | Banana Weevil Borer (QLD, NSW, NT, WA only)  | 2.5mL/stool Inject undiluted, or diluted 50:50 with water | Application Timing  
DO NOT inject bunched plants. Select the best follower and inject into the base.  
DO NOT inject any follower more than once. Injection can occur at any time within 3 months after harvest of the mother plant or nurse-suckering.  
To limit the risk of plant damage from injection, inject only those followers that are at least 1.5m tall to the throat of the plant.  
Plants smaller than 1.5m tall to the throat can be treated but there is significant risk of plant injury from injection.  
For application in plant bananas the same minimum height requirement applies as above, plus the plant should be at a stage at least 3 months prior to bell emergence.  
Application Method  
Injection should occur 15cm from the base of the plant at an off-centre, downward angle to a depth of 5 to 10cm. DO NOT inject into the centre of the plant as this may result in plant death.  
Injection should be conducted in a manner which ensures applied chemical is retained within the pseudostem. Irrigation or moderate to heavy or prolonged periods of rainfall may saturate the internal structure of the pseudostem, leading to ‘run-out’ from injection holes. Allow sufficient time following irrigation and rainfall events, before application, to minimise such ‘run-out’.  
TITAN Imidacloprid 350 SC Insecticide should be used as part of an integrated pest management approach which should include the use of other measures for control of Banana Rust Thrips, such as bell injection and bunch applications.  
Note: Application during conditions conducive to banana spider mite may enhance population development. Under these conditions, continue to monitor mite populations following TITAN Imidacloprid 350 SC Insecticide application, taking appropriate action where thresholds are exceeded.  
Application Timing  
Multiple flowering and/or overlapping cropping: Where extended flowering and/ or multiple flowering periods occur eg. lemons and limes, or if the previous seasons crop is still hanging on the tree during or at the end of a new seasons flowering (overlapping cropping) eg. Valencia oranges, TITAN Imidacloprid 350 SC Insecticide should only be applied:  
• when there is a minimum of 20 weeks to the next harvest and,  
• according to the timing for specific pests described above and,  
• after the previous crop has been harvested or stripped and,  
• when the main flowering period has finished.  
DO NOT apply more than once per season. |
| Bananas – Lady Finger (QLD, NSW, NT, WA only) | Banana Weevil Borer                        | 2.5 or 3.5mL/stool Inject undiluted, or diluted 50:50 with water |                                                                                     |
| Citrus                      | Black Citrus Aphid, Citrus Leafminer, Pink Wax Scale, Red Scale | 9mL/tree Apply as a soil drench* OR via micro- sprinkler* OR drip irrigation* |                                                                                     |
| Citrus (non-bearing only)   | Citrus Leafminer                            | 6mL/tree Apply as a soil drench* OR via drip irrigation* |                                                                                     |

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION
WITHHOLDING PERIODS
Harvest: Sugarcane/plant cane: DO NOT HARVEST FOR 21 WEEKS AFTER APPLICATION. All other crops: NOT REQUIRED WHEN USED AS DIRECTED
Grazing: Sugarcane/plant cane: DO NOT GRAZE OR CUT FOR STOCKFEED FOR 21 WEEKS AFTER APPLICATION.
Export of Treated Produce: Growers should note that MRLs or import tolerances do not exist in all markets for edible produce treated with TITAN Imidacloprid 350 SC Insecticide. If you are growing edible produce for export, please check with TITAN AG Pty Ltd for the latest information on MRLs and import tolerances before using TITAN Imidacloprid 350 SC Insecticide.

GENERAL INSTRUCTIONS
INSECTICIDE RESISTANCE MANAGEMENT STRATEGY (VEGETABLES)
DO NOT apply more than one soil application of TITAN Imidacloprid 350 SC Insecticide to each crop. DO NOT use TITAN Imidacloprid 350 SC Insecticide or any other Group 4A Insecticide as a foliar spray after soil application of TITAN Imidacloprid 350 SC Insecticide in that crop. Refer to district advice for local Silverleaf Whitefly resistance management strategies.

NOTE FOR VEGETABLE CROPS
Potential migration of Silverleaf Whitefly from neighbouring crops. Adult Silverleaf Whitefly (SLWF) are controlled when they ingest a lethal dose of active ingredient by feeding on a TITAN Imidacloprid 350 SC Insecticide treated crop. However, in some very susceptible crops and varieties, the first migration of large populations of adults from adjacent fields may result in significant feeding damage to the crop, although further reproduction and development of the pest will be prevented. To help prevent such damage it is important to minimise the migration of adult SLWF into a treated crop, eg. by applying a ‘clean-up’ fast-acting insecticide to recently harvested crops. Consideration of factors such as planting sequences and timing, wind direction, variety selection, and general crop hygiene should also be integral to SLWF management. Crops should be monitored for SLWF adult numbers after application of TITAN Imidacloprid 350 SC Insecticide, and appropriate fast-acting insecticides for control of adults should be applied if economic thresholds are reached or excessive adult feeding damage is observed.

MIXING
Prior to pouring, shake container vigorously, then add the required amount of TITAN Imidacloprid 350 SC Insecticide to water in the tank while stirring or with agitators in motion. TITAN Imidacloprid 350 SC Insecticide requires constant agitation in the tank.

APPLICATION
For all application instructions, refer to the Critical Comments in the Directions for Use Table. Additional instructions for sugarcane and citrus follow.

Application (sugarcane)
Plant Cane
Application can occur at various stages from planting until harvesting as described below. TITAN Imidacloprid 350 SC Insecticide should be applied into the plant drill in a narrow band centred on the cane row. Mix TITAN Imidacloprid 350 SC Insecticide with water and spray the mixture into the cane drill as a narrow 50–100mm wide band in the middle of the drill. Apply in no less than 1.5L of water per 100 metres of cane row (equivalent to no less than 100L/ha of water for single row cane with 1.52m spacing between rows). Soil should have moisture at coulter depth at the time of application or should receive at least 15mm of rainfall or irrigation within 1 week. DO NOT leave TITAN Imidacloprid 350 SC Insecticide exposed to sunlight. After application ensure the TITAN Imidacloprid 350 SC Insecticide treated band is covered by at least 100mm of soil and that coulter slits are filled in completely.

At planting
Fix a spray nozzle or nozzles on the planter so that the TITAN Imidacloprid 350 SC Insecticide spray band is directed at soil just after it covers the setts to a depth of at least 50mm. The boards on the planter need to be adjusted so that another 50mm of soil comes over the top of the treated band of soil. Subsequent cutaway cultivations must not disturb soil to the depth of the treated band.

At first working, or at half-open drill, or at fill-in
Apply TITAN Imidacloprid 350 SC Insecticide as a spray band 50–100mm wide directed at the base of the young cane shoots so that the middle of the drill is treated, not the sides. A single nozzle per row or a directed nozzle each side of each row may achieve this. The treated band must be covered with at least 50mm of soil immediately. Subsequent cultivations must not disturb soil to the depth of the treated band. There should be at least 100mm of soil cover over the treated layer after the final cultivation or hilling-up operation.

At hilling up
Apply TITAN Imidacloprid 350 SC Insecticide as twin narrow spray bands 50mm wide on each side of the cane rows directed at the base of the cane rows directed at the base of the young cane shoots. Directed nozzles each side of the row may achieve this. Direct the spray nozzles to ensure that the spray is not blocked by cane shoots or leaves. The treated bands must be covered with at least 100mm of soil immediately as the final step in the shaping of the row profile.

At planting
For all application instructions, refer to the Critical Comments in the Directions for Use Table. Additional instructions for sugarcane and citrus follow.

Application (citrus)
Ensure treatment area below canopy is weed free prior to application and remains weed free throughout season, otherwise reduced control will occur.

Soil drench
Apply TITAN Imidacloprid 350 SC Insecticide in a water mix using 1L of water per tree. Apply evenly to moist soil immediately around the base of the tree trunk. The maximum trunk height of 20cm. Ensure the mixture infiltrates the soil around the trunk and does not run off the tree. DO NOT disturb or remove the treated soil around the trunk during the season. Irrigation for up to 1 hour (depending on soil type) immediately after a soil drench application is preferred but not essential. DO NOT leave TITAN Imidacloprid 350 SC Insecticide mixture exposed to sunlight.

Drip or micro-sprinklers (below canopy)
For treatment under non-bearing trees, application via micro-sprinklers is not recommended and the Critical Comments in the Directions for Use Table should be consulted for further guidance on application by drip/trickle. Drip emitters placed under the tree canopy or near the trunk provide better results than those spaced irregularly or further from the tree. Micro-sprinklers should only be used when the wetting zone can be contained beneath the tree canopy, especially in young orchards where there is minimal canopy and root development. Begin injection only after soil below the trees furthest from the injection point is partially wetted up and irrigation system has reached operating pressure.

After TITAN Imidacloprid 350 SC Insecticide injection is completed, and lines have been flushed, continue irrigation for no longer than 1 hour. On sandy soils, this irrigation period after lines have been flushed should not be more than 10 minutes. Allow 48 hours before subsequent irrigations. This application technique is best suited to an IPM system, where beneficial species (eg. parasitic wasps) are released. DO NOT disturb or remove the treated soil during the season. DO NOT leave TITAN Imidacloprid 350 SC Insecticide mixture exposed to sunlight.

PRECAUTION
Application in Bananas: Ensure application equipment does not leak. To reduce the risk of exposure from accidental leakage, wear gloves during...
INSECTICIDE RESISTANCE WARNING

For insect resistance management TITAN Imidacloprid 350 SC Insecticide is a Group 4A Insecticide. Some naturally occurring insect biotypes resistant to Titan Imidacloprid 350 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 TITAN Imidacloprid 350 SC Insecticide or other Group 4A insecticides are used repeatedly. The effectiveness of TITAN Imidacloprid 350 SC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN Imidacloprid 350 SC Insecticide to control resistant insects. TITAN Imidacloprid 350 SC Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, TITAN AG Pty Ltd representative or local agricultural department agronomist.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or watercourses with the chemical or used containers. Imidacloprid is toxic to certain aquatic species. Application should be planned to avoid run-off within 48 hours of application. Application should not be made to wet/waterlogged soils. Application is not to be performed if heavy rains are expected to occur within 48 hours. Irrigation run-off from treated areas should be prevented from entering drains and waterways. DO NOT over irrigate or cause run-off. Irrigation should only occur when soil moisture measurements indicate the need for addition of water.

Citrus: For the first 48 hours after application irrigation should be restricted to only that which is recommended immediately after application (refer to Application section).

Sugarcane: Irrigation should not occur within 48 hours of application.

Vegetables (furrow spray pre-plant and plant hole drench applications): Irrigation within 48 hours of application should be minimal, and sufficient to reduce seedling stress only.

Run-off management: DO NOT apply within 3 metres of aquatic areas. The growth of a vegetative filter strip between the application site and any water body would also assist.

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 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 a 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.

SAFETY DIRECTIONS

Harmful if swallowed. Repeated exposure may cause allergic disorders. 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 face shield. After each day’s use wash gloves, face shield and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Imidacloprid 350 SC Insecticide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit www.titanag.com.au

CONDITIONS OF SALE: TITAN AG Pty Ltd shall not be liable for any loss, injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG’s skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia:

Harmful if swallowed. May cause an allergic skin reaction. Precautionary: Avoid breathing fumes, mists, vapours or spray. Wash contacted areas thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing and eye or face protection. Wash contaminated clothing before reuse. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Rinse mouth. Do not induce vomiting. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice. If eye irritation persists: get medical advice. Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep cool. Dispose of contents and containers as specified on the registered label.