POISON

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

TITAN

FIPRONIL 200SC
INSECTICIDE

ACTIVE CONSTITUENT: 200g/L FIPRONIL

GROUP **2B** INSECTICIDE

For the control of various insect pests in Asparagus, Bananas, Brassicas, Cotton, Forestry, Ginger, Wine Grapevines, Mushrooms, Pasture, Potatoes, Sorghum, Sugarcane and Swede as specified in the Directions For Use table.

APVMA Approval No.: 68315/59110

Pack Size: 1L-20L

TITAN AG
CROP PROTECTION

TITAN AG Pty Ltd | ABN 57 122 081 574
15/16 Princes Street, Newport NSW 2106
Tel (02) 9999 6655 | titanag.com.au

SC Formulation Type
Suspension Concentrate

IN A TRANSPORT EMERGENCY
• DIAL 000 • POLICE OR FIRE BRIGADE

9 3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains fipronil)
PG III Hazchem •3Z

DIRECTIONS FOR USE

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
					Dangerous to bees. Refer to PROTECTION OF LIVESTOCK.
Asparagus	Garden Weevil (*Phlyctinus callosus*)	VIC, WA only	40mL/100L Applying 500L spray solution per hectare		Day time spraying is effective but superior control may be achieved if spray is appied at night. Repeat applications as required, depending on pest pressure. Controlling weevils in asparagus fern may reduce abundance the following season. DO NOT apply more than 6 applications per season, up to 4 applications to spears and after harvest 2 applications.
Bananas	Banana Rust Thrips (*Chaetanaphothrips signipennis*)	QLD, NSW, WA, NT only	Butt application All planting configurations: 150mL/100L water (0.75mL/stool) Band application All planting configurations: 40mL/100m^2 treated area (See table under 'General Instructions – Application' for calculation of the treated area)	–	**Timing** Application should ideally be made at least two months prior to bunch emergence to reduce early thrips pressure. Such an application could coincide with an application for Banana Weevil Borer control (see label directions below). **Butt application** Apply in a coarse spray covering the stem to a height of 30cm and the soil/trash in a 30cm radius from the stem base. Apply a total volume of 500mL solution per stool. Ensure thorough coverage of butt, suckers, trash and exposed soil. **Band application** Apply in a band along each row. The bandwidth should be such that at least 30cm of soil/trash is treated on both sides of the butt. Apply with a side delivery boom and offset nozzles directed to spray at least 30cm of soil on either side of the butt and to a height of 30cm up the stems. Repeat the application from the opposite side of the row. Half of the spray volume required to treat each row should be applied from each direction of spraying. For double row configurations treat both rows with each pass, ensuring the ground area between the two rows is also treated. Ensure thorough coverage of butt, suckers, trash and exposed soil. Apply in a minimum water volume of 13L/100m^2 (trash removed) or 26L/100m^2 (trash retained). **See table under General instructions Application for guidance.**
	Banana Weevil Borer (*Cosmopolites sordidus*)		Butt application All planting configurations: 150mL/100L water (0.75mL/stool)		Apply by butt application as described above for Banana Rust Thrips. **Population assessment** Lay baits (cut billets of stem base) flat on soil beside stools and cover with leaf material. Check baits after 3 days to assess pest activity. Monitoring should commence in September when pest activity increases and continue until April. **Application method** Applications should be made in spring and/or autumn when weevil numbers reach or exceed acceptable threshold levels. Remove any green trash from area to be treated. Avoid application to trash which is less than 3 weeks old. This use is subject to an Avcare Resistance Management Strategy. Refer to your TITAN AG representative for details.
Brassicas (Head Cabbage, Cauliflower, Broccoli, Brussels Sprouts, Kohlrabi)	Diamondback Moth (*Plutella xylostella*), Cabbage White Butterfly (*Pieris rapae*), Cabbage Cluster Caterpillar (*Crocidolomia pavonana*)	ALL STATES	250mL/ha	7 days (H)	Diamondback Moth can rapidly become resistant to insecticides. To preserve the effectiveness of TITAN Fipronil 200SC Insecticide, limit the number of applications to no more than 4 per year, preferably applied within an 8 week period. Use spray volume of between 400 and 1000L/ha according to crop size. Use a non-ionic wetting agent at the rate specified by the manufacturer for use in horticultural crops. Ensure that the rate of wetting agent used results in efficient spray coverage of the leaf surface. This use is subject to an Avcare Resistance Management Strategy. Refer to your TITAN AG representative for details.
Cotton	Cotton Thrips (*Thrips tabaci*), Green Mirid (*Creontiades dilutus*), Green Vegetable Bug (*Nezara viridula*)	QLD, NSW, WA only	62.5 to 125mL/ha	4 weeks (H)	Apply at the first sign of the pest. TITAN Fipronil 200SC Insecticide will take 3-4 days to reach full effectiveness. Apply spray to achieve thorough coverage of foliage when pest first appears and repeat as required. Use the higher rate in situations of high thrips pressure. Use the higher rate under sustained heavy Green Mirid pressure. Use higher rate in situations of high Green Vegetable Bug pressure. The product is compatible with early season IPM and the lower rate having less impact on beneficials.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
					Dangerous to bees. Refer to PROTECTION OF LIVESTOCK.
Forestry Plantations including *Eucalyptus*, *Pinus* and *Corymbia* spp.	Australian Plague Locust (*Chortoicetes terminifera*), Spur-throated Locust (*Austracris guttulosa*), Migratory Locust (*Locusta migratoria*), Wingless Grasshopper (*Phaulacridium vittatum*), Small Plague Grasshopper (*Austroicetes cruciata*)	ALL STATES	6.25 to 12.5mL/ha	–	Apply in plantation situations up to a maximum of two years of age. Apply diluted with water to a minimum of 20L/ha by air or 50L/ha by ground rig, directly onto locusts. Ensure thorough coverage of foliage. Residual control of these pests provided by TITAN Fipronil 200SC Insecticide will vary with conditions. Rainfall will significantly reduce residual control. Residual control will also be reduced when applied directly to bare earth. Where inaccessibility prevents direct spraying of locusts apply as a barrier treatment (minimum 25m wide) ahead of advancing hopper bands. DO NOT retreat for 14 days following application. DO NOT apply TITAN Fipronil 200SC Insecticide to wet foliage. TITAN Fipronil 200SC Insecticide is rainfast after drying on foliage (1 hour). Respray only if rain falls before spray is dry on crop. Mortality will increase to a maximum over a period of 3-15 days after spraying. Speed of kill varies with locust species, temperature and age of adults. Fully mature, adult Spur-throated Locusts may show symptoms of debilitation 4-48 hours after spraying but in cool weather may take up to 14 days to die. Feeding ceases when debilitation symptoms appear. See also **General Instructions**.
Ginger	Symphylids	QLD only	Pre-plant application: 250mL to 500mL /ha Dipping: 1mL/200 + 250mL/ha pre-planting application	–	**Pre-plant application** Apply as a spray to soil and incorporate to a depth of 200mm prior to planting. Use the higher rate in heavier soils and/or under high pest pressure. **Dipping** Dip seed pieces in aqueous solution prior to planting in beds pre-treated with TITAN Fipronil 200SC Insecticide. Dip solution is achieved by mixing 1mL of TITAN Fipronil 200SC Insecticide in 200L of water.
Wine Grapevines	Fig Longicorn (*Acalolepta vastator*)	ALL STATES	100mL/100L	–	Apply as a single spray to dormant vines following pruning and prior to budburst. Apply only as high volume spray using hand held equipment. Thorough coverage of vine trunks and cordons is essential for effective control. **Refer to Application Wine Grapevines.**
Mushrooms	Mushroom flies (Sciarids, Phorids and Cecids)	ALL STATES	16mL/300L bale of peat moss	14 days (H)	Prepare solution by mixing TITAN Fipronil 200SC Insecticide with a small volume of water. Apply mixture to peat moss during preparation of casing. Ensure thorough mixing with peat moss.
Pasture, Sorghum	Australian Plague Locust (*Chortoicetes terminifera*), Spur-throated Locust (*Austracris guttulosa*), Migratory Locust (*Locusta migratoria*), Wingless Grasshopper (*Phaulacridium vittatum*), Small Plague Grasshopper (*Austroicetes cruciata*)	ALL STATES	6.25mL/ha	14 days (H)	Apply diluted with water to a minimum of 20L/ha by air or 50L/ha by ground rig, directly onto locusts. Ensure thorough coverage of foliage. Residual control of these pests provided by TITAN Fipronil 200SC Insecticide will vary with conditions. Rainfall will significantly reduce residual control. Residual control will also be reduced when applied directly to bare earth. Where inaccessibility prevents direct spraying of locusts apply as a barrier treatment (minimum 25m wide) ahead of advancing hopper bands. DO NOT retreat for 14 days following application. DO NOT apply TITAN Fipronil 200SC Insecticide to wet foliage. TITAN Fipronil 200SC Insecticide is rainfast after drying on foliage (1 hour). Respray only if rain falls before spray is dry on crop. Mortality will increase to a maximum over a period of 3-15 days after spraying. Speed of kill varies with locust species, temperature and age of adults. Fully mature, adult Spur-throated Locusts may show symptoms of debilitation 4-48 hours after spraying but in cool weather may take up to 14 days to die. Feeding ceases when debilitation symptoms appear. See also **General Instructions**.
Potatoes, Sweet Potatoes	Wireworm (various), Mole Cricket (various)	ALL STATES	250mL/ha	–	Apply as a broadcast spray to the surface of the soil and incorporate to a depth of 15cm prior to planting.
	Whitefringed Weevil (*Naupactus leucoloma*)	ALL STATES	500mL/ha		

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
					Dangerous to bees. Refer to PROTECTION OF LIVESTOCK.
Sugarcane	Sugarcane Weevil Borer (*Rhabdoscelus obscurus*)	QLD, NSW, WA, NT only	2 to 5.7mL/ 100m row	12 weeks (H, G)	Apply during the summer months of December to February when the crop has produced the first millable internode of cane. Use hollow cone nozzles as a directed spray to cover the base of the sugarcane stools and up the stalk to a height of 40cm. Treat both sides of the stools ensuring coverage of all stalks, soil and trash in an area to 10cm either side of the stools. Use a non-ionic wetting agent at the rate specified by the manufacturer. Ensure that the rate of wetting agent used results in efficient spray coverage of the stalk, soil and trash surface. Apply in a minimum water volume of 250L/ha (approx 3.8L/100m row). Use the higher rate when pest pressure is heavy.
	Sugarcane Wireworm (various)		Single row plantings 1.1mL/100m single row length Double row plantings 1.8mL/100m double row length	–	Apply in the planting furrow over the top of plant pieces (setts) in sufficient water to ensure coverage of the plant pieces and the surrounding soil.
Swede and Turnips	Diamondback Moth (*Plutella xylostella*)	ALL STATES	250mL/ha	7 days (H)	Use according to the Croplife Resistance Management Strategy for Diamondback Moth control. The use is limited to 4 applications per year, preferably applied within an 8 week period.

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

WITHHOLDING PERIODS:

(H) = HARVEST, (G) = GRAZING

ASPARAGUS: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.
BANANAS: NOT REQUIRED WHEN USED AS DIRECTED.
BRASSICAS: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.
COTTON: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.
DO NOT GRAZE OR CUT FOR STOCK FOOD.
GINGER: NOT REQUIRED WHEN USED AS DIRECTED.
WINE GRAPES: NOT REQUIRED WHEN USED AS DIRECTED (H).
DO NOT FEED TRASH OR BY-PRODUCTS RESULTING FROM TREATED GRAPEVINES TO LIVESTOCK.
MUSHROOMS: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.
PASTURE: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.
POTATOES, SWEET POTATOES: NOT REQUIRED WHEN USED AS DIRECTED.
DO NOT GRAZE OR CUT FOR STOCK FOOD ANY PART OF FAILED CROP (INCLUDING TUBERS).
SORGHUM: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.
SUGARCANE: DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION.
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 12 WEEKS AFTER APPLICATION.
SWEDE AND TURNIIP: DO NOT HARVEST FOR 7 DAYS FOLLOWING APPLICATION.
DO NOT ALLOW LIVESTOCK TO GRAZE TREATED CROP.

LIVESTOCK WITHHOLDING PERIOD
WITHHOLD STOCK FROM SLAUGHTER FOR 21 DAYS AFTER APPLICATION, WHERE STOCK WERE PRESENT IN CROP OR PASTURE AT TIME OF APPLICATION.

GENERAL INSTRUCTIONS

INSECTICIDE RESISTANCE WARNING

GROUP **2B** INSECTICIDE

For insecticide resistance management TITAN Fipronil 200SC Insecticide is a Group 2B Insecticide. Some naturally occurring insect biotypes resistant to TITAN Fipronil 200SC Insecticide and other Group 2B Insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if TITAN Fipronil 200SC Insecticide or other Group 2B Insecticides are used repeatedly. The effectiveness of TITAN Fipronil 200SC Insecticide on resistant individuals could be significantly reduced. Since the 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 this product to control resistant insects. TITAN Fipronil 200SC Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, TITAN AG representative or local agricultural department agronomist.

RESIDUES MANAGEMENT IN EXPORT PRODUCE

Crops

Growers should note that MRLs or import tolerances do not exist in all markets for produce treated with TITAN Fipronil 200SC Insecticide. If you are growing produce for export, please check with TITAN AG Pty Ltd for the latest information on MRLs and import tolerances BEFORE using TITAN Fipronil 200SC Insecticide.

Livestock

Livestock may be exposed to fipronil residues in the feed by grazing treated fodder. Observance of the 14 day grazing withholding period permits compliance with Australian MRLs for fipronil in meat, offal and milk. To meet more stringent export residues requirements, Meat and Livestock Australia recommends Export Slaughter Intervals (ESIs) and Export Grazing Intervals (EGIs) for TITAN Fipronil 200SC Insecticide.

When livestock grown for export are grazed on fodder treated with TITAN Fipronil 200SC Insecticide the user must obtain details of the recommended export intervals from Meat and Livestock Australia and must follow those recommendations.

MIXING

Asparagus, Bananas, Brassicas, Cotton, Wine Grapevines, Pasture, Potatoes, Sweet Potatoes, Sugarcane

Slowly add the required amount of product to water in the spray tank while stirring or agitating. Agitate while spraying.

Mushrooms

Add required amount of TITAN Fipronil 200SC Insecticide to a small quantity of water, ensuring thorough mixing.

TITAN AG CROP PROTECTION

APPLICATION

Bananas

Ensure thorough coverage of butts, suckers and surrounding trash and exposed soil.

Bananas (Band Spray)

Example calculations of the quantity of TITAN Fipronil 200SC Insecticide and the minimum water volume required to treat a 100m row length of bananas for various band widths.

Band width to be treated#	Spray area per 100m row	Total quantity of TITAN Fipronil 200SC Insecticide required per 100m row*	Minimum recommended water volume per 100m (Trash removed)*	Minimum recommended water volume per 100m (Trash retained)*
1.5m	150m^2	60mL	20L	40L
2.0m	200m^2	80mL	27L	54L
2.5m	250m^2	100mL	33L	66L
3.0m	300m^2	120mL	40L	80L

Band width = butt diameter plus 30cm on either side of the butt

* Rows should be treated from both sides. The quantities stated are the total amount i.e. half of the stated quantity should be applied from each direction of spraying.

Brassicas: Ensure thorough coverage of foliage and heads.

Cotton: For ground application use a prepared spray volume of 35-75L/ha depending on the size of the crop. For aerial application see 'Aerial application' instructions below.

Ginger: Apply as a spray to soil and incorporate to a depth of 200mm prior to planting.

Wine Grapevines: TITAN Fipronil 200SC Insecticide should be applied by hand held equipment as a high volume directed spray of approximately 500mL solution per vine, directed to trunks and cordons during dormant period only.

Mushrooms: Apply mixture to peat moss during preparation of casing, ensuring even mixing in peat moss.

Potatoes, Sweet Potatoes: Apply as a broadcast spray to the surface of the soil and incorporate to a depth of 15cm prior to planting.

Swede and Turnip: Ensure thorough coverage of foliage.

AERIAL APPLICATION

Use spray techniques that minimize off-target spray drift.
DO NOT use rotary atomisers.
Use application volumes between 20L and 50L/ha. Achieve a droplet density of ~60 droplets/cm^2 on a flat surface on the target. When spraying large droplets (>250µm), increase the application volume to >40L/ha to ensure sufficient droplets are produced. Aerial application is not recommended for brassica and potato crops.

PRECAUTIONS

Re-entry period: DO NOT allow entry into treated areas until spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.
Human flaggers, if used in aerial spraying operations, must be protected by enclosed cabs.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply in weather conditions or from spraying equipment, that may cause spray to drift onto non-target plants/crops, cropping lands or pastures.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT apply where bees from managed hives are foraging and crops, weeds or cover crops are in flower at the time of spraying, or are expected to flower within 28 days (7 days for pastures and sorghum). Before spraying, notify beekeepers to move hives to a safe location with an untreated source of nectar, if there is potential for managed bees to be affected by the spray or spray drift. If an area has been sprayed inadvertently, in which the crop, weeds or cover crop were in flower or subsequently came into flower, notify beekeepers in order to keep managed bees out of the area for at least 28 days (7 days for pastures and sorghum) from the time of spraying. Where the owner of managed hives in the vicinity of a crop to be sprayed is not known, contact your State Department of Primary Industries/ Agriculture, citing the registration number, for assistance in contacting the owner.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT spray across open bodies of water. This product will kill susceptible non-target invertebrates, including beneficial species, if they are exposed to drift. DO NOT apply aerially to brassicas and potatoes. A spray drift minimisation strategy should be employed at all times when aerially applying sprays to or near sensitive areas. The strategy envisaged is exemplified by the cotton industry's Best Management Practice Manual.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to the 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 deliver empty packaging for appropriate disposal 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 compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SAFETY DIRECTIONS

Harmful if inhaled or swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length PVC gloves. 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 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 Fipronil 200SC Insecticide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit 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. Harmful in contact with skin. Harmful if inhaled. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. Precautionary Statements: Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves and protective clothing. Collect spillage. IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Rinse mouth. Take off contaminated clothing and wash it before reuse. Dispose of contents/ container to authorised hazardous or special waste collection point in accordance with any local regulation.

TITAN AG CROP PROTECTION