READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

PEACEKEEPER 350 WG

INSECTICIDE

ACTIVE CONSTITUENT: 350g/kg CHLORANTRANILIPROLE

GROUP 28 INSECTICIDE



For the control of Lepidopteran species of insect pests in Cotton and Pulse crops as specified in the Directions For Use.

APVMA Approval No.: 90318/143028

Pack Size: 500g-5kg

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

WG Formulation Type **Water Dispersible Granule**

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



3077
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains chlorantraniliprole)
PG III Hazchem 2Z

DIRECTIONS FOR USE

Restraints:

DO NOT apply if heavy dew is present on crops, or if rainfall is expected within 2 hours of application.

DO NOT make more than 3 applications per Cotton crop per season and no more than 2 consecutive sprays per field per season. Applications must be a minimum of 7 days apart.

DO NOT make more than 1 application per pulse crop per season (except Chickpea, Soybean and Mung Bean where a maximum of 2 applications can be made). Applications must be a minimum of 7 days apart.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

Boom Sprayers

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zone' section of the following table titled 'Buffer Zone for Boom Sprayers') are observed.

Buffer Zone for Boom Sprayers	
Application Rate	**Mandatory downwind buffer zone**
Up to maximum label rate (150g/ha)	Natural aquatic areas
	20 metres

Aircraft

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets not smaller than a MEDIUM spray droplet size category.
- For maximum release heights above the target canopy of 3m or 25% of wingspan or 25% of rotor diameter whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer Zones for Aircraft') are observed.

Buffer Zones for Aircraft		
Application Rate	**Wind speed conditions**	**Mandatory downwind buffer zones**
		Natural aquatic areas
Up to maximum label rate (150g/ha)	3-8km/hr	100 metres
	8-14km/hr	200 metres
	15-20km/hr	400 metres

For use in ALL STATES where appropriate for the crop and/or insect pest.

CROP	**PEST**	**RATE/ha**	**WHP**	**CRITICAL COMMENTS**
Cotton	Cotton Bollworm, Native Budworm, Cluster Caterpillar	90 or 150g + TITAN Wetter 1000 Wetting Agent @ 125mL/100L	28 days	Target brown eggs and hatchling (neonates or 1st instar) to small larvae (2nd instar) when they reach the economic spray threshold and before they become entrenched in squares, flowers and bolls. Use the low rate on threshold larvae pressure (2 larvae per metre row) and low egg pressure. Use the high rate with high egg and/ or larvae pressure (where potential for >2 larvae per metre row produced) and so as to achieve longer residual control of Budworms.
Chickpea	Cotton Bollworm, Native Budworm	70g + TITAN Wetter 1000 Wetting Agent @ 125mL/100L	14 days	A maximum of 1 application is to be applied to any 1 crop per season (except Chickpea, Soybean and Mung Bean where a maximum of 2 applications can be applied per season). Further treatments should be made with alternative mode of action insecticides. Regularly scout crops to monitor for larvae. Target sprays against larvae. Apply as larvae reach threshold numbers. Larvae in entrenched feeding sites will not be controlled. Use enough water to ensure thorough coverage of the crop. Target a minimum of 100L/ha by ground rig and a minimum of 30L/ha by aircraft. Use in accordance with Crop Life Insecticide Resistance Management Strategy guidelines. Target brown eggs and hatchlings (neonates or 1st instar) to small larvae (2nd instar) when they reach the economic spray threshold and before they become entrenched in flowers or pods.
Mung Bean, Soybean	Bean Podborer, Cotton Bollworm, Native Budworm, Soybean Looper, Bean Looper, Irrorated Tabby			
Winter pulse crops (except Chickpea) including; Faba/Broad Bean, Field Pea, Lentil, Lupin, Vetch	Cotton Bollworm, Native Budworm		28 days	
Summer pulse crops (except Mung Bean and Soybean) including; Azuki/ Adzuki Bean, Cowpea, Navy Bean, Pigeon Pea	Bean Podborer, Cotton Bollworm, Native Budworm, Soybean Looper, Bean Looper, Irrorated Tabby			

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

TITAN AG CROP PROTECTION

WITHHOLDING PERIODS

HARVEST

Cotton: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.
Chickpea, Mung Bean, Soybean: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.
Pulse crops (except Chickpea, Mung Bean, Soybean): DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

GRAZING

Cotton: DO NOT ALLOW LIVESTOCK TO GRAZE CROPS, COTTON STUBBLE OR GIN TRASH TREATED WITH TITAN PEACEKEEPER 350 WG INSECTICIDE.
Pulse crops: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS 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 Peacekeeper 350 WG 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 Peacekeeper 350 WG Insecticide.

GENERAL INSTRUCTIONS

TITAN Peacekeeper 350 WG Insecticide is an anthranilic diamide insecticide in the form of a water dispersible granule. TITAN Peacekeeper 350 WG Insecticide is particularly active on Lepidopteran insect pests, primarily as a larvicide. TITAN Peacekeeper 350 WG Insecticide should be applied after careful monitoring of pest populations of eggs and larvae to determine the need for application, the correct timing of the initial application and of any subsequent applications. Subsequent applications are dependent on economic thresholds, as well as the growth rate of new unprotected plant material. For *Helicoverpa* species, spray applications should be timed to coincide with egg hatching and before larvae are entrenched in protected feeding sites. TITAN Peacekeeper 350 WG Insecticide has been specifically designed for use in Integrated Pest Management (IPM) schemes. TITAN Peacekeeper 350 WG Insecticide does not give traditional larval "knockdown" control. TITAN Peacekeeper 350 WG Insecticide enters larvae primarily by ingestion of treated foliage, or through penetration of the insect cuticle. After ingesting TITAN Peacekeeper 350 WG Insecticide, the larvae cease feeding and die 4 to 5 days later. TITAN Peacekeeper 350 WG Insecticide provides square, flower and boll protection in Cotton and flower and pod protection in pulse crops.

MIXING

Fill spray tank to ¼ to ½ full of water. Measure the amount of TITAN Peacekeeper 350 WG Insecticide required for the area to be sprayed. Add TITAN Peacekeeper 350 WG Insecticide directly to the spray tank with the agitation engaged. Mix thoroughly to disperse the insecticide. Once dispersed, the material must be kept in suspension at all times by continuous agitation. Use mechanical or hydraulic means, do NOT use air agitation, premix or slurry. If spray solution is left standing, ensure thorough reagitation of the spray mix until fully resuspended.

DO NOT allow spray mix to sit overnight, as resuspension may be difficult.

SURFACTANTS

Use TITAN Wetter 1000 at 125mL/100L. DO NOT add a non-ionic surfactant/ wetting agent if mixing with another product which already contains a surfactant and/or the product label advises not to add a surfactant, and/or mixing with a liquid fertiliser.

COMPATIBILITY

TITAN Peacekeeper 350 WG Insecticide is compatible with many commonly used fungicides, liquid fertilisers, herbicides, insecticides and biological control products. However, since the formulations of products are always changing, it is advisable to test the physical compatibility of desired tank-mixes and check for adverse effects like settling out or flocculation. To determine the physical compatibility, add the recommended proportions of the tank-mix products to water, mix thoroughly and allow to stand for 20 minutes. If the combination remains mixed, or can be re-mixed readily, it is considered physically compatible. Avoid complex tank-mixtures of several products or very concentrated spray mixtures. The crop safety of all potential tank-mixes, including additives and other pesticides, on all crops under all environmental conditions has not been fully tested. Before applying any tank-mixture not specifically recommended on this label the safety to the target crop must be confirmed. To test for crop safety, apply the combination to a small area of the target crop in accordance with the label instructions to ensure that a phytotoxic response will not occur. TITAN Peacekeeper 350 WG Insecticide is compatible with suitable products that contain amitraz and TITAN Mepiquat Chloride 38 Cotton Growth Regulator. TITAN Peacekeeper 350 WG Insecticide is not compatible with Ultra Low Volume (ULV) formulations. The mixing sequence recommended is: water soluble bags, dry flowable or water-dispersible granules (TITAN Peacekeeper 350 WG Insecticide), wettable powders, water-based suspension concentrates, water-soluble concentrates, suspo-emulsions, oil based suspension concentrates, emulsifiable concentrates, adjuvants and surfactants, soluble fertilisers and drift retardants.

APPLICATION

Application equipment should be calibrated to apply at least 60 droplets per cm^2 of target foliage. Droplets should be of **MEDIUM** spray droplet size category.

Ground application: Apply as a blanket spray or as a banded spray. Ensure thorough spray coverage on the foliage, using appropriate fan nozzles. Apply in a minimum spray volume of 100L/ha and keep the boom low to avoid spray drift. A minimum spray pressure of 275kPa (40psi) should be used with fan nozzles applying insecticides. Higher pressure reduces droplet size, DOES NOT improve canopy penetration and may increase drift potential.

WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

For band spraying, increase the number of fan nozzles per crop row as the plant size increases.

Aerial application: TITAN Peacekeeper 350 WG Insecticide must only be applied with aircraft fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30L/ha with nozzles (eg. Micronair rotary atomisers, CP nozzles or conventional hydraulic nozzles) set to medium spray quality. A spray drift minimisation strategy should be employed at all times when applying this product.

DO NOT apply TITAN Peacekeeper 350 WG Insecticide using Ultra Low Volume (ULV) methods.

Minimising Spray Drift: The most effective drift management strategy is to apply the largest droplets which are consistent with pest control objectives. Coarser droplet size spectra have larger volume mean diameters (VMDs) and lower drift potential. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator must consider all these factors when making application decisions. Refer to the Spray Drift Restraints.

Spray Equipment Cleanout: Prior to application, start with clean, well-maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove. Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment.
DO NOT clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

INSECTICIDE RESISTANCE WARNING

GROUP **28** INSECTICIDE

For insecticide resistance management TITAN Peacekeeper 350 WG Insecticide is a Group 28 insecticide. Some naturally occurring insect biotypes resistant to TITAN Peacekeeper 350 WG Insecticide and other Group 28 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if TITAN Peacekeeper 350 WG Insecticide and other Group 28 insecticides are used repeatedly. The effectiveness of TITAN Peacekeeper 350 WG 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 TITAN Peacekeeper 350 WG Insecticide to control resistant insects.
Strategies to minimise the risk of insecticide resistance are available. To help prevent the development of resistance to TITAN Peacekeeper 350 WG Insecticide observe the following instructions:

- Use TITAN Peacekeeper 350 WG Insecticide in accordance with the current Insecticide Resistance Management (IRM) strategy for your region.
- Apply TITAN Peacekeeper 350 WG Insecticide or other Group 28 insecticides using a "window" approach to avoid exposure of consecutive insect pest generations to the same mode of action. Multiple successive applications of TITAN Peacekeeper 350 WG Insecticide or other Group 28 insecticides are acceptable if they are used to treat a single insect generation.
- Following a "window" of TITAN Peacekeeper 350 WG Insecticide or other Group 28 insecticides, rotate to a "window" of applications of effective insecticides with a different mode of action.
- The total exposure period of all "Group 28-active windows" applied throughout the crop cycle (from seedling to harvest) should not exceed 50% of the crop cycle.
- Incorporate IPM techniques into the overall pest management program.

TITAN AG CROP PROTECTION

- Monitor insect populations for loss of field efficacy.
- Cultivate all Cotton and pulse crop fields as soon as possible after picking/harvest to destroy overwintering pupae of *Helicoverpa armigera*.

For further information contact your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries or local TITAN AG Representative. For additional information on insect resistance, modes of action and monitoring visit the CropLife resistance management (https://www.croplife.org.au/resources/programs/resistancemanagement) for chlorantraniliprole/Group 28 Insecticides.

PRECAUTION
DO NOT use human flaggers/markers unless they are protected by engineering controls such as vehicles with enclosed cabs.

Re-entry Period: DO NOT enter treated areas until spray has dried. If prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS
Important: Not all crops within a crop group and not all varieties, cultivars or hybrids of crops, have been individually tested for crop safety. To test for crop safety, apply the product in accordance with the label instructions to a small area of the target crop to ensure that a phytotoxic response will not occur, especially where the application is a new use of the product by the applicator.

PROTECTION OF LIVESTOCK
Based on Good Agricultural Practices (GAP), TITAN Peacekeeper 350 WG Insecticide should not be applied when bees are actively foraging.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Dangerous to aquatic invertebrates. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighbouring areas. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

STORAGE AND DISPOSAL
KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, cool, well-ventilated area out of 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 recycler 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 compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

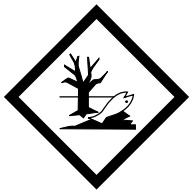
SAFETY DIRECTIONS
May irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use.

FIRST AID
First aid is not generally required. If in doubt, contact a 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 Peacekeeper 350 WG 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: Very toxic to aquatic life with long lasting effects. Precautionary Statements: Avoid release to the environment. Collect spillage.Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.



TITAN AG CROP PROTECTION