CAUTION

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

TITAN

PYRIPROXYFEN 100

INSECT GROWTH REGULATOR

ACTIVE CONSTITUENT: 100g/L PYRIPROXYFEN
SOLVENT: 450g/L LIQUID HYDROCARBONS

GROUP **7C** INSECTICIDE



For the control of Silverleaf Whitefly (*Bemisia tabaci* Biotype B) in Cotton, Rockmelon and Capsicum, the control of Silverleaf Whitefly (*Bemisia tabaci* Biotype B) and Greenhouse Whitefly in Tomatoes and the control of various Scale in Citrus, Mangoes and Olives.

APVMA Approval No.: 87071/117485

Pack Size: 1L; 5L; 10L; 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

EC Formulation Type
Emulsifiable Concentrate

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

9
3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains pyriproxyfen and solvent naphtha petroleum, heavy aromatic)
PG III Hazchem •3Z

DIRECTIONS FOR USE

Restraints:
DO NOT apply if rain is forecast within 48 hours.
DO NOT apply to soils where surface water is evident.
DO NOT apply TITAN Pyriproxyfen 100 Insect Growth Regulator more than twice per growing season.
TITAN Pyriproxfen 100 Insect Growth Regulator should be alternated with other suitable products, the choice of which will depend on the need to maintain beneficial insects in the field or orchard.

CROP	INSECT	RATE	CRITICAL COMMENTS
Cotton	Silverleaf Whitefly (*Bemisia tabaci* Biotype B)	500mL/ha	Ensure thorough coverage (See APPLICATION). Apply when industry recommended thresholds of silverleaf whitefly (SLW) are exceeded. If a second spray is required, a minimum re-treatment interval of two weeks must be observed. DO NOT apply more than twice in any one season. Apply as per current Cotton Industry Insecticide Resistance Management Strategy.
Rockmelon, Tomato, Capsicum (field and greenhouse)	Silverleaf Whitefly (*Bemisia tabaci* Biotype B), Greenhouse Whitefly (*Trialeurodes vaporariorum*)		Ensure thorough coverage (See APPLICATION). Apply in 100-150L water per hectare. Use high water volume 500-1000L/ha for dense crops. If applying more than 1000L/ha use a rate of 50mL/100L water. Apply at first appearance of whitefly. If a second spray is required, a minimum re-treatment interval of two weeks must be observed. DO NOT apply more than twice in any one season. To avoid the resistance build-up, the product must be rotated with other approved products. Apply in accordance with the SLW Resistance Management Strategy.
Citrus	Red Scale (*Aonidiella aurantii*), Black Scale (*Saissetia oleae*)	50mL/100L water	Ensure thorough coverage (See APPLICATION). **Red Scale:** Apply at the time of crawler release. There are usually multiple periods of crawler release from spring through to autumn. Ideally TITAN Pyriproxfyen 100 Insect Growth Regulator should be applied to control the first generation but if the infestation persists and there is significant crawler release later in the season then TITAN Pyriproxyfen 100 Insect Growth Regulator can be applied again. DO NOT apply more than twice in any one season on tree crops. **Black Scale:** Apply at the time of crawler release which is usually December to January but also may occur in autumn. DO NOT apply more than twice in any one season. **Mango Scale:** Apply at the time of crawler release. There are usually multiple periods of crawler release from spring through to autumn. Ideally TITAN Pyriproxyfen 100 Insect Growth Regulator should be applied to control the first generation but if the infestation persists and there is significant crawler release later in the season then TITAN Pyriproxyfen 100 Insect Growth Regulator can be applied again. DO NOT apply more than twice in any one season. **Pink Wax Scale:** Apply at the time of crawler release in early spring to early summer. There are usually two periods of crawler release in Queensland, with crawlers of the second generation emerging in mid summer to mid autumn. Ideally TITAN Pyriproxyfen 100 Insect Growth Regulator should be applied to control the first generation but if the infestation persists and there is significant second generation crawler release then TITAN Pyriproxyfen 100 Insect Growth Regulator can be applied again. DO NOT apply more than twice in any one season.
Mango	Mango Scale (*Aulacaspis tubercularis*), Pink Wax Scale (*Ceroplastes rubens*)		
Olives	Black Scale		

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

WITHHOLDING PERIODS:

COTTON: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.
DO NOT GRAZE TREATED CROP OR CUT FOR STOCK FEED.
DO NOT FEED TREATED COTTON TRASH TO LIVESTOCK.

ROCKMELON, TOMATO AND CAPSICUM: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. DO NOT GRAZE TREATED CROP FOR STOCKFEED.

CITRUS: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

OLIVES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.
DO NOT FEED TREATED OLIVE CROPS OR BY-PRODUCTS OF TREATED CROPS (E.G. OLIVE POMACE) TO LIVESTOCK.

MANGOES: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.

TRADE ADVICE INFORMATION: Treated citrus fruit, mangoes, melons, tomatoes and olives destined for export may require extra time being allowed between application and harvest, to be accepted in some export markets. Before you use this product, you are advised to contact TITAN AG Pty Ltd and/or your industry body about any potential trade issues and their management.

TITAN AG CROP PROTECTION

GENERAL INSTRUCTIONS
TITAN Pyriproxyfen 100 Insect Growth Regulator acts by suppressing embryogenesis with the insect egg and by inhibiting metamorphosis and adult emergence of target insects. TITAN Pyriproxyfen 100 Insect Growth Regulator has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

MIXING
Measure the required amount of TITAN Pyriproxyfen 100 Insect Growth Regulator, add to the spray tank partly filled with water and then add the remainder of the water.

APPLICATION
Cotton: Ensure thorough coverage. Apply in 100-150L water/ha (ground rig boom spray) OR 20-30L water/ha (aerial). Ground application must be first option undertaken, aerial application may only be applied in cases where canopy closure prevents ground access. Apply when industry recommended thresholds of silverleaf whitefly (SLW) are exceeded.
DO NOT apply more than two applications per crop. DO NOT apply consecutive applications, apply the product as part of a SLW management strategy with other approved chemistry for SLW in particular a non Insect Growth Regulator (IGR) product. The minimum re-treatment interval permitted between the first and second TITAN Pyriproxyfen 100 Insect Growth Regulator spray is 14 days. A strategy to minimize spray drift should be employed at all times when aerially applying sprays to, or near, sensitive areas. Such a strategy is illustrated by the cotton industry's Best Management Practice Manual.

Rockmelon, Tomato and Capsicum: Ensure thorough coverage. Apply by foliar spray with ground rig in 100-150L water per hectare. Use high water volume 500-1000L/ha for dense crops. If applying more than 1000L/ha use a rate of 50mL/100L water. Apply when whiteflies first appear.
DO NOT apply more than two applications per crop. DO NOT apply consecutive applications, apply the product as part of a Silverleaf Whitefly (SLW) management strategy with other approved chemistry for SLW, in particular a non Insect Growth Regulator (IGR) product.
The minimum re-treatment interval permitted between the first and second TITAN Pyriproxyfen 100 Insect Growth Regulator spray is 14 days. Apply in accordance with the SLW Resistance Management Strategy.

Citrus, Mangoes and Olives: It is essential to apply in sufficient water to ensure thorough coverage. For young trees this will be approximately 1000L/ha. DO NOT apply less than 1000L/ha to bearing trees.

CLEANING SPRAY EQUIPMENT
After using TITAN Pyriproxyfen 100 Insect Growth Regulator empty the tank and completely drain the system. Rinse the tank, pump, lines, hoses, filters and nozzles by circulating clean water through the system. Drain and repeat the rinsing procedure twice.

INSECTICIDE RESISTANCE WARNING
GROUP **7C** INSECTICIDE

For insecticide resistance management TITAN Pyriproxyfen 100 Insect Growth Regulator is a Group 7C insecticide. Some naturally occurring insect biotypes resistant to TITAN Pyriproxyfen 100 Insect Growth Regulator and other Group 7C insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if TITAN Pyriproxyfen 100 Insect Growth Regulator or other Group 7C insecticides are used repeatedly. The effectiveness of TITAN Pyriproxyfen 100 Insect Growth Regulator 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 Pyriproxyfen 100 Insect Growth Regulator to control resistant insects. TITAN Pyriproxyfen 100 Insect Growth Regulator may be subject to specific resistance strategies. For further information contact your local supplier, TITAN AG representative or local department of agriculture agronomist. To ensure TITAN Pyriproxyfen 100 Insect Growth Regulator remains effective, DO NOT use more than twice per season.

RE-ENTRY
DO NOT allow re-entry into treated areas until the spray has dried unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Very highly toxic to aquatic organisms. DO NOT contaminate streams, rivers, waterways or dams with the chemical or used container. DO NOT apply if waterbodies, watercourses or wetlands are within 50m downwind of the application area for tree crops when applied by ground equipment. DO NOT apply under weather conditions, or from spraying equipment, that may cause off target spraydrift, particularly to wetlands, waterbodies or watercourses. DO NOT spray across open bodies of water. DO NOT apply by air to crops other than cotton. DO NOT apply if waterbodies, watercourses or wetlands are within 200m downwind of the application area for cotton where applied aerially. For aerial application ensure a spray with a droplet size distribution of ASAE Fine (VMD 179 µm) or larger is used. A strategy to minimise spray drift should be employed at all times when aerially applying sprays to, or near, sensitive areas. Such a strategy is illustrated by the cotton industry's Best Management Practice Manual.

STORAGE AND DISPOSAL
Store in the closed original container in a well-ventilated area, as cool as possible. 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 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
Product is harmful if inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale vapours. When opening the container and preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow-length nitrile or PVC gloves, goggles, half face piece respirator with organic vapour cartridge or canister. If product is on skin immediately wash area with soap and water. If product is in eyes wash it out immediately with water. After each day's use, wash gloves, goggles and respirator and if rubber wash with detergent and warm water.

FIRST AID
If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If swallowed, DO NOT induce vomiting.

SAFETY DATA SHEET
Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Pyriproxyfen 100 Insect Growth Regulator 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: Combustible liquid. May be fatal if swallowed and enters airways. Causes eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness and cracking. Precautionary Statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only a well-ventilated area. Avoid breathing mist/vapours/spray. Avoid release to the environment. Wear protective gloves and protective clothing. Wash all exposed external body areas thoroughly after handling. IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. Do NOT induce vomiting. In case of fire: Use alcohol resistant foam or normal protein foam to extinguish. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. If eye irritation persists: Get medical advice/attention. Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.



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