

POISON

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

TITAN

Propiconazole 250

EC Fungicide

ACTIVE CONSTITUENT: 250g/L PROPICONAZOLE

SOLVENT: 640g/L HYDROCARBON LIQUID

GROUP **3** FUNGICIDE

For the control of certain fungal diseases of bananas, peanuts, pineapples, stone fruit, oats, perennial ryegrass, sugarcane, wheat and other crops as specified in the Directions for Use.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 63627/0610

Pack Sizes:
5L; 20L; 110L; 1000L



TITAN AG Pty Ltd

3/14 Narabang Way, Belrose NSW 2085

Telephone 02 9986 2943 Fax 02 9986 2945

www.titanag.com.au

IN A TRANSPORT EMERGENCY

DIAL 000

POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN
DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL.

DIRECTIONS FOR USE
TREE AND VINE CROPS

RESTRAINTS: DO NOT apply if crops or weeds are stressed due to excessively dry or moist conditions.
DO NOT apply if rain is likely within 6 hours.

RATE					WHP	CRITICAL COMMENTS	
In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Mixing/Application section.							
CROP	DISEASE CONTROLLED	STATE	RATE				
			Per Hectare	High Volume/ 100L			
Apricots	Prune Rust (<i>Tranzschelia discolor</i>)	SA only	–	32mL/100L water	1 day	<p>Curative Control: Apply when the disease first occurs. Further application should be made when the disease occurs on new growth. DO NOT make more than five applications to any individual tree during the season.</p> <p>Protective Treatment: Spray mancozeb or zineb mixed with TITAN Propiconazole 250 EC Fungicide at the full recommended rates of application.</p> <p>This use is subject to a DMI anti-resistance strategy.</p>	
Plums for Prune Production	Prune Rust (<i>Tranzschelia discolor</i>)	NSW, VIC, SA, WA only	–	32mL/100L water	1 day	<p>Curative Control: Apply when the disease first occurs. Further application should be made when the disease occurs on new growth. DO NOT make more than five applications to any individual tree during the season.</p> <p>Protective Treatment: Spray mancozeb or zineb mixed with TITAN Propiconazole 250 EC Fungicide at the full recommended rates of application.</p> <p>This use is subject to a DMI anti-resistance strategy.</p>	
Stone Fruit	Brown Rot (Blossom Blight) – blossom phase (<i>Monolinia fructicola</i>)	VIC, TAS, WA only	–	25mL/100L water	1 day	<p>This use is subject to a DMI anti-resistance strategy.</p> <p>Apply at early (1 to 10%) blossom and again at full bloom. A further application is made at shuck-fall.</p>	
	Brown Rot – blossom phase (<i>Monolinia fructicola</i>)	QLD, NSW, TAS, SA, WA only					
	Brown Rot – fruit phase (<i>Monolinia fructicola</i>)	QLD, NSW, VIC, TAS, SA, WA only					
						<p>Apply 3 weeks and 1 week before harvest. Only 2 consecutive applications of DMI fungicides can be made during this period. The last blossom blight spray and the first Brown Rot (fruit phase) spray should be regarded as consecutive applications. For varieties with extended harvesting periods, a third spray during the picking period may be applied if conditions are favourable for disease development.</p>	

NON TREE AND VINE CROPS

CROP	DISEASE CONTROLLED	STATE	RATE		WHP	CRITICAL COMMENTS
			Per Hectare	High Volume/ 100L		
Bananas (including Bananas interplanted with Avocados)	Leaf Spot (<i>Mycosphaerella musicola</i>), Leaf Speckle (<i>Mycosphaerella musae</i>), Cordana Leaf Spot (<i>Cordana johnstonii</i>)	STH QLD, NSW, WA only	Ground Application: 200-400mL + 3-5L of a water miscible oil, in a convenient volume of water. Aerial Application: 400mL + 3-5L of a water miscible oil, in a minimum of 30L of water. Aerial Application without water: 400mL + 8-10L of spraying oil (This use does not require further dilution with water).	-	1 day	This use is subject to a DMI anti-resistance strategy. Ground Application: Apply by misting machine or airblast sprayer. Use rates towards the higher end of the range where weather conditions favour diseases or where equipment or terrain does not permit thorough spray coverage of all foliage. This use is subject to a DMI anti-resistance strategy. NSW, Sth Qld – Ground and Aerial Application: Commence spraying at the start of the summer rainy season and apply a maximum of 5 sprays per season at 21 to 28 day intervals. For effective control the product must be applied for at least 2 consecutive sprays at 21 to 28 day intervals before further treatments of an alternative recommended protective fungicide are applied. NT, WA, Nth Qld – Ground and Aerial Applications: Commence spraying at the start of the wet season and apply a maximum of 6 sprays per season at 14 to 21 day intervals. For effective control the product must be applied for at least 2 consecutive sprays at 14 to 21 day intervals before further treatments of an alternative recommended fungicide are applied. Continue with treatments of an alternative recommended protective fungicide for the remainder of the season. Use the lower rate of oil in Nth Qld. DO NOT apply July, August, September and October.
	Leaf Spot (<i>Mycosphaerella musicola</i>), Leaf Speckle (<i>Mycosphaerella musae</i>), Cordana Leaf Spot (<i>Cordana johnstonii</i>)	NTH QLD, WA, NT only				
	Black Sigatoka (<i>Mycosphaerella fijiensis var difformis</i>)	QLD, WA, NT only				
Barley	Powdery Mildew (<i>Blumeria graminis hordei</i>)	ALL STATES	150-500mL	-	28 days Harvest 7 days Grazing	Spray at the first sign of the disease during the tillering stage. A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. Powdery Mildew: Higher rates provide longer protection. Apply after flag leaf is around 70% emerged and before infection averages 10% on the flag-2 leaf. Ensure thorough coverage of the leaves and stem.
	Barley Scald (<i>Rhynchosporium secalis</i>)					
	Spot Form Net Blotch (<i>Pyrenophora teres f. maculata</i>)					
Peanuts	Early Leaf Spot (<i>Cercospora arachidicola</i>), Late Leaf Spot (<i>Cercosporidium peronatum</i>)	STH QLD, NSW, WA only	400-600mL	-	14 days	This use is subject to a DMI anti-resistance strategy. Spray when disease symptoms are first observed. Apply at 14 day intervals while weather conditions favour disease. Use rates towards the higher end of the range when wet conditions prevail. Use a fungicide from a different activity group (non-DMI) after 3 consecutive sprays using TITAN Propiconazole 250 EC Fungicide alone. Apply a maximum of 5 sprays per season. The leaves of peanuts sprayed may become darker green in colour and modified in shape. These effects will not adversely affect yield at recommended rates.
	Rust (<i>Puccinia arachidis</i>)	STH QLD, WA only	600mL			
Peppermint, spearmint grown for oil production only	Mint Rust (<i>Puccinia menthae</i>)	NSW, VIC, TAS only	500mL	-	35 days	Apply 2 to 5 applications at 10 to 14 day intervals during the main disease period. DO NOT use on mint grown for the fresh market.
Perennial Ryegrass	Stem Rust (<i>Puccinia graminis</i>), Blind Seed Disease (<i>Gloeocolinia granigene</i>)	VIC only	500mL	-	28 days	Apply at ear emergence and again at antithesis.
Boronia	Rust (<i>Puccinia boroniae</i>)	TAS, WA only	500mL-1L	-	-	Apply 2 to 5 applications at 10 to 14 day intervals during the main disease period. Use the lower rate when application is made protectively before disease occurs. Use the higher rate when disease is first observed and when the minimum number of applications is applied.
Poppies (<i>Papaver somniferum</i>)	Leaf Smut (<i>Entyloma fuscum</i>)	TAS only	500mL	-	28 days	Usage recommended by poppy contract companies. Apply as a mid season application in the full flower/petal drop period when disease is present.

NON TREE AND VINE CROPS – continued

CROP	DISEASE CONTROLLED	STATE	RATE		WHP	CRITICAL COMMENTS
			Per Hectare	High Volume/ 100L		
Pineapples	Base Rot (<i>Thielaviopsis paradoxa</i>)	QLD, WA, NT only	–	10-20mL	–	Pre-plant Dip: Ensure thorough coverage by totally immersing the planting material in the dip solution. Apply 50mL of the dip solution per plant. Apply the higher rate under conditions of high disease pressure.
Sugarcane	Pineapple Disease (<i>Ceratocystis paradoxa</i>)	QLD, NSW, WA only	–	20mL	–	Ensure thorough coverage of the cut ends of sugarcane sets.
Wheat	Stripe Rust (<i>Puccinia striiformis</i>)	QLD, NSW, VIC, SA, WA only	250 or 500mL	–	28 days Harvest 7 days Grazing	Spray between jointing and end of flowering when 10 to 20% of leaves are infected. A repeat spray 21 to 28 days later may be required. Use higher rate under high infection pressure or when longer residual protection is required.
	Stripe Rust (<i>Puccinia striiformis</i>)	TAS only	250 or 500mL			Spray when 10-20% of leaves are infected. A repeat spray 21 to 28 days later may be required. Use higher rate under high infection pressure or when longer residual protection is required.
	Powdery Mildew (<i>Blumeria graminis tritici</i>)	ALL STATES	150-500mL			Spray at the first sign of disease during the tillering stage. A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. Higher rates provide longer protection.
	Stem Rust (<i>Puccinia graminis</i>)		500mL			Apply at the first sign of disease and before there is an average of over 2 pustules per tiller. Ensure thorough coverage of stems and leaves.
	Septoria Nodorum Blotch (<i>Phaeosphaeria nodorum</i>)		150-500mL			Apply after flag leaves are around 70% emerged if infection averages 10% on the flag-2 leaf. The high rate of application gives a longer period of protection than the lower rates. Use higher rates on high potential crops when conditions favour severe disease development during flowering. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Wheat Leaf Rust (<i>Puccinia triticina</i>)		150-500mL			Apply after flag leaf is 70% emerged and before disease levels reach 1% of flag leaf area. Consider control if disease is greater than 5-10% on any lower leaf layer. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Yellow Spot (<i>Pyrenophora tritici-repentis</i>), Septoria Tritici Blotch (<i>Mycosphaerella graminicola</i>)		250-500mL			Apply after flag leaves are around 70% emerged if infection averages 10% on the flag-2 leaf. Higher rates provide longer protection. Use higher rates on high potential crops when conditions favour severe disease development during flowering. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
Oats	Stem Rust (<i>Puccinia graminis f. sp avenae</i>)	ALL STATES	500mL	–	28 days Harvest 7 days Grazing	Apply at the first sign of disease and before there is an average of over 2 pustules per tiller. Ensure thorough coverage of stems and leaves.
	Crown Rust (<i>Puccinia coronata f. sp avenae</i>)		250 to 500mL			Apply after flag blade leaf is fully emerged or Z39 and before disease levels reach 1% of flag leaf area. Consider control if disease is greater than 5-10% on any lower leaf layer. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Suppression of Septoria Leaf Blotch (<i>Leptosphaeria avenaria</i>)					Apply after flag blade is fully emerged or Z39. If infection averages 10% on the flag-2 leaf. The high rate of application gives longer period of protection than the lower rates. Use higher rates on high potential crops when conditions favour severe disease development during flowering. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.

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

WITHHOLDING PERIODS:

APRICOTS, BANANAS, STONE FRUIT: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

PEANUTS: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

BARLEY, OATS, WHEAT: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

POPPIES: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

PERENNIAL RYEGRASS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 28 DAYS AFTER APPLICATION.

PEPPERMINT, SPEARMINT: DO NOT HARVEST FOR 35 DAYS AFTER APPLICATION.

PINEAPPLES, SUGARCANE: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS

DO NOT apply more than 6 sprays per season.

Note: For cereals, the flag-2 leaf is the 3rd last fully emerged leaf, ie. the second leaf below flag.

Wheat – Stripe Rust – susceptible varieties – apply when 10% leaves infected.

Wheat – Stripe Rust – moderately susceptible varieties – apply when 15 to 20% leaves infected.

FUNGICIDE RESISTANCE WARNING

TITAN Propiconazole 250 EC Fungicide is a member of the DMI group of fungicides. For **GROUP 3 FUNGICIDE** fungicide resistance management TITAN Propiconazole 250 EC Fungicide is a Group 3 Fungicide. Some naturally occurring individual fungi resistant to the product and other Group 3 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled by TITAN Propiconazole 250 EC Fungicide or other Group 3 fungicides, thus resulting in a reduction in efficacy and possible yield loss.

Since the occurrence of resistant fungi 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 Propiconazole 250 EC Fungicide to control resistant fungi.

MIXING

Shake well before use. Fill the spray tank and then add concentrate. Mix well.

Pineapples – Preplant dip:

Add the required amount of TITAN Propiconazole 250 EC Fungicide directly to the dip and mix well. Avoid excessive contamination of the dip with organic matter.

APPLICATION

TITAN Propiconazole 250 EC Fungicide may be applied by ground rig, high or low volume, or by air.

Cereals: May be applied by boom spray or aircraft. Ensure complete coverage of all leaves and stems is obtained. The objective of spraying is to control disease on the upper 2-3 leaves during grain filling.

With aircraft, as a guide, apply 10-20L/ha with the lower rate being used when applications are made with a cross wind of not less than 5 knots. Use the higher rate when applying to dense crops.

Bananas: Apply by misting machine, airblast sprayer or aircraft. Use a minimum of 30L water if applying by air.

Dilute Spraying:

Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. Add the amount of product specified in the Directions for Use table for each 100L of water. Spray to the point of run-off. The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate Spraying:

Use a sprayer designed and set up for concentrate spraying (that is, a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume. Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy, this is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can then be calculated in the following way:

Example only

1 Dilute spray volume as determined above: For example 1500L/ha

2 Your chosen concentrate spray volume: For example 500L/ha

3 The concentration factor in this example is: $3 \times$ (ie. $1500L \div 500L = 3$)

4 If the dilute label rate is 10mL/100L, then the concentrate rate becomes 3×10 , that is 30mL/100L of concentrate spray.

The chosen spray volume, amount of product per 100L of water, and the sprayer set up and operation may need to be changed as the crop grows. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

COMPATIBILITY

TITAN Propiconazole 250 EC Fungicide may be mixed with any one of the registered products containing azinphos-methyl, chlorothalonil, copper oxychloride, demeton-s-methyl, diazinon, dimethoate, mancozeb, metalaxyl, methomyl, parathion, propargite and zineb.

PROTECTION OF LIVESTOCK

Low hazard to bees. No special precautions are required.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

5L, 20L: Store in the closed, original container in a well ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and products should not be burnt.

110L: Store in the original sealed Envirodrum in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the drum with water or any water or any other foreign matter. After each use of the product, please ensure the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the drum have been used, please return the empty drum to the point of purchase. The drums remain the property of TITAN AG Pty Ltd.

1000L: Store in the closed original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs TITAN AG Pty Ltd should be notified immediately. This minibulk/bulk container is reusable and remains the property of TITAN AG Pty Ltd. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to TITAN AG Pty Ltd for cleaning, relabelling and refilling.

RE-ENTRY PERIOD

DO NOT enter treated area until spray has dried.

SAFETY DIRECTIONS

Harmful if swallowed. Will damage the eyes. Will irritate the nose, throat and skin. Avoid contact with the eyes and skin. DO NOT inhale vapour. When opening the container, preparing the spray wear cotton overall buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves, goggles and disposable fume mask. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. If product in eyes wash out immediately with water. If product on skin, immediately wash area with soap. Wash hands after use. After each days use wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

If swallowed, DO NOT induce vomiting, give a glass of water.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Propiconazole 250 EC Fungicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 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.