

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

eChem
Propiconazole 250 EC
Fungicide

ACTIVE CONSTITUENT: 250 g/L PROPICONAZOLE
SOLVENT: 640 g/L LIQUID HYDROCARBON

GROUP 3 FUNGICIDE

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

IMPORTANT: READ THIS LEAFLET BEFORE USE

APVMA Approval No. 68709/58936

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DIRECTIONS FOR USE

Crop	Disease	State	Rate per ha		WHP	Critical Comments
			Per Hectare	High Volume		
Apricots	Prune Rust (<i>Tranzschelia discolor</i>)	SA only	-	Dilute Spraying: 32 mL/100 L Concentrate Spraying: Refer to the Mixing/Application Section	1 day	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Curative Control: Apply when the disease first occurs. Further applications should be made when the disease occurs on new growth. DO NOT make more than 5 applications to any individual tree during the season. Protective Treatment: Spray mancozeb or zineb mixed with eChem Propiconazole 250 EC Fungicide at the full - recommended rates of application. This use is subject to a DMI anti-resistance strategy.
Bananas (including inter-planted with avocados)	Leaf Spot (<i>Mycosphaerella musicola</i>), Leaf Speckle (<i>Mycosphaerella musae</i>), Cordana Leaf Spot (<i>Cordana johnstonii</i>)	Sth Qld, WA, NSW only	Ground Application: 200 - 400 mL + 3 – 5 L of water miscible oil, in a convenient volume of water. Aerial Application: 400 mL + 3 – 5 L of a water miscible oil, in a minimum of 30 L water. Aerial Application without water: 400 mL + 8 – 10 L spraying oil. (This use does not require further dilution with water).	-	1 day	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. Apply a maximum of 5 sprays per season at 21 to 28 day intervals. For effective control eChem Propiconazole 250 EC Fungicide 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. Nth Qld, WA, NT: 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 eChem Propiconazole 250 EC Fungicide 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 during 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</i> var <i>difformis</i>)	Qld, WA, NT only				

Crop	Disease	State	Rate per ha		WHP	Critical Comments
			Per Hectare	High Volume		
Barley	Powdery Mildew (<i>Blumeria gramminis</i>)	All States	150 – 500 mL	-	Harvest 4 weeks	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. Powdery Mildew: Higher rates provide longer protection.
	Barley Scald (<i>Rhynchosporium secalis</i>)		500 mL		Grazing 7 days	
	Spot Form Net Blotch (<i>Pyrenophora teres f. Maculate</i>)		500 mL	-	-	Apply after flag leaf is around 70% emerged and before infection averages 10% on the flag – 2 leaf. Ensure thorough coverage of stems and leaves.
Boronia	Rust (<i>Puccinia boroniae</i>)	Tas, WA only	500 mL – 1 L	-	-	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 the disease is first observed and when the minimum number of applications are applied.
Oats	Stem Rust (<i>Puccinia gramminis f. sp avenae</i>)	All States	500 mL	-	Harvest 4 weeks	Spray 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 – 500 mL	-	Grazing 7 days	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 leaf is fully emerged or Z39. If infection averages 10% on the flag-2leaf. The high rate of application gives longer period of infection 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.

Crop	Disease	State	Rate per ha		WHP	Critical Comments
			Per Hectare	High Volume		
Peanuts	Early Leaf Spot (<i>Cercospera arachidicola</i>), Late Leaf Spot (<i>Cercosporidium personatum</i>)	Sth Qld, NSW, WA only	400 – 600 mL	-	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 eChem 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	600 mL			
Peppermint, Spearmint grown for oil production only	Mint Rust (<i>Puccinia menthae</i>)	NSW, Vic, Tas only	500 mL	-	5 weeks	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>Gleotinia granigena</i>)	Vic only			4 weeks	Apply at ear emergence and again at anthesis.
Plums for Prune production	Prune Rust (<i>Tranzschelia discolor</i>)	NSW, Vic, SA, WA only	-	Dilute Spraying: 32 mL/100 L Concentrate Spraying: Refer to the Mixing/Application section	1 day	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying method. Curative Control: Apply when the disease first occurs. Further applications should be made when the disease occurs on new growth. DO NOT make more than 5 applications to any individual tree during the season. Protective Treatment: Spray mancozeb or zineb mixed with eChem Propiconazole 250 EC Fungicide at the full recommended rates of application. This use is subject to a DMI anti-resistance strategy.
Pineapples	Base Rot (<i>Thielaviopsis paradoxa</i>)	Qld, NT, WA only	-	10 – 20 mL/100 L	-	Preplant Dip: Ensure thorough coverage by totally immersing the planting material in the dip solution. Allow 50 mL of the dip solution per plant. Apply the higher rate under conditions of high disease pressure.

Crop	Disease	State	Rate per ha		WHP	Critical Comments
			Per Hectare	High Volume		
Poppies (<i>Papaver somniferum</i>)	Leaf Smut (<i>Entyloma fuscum</i>)	Tas only	500 mL	-	4 weeks	Usage recommended by poppy contract companies. Apply as mid season application in the full flower/petal drop period when disease is present.
Stone Fruit	Brown Rot (Blossom Blight) (Blossom phase) (<i>Monilinia laxa</i>)	Vic, Tas, WA only	-	Dilute Spraying: 25 mL/100 L Concentrate Spraying: Refer to the Mixing/Application section	1 day	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying by dilute or concentrate spraying methods. This use is subject to a DMI anti-resistance strategy. Apply at early (1 to 10%) blossom and again at full bloom. A further application is made at shuck-fall. Only 2 consecutive applications of DMI fungicides can be made during this period.
	Brown Rot (Blossom phase) (<i>Monilinia fructicola</i>)	Qld, NSW, Tas, SA, WA only				Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying by dilute or concentrate spraying methods. 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.
	Brown Rot (Fruit Phase)	WA only				
Sugar Cane	Pineapple Disease (<i>Ceratocystis paradoxa</i>)	Qld, NSW, WA only	-	20 mL/100 L	-	Ensure thorough coverage of the cut ends of sugar cane setts.
Wheat	Stripe Rust (<i>Puccinia striiformis</i>)	Qld, NSW, Vic, SA, WA only	250 or 500 mL	-	28 days	Spray between joining 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 where longer residual protection is required.
		Tas only				Spray 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.
	Powdery Mildew (<i>Blumeria graminis</i>)	All states				150 – 500 mL

Crop	Disease	State	Rate per ha		WHP	Critical Comments
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Wheat (cont'd)	Stem Rust (<i>Puccinia graminis</i>)	All states	500 mL	-	28 days	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.
	Septoria Nodorum Blotch (<i>Phaeosphaeria nodorum</i>)		150 - 500 mL			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 higher 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.
	White Leaf Rust (<i>Puccinia triticina</i>)					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 to 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>)		250 – 500 mL			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 higher potential crops when conditions favour severe disease development. 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:

Perennial Ryegrass: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.**

Peppermint, Spearmint: **DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION.**

Poppies: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

Barley, Oats, Wheat: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

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

Peanuts: **DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**

Apricots, Bananas, Stone Fruit: **DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.**

Pineapples, Sugar Cane: **WITHHOLDING PERIOD NOT REQUIRED WHEN USED AS DIRECTED.**

GENERAL INSTRUCTIONS

DO NOT apply more than 6 consecutive sprays per season.

NOTE: For cereals the flag 2 leaf is the 3rd last fully emerged leaf i.e. 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

GROUP 3 FUNGICIDE

eChem Propiconazole 250 EC Fungicide is a member of the DMI group of fungicides. For fungicide resistance management the product is a Group 3 fungicide. Some naturally occurring individual fungi resistant to eChem Propiconazole 250 EC Fungicide and other Group 3 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by this product 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, eChem (Australia) Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant fungi. Resistance should not be assumed without first reviewing the method of application, the coverage and the timing of the application.

MIXING

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

Pineapples pre-Plant Dip

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

APPLICATION

eChem 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 are obtained. The objective of spraying is to control disease on the upper 2 to 3 leaves during grain filling.

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

Apricots, Plums and other Stone Fruits: Apply by high volume (dilute) sprayer or concentrate sprayer.

Bananas: Apply by misting machine, air blast sprayer or aircraft. Use a minimum of 30 L of 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 100 L 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 1500 L/ha.
2. Your chosen concentrate spray volume: for example 500 L/ha.
3. The concentration factor in this example is: 3 x (i.e. 1500 L divided by 500 L = 3).
4. If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes 3 x 10 that is 30 mL/100 L of concentrate spray.

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

COMPATIBILITY

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

PRECAUTION

Re-entry Period

DO NOT enter treated area until spray has dried.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

PROTECTION OF LIVESTOCK

Low hazard to bees. No special precautions required.

STORAGE AND DISPOSAL

Store in the closed, original container in a locked, well-ventilated area as cool as possible and away from children, animals, food, feedstuffs, seed and fertilisers. **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 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should **NOT** be burnt.

SAFETY DIRECTIONS

Harmful if swallowed. Will damage the eyes. Will irritate the nose, throat and skin. Avoid contact with eyes and skin. **DO NOT** inhale vapour. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC, nitrile or neoprene gloves, goggles and disposable fume mask. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC, nitrile or neoprene gloves and goggles. If product is in eyes, wash it out immediately with water. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. 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 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) which is available from the supplier.

CONDITIONS OF SALE

eChem (Australia) Pty Ltd. accepts responsibility for the consistent quality of the product however since the use and application of the product is beyond control, the company accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not; other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale.