

Product Name: NAADCO Propiconazole 500 Fungicide
APVMA Approval No: 92634/136081



Label Name:	NAADCO Propiconazole 500 Fungicide
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT 500 g/L PROPICONAZOLE SOLVENT: 435 g/L LIQUID HYDROCARBON
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Mode of Action:	GROUP 3 FUNGICIDE
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Statement of Claims:	For the 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. For the control of dollar spot in bent and Queensland blue couch, and spring dead spot in couch as specified in the Directions for use Table for turfs.
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Net Contents:	5L-1000L
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Restrains:	DO NOT apply to turf under heat or moisture stress DO NOT apply more than one application per year on the following couch varieties; C29, Greenless Park, National Park, Tifway, Sportsway and Wagga City.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	Peppermint, Spearmint: DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION Barley, Oats, Poppies, Wheat: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION Peanuts: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION Bananas, Stone Fruit: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION Perennial Ryegrass: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION Forage and fodder of Barley, Oats, Wheat: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION Pineapples, Sugar Cane: NOT REQUIRED WHEN USED AS DIRECTED Turf: WITHHOLDING PERIOD NOT REQUIRED
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>GROUP 3 FUNGICIDE</p> <p>NAADCO Propiconazole 500 Fungicide is a member of the DMI group of fungicides. For fungicide resistance management NAADCO Propiconazole 500 Fungicide is a group 3 fungicide. Some naturally occurring fungi resistant to NAADCO Propiconazole 500 Fungicide or any 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. The resistant fungi will not be controlled by NAADCO Propiconazole 500 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, NAADCO accepts no liability for any losses that may result from the failure of NAADCO Propiconazole 500 Fungicide to control resistant fungi.</p>
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Precautions:	Re-entry Period DO NOT enter treated area until spray has dried.
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Protections:	<p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>Dangerous to fish. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.</p> <p>PROTECTION OF LIVESTOCK DO NOT graze treated turf or feed grass clippings from treated areas to poultry or livestock.</p>
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Storage and Disposal:	<p>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 spray tank. DO NOT dispose of undiluted chemical on-site. For pineapples dispose of spent dip in approved landfill or bury under at least 500 mm of soil in a non-crop, no-pasture area away from water sources or homes. If recycling, replace cap and return clean containers to recycler or designated collection point.</p> <p>If not re-cycling, 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 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in</p>
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compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or products.

Safety Directions:

Harmful if swallowed. Will damage 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, elbow-length gloves, goggles, disposable fume mask covering mouth and nose. When using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length gloves and goggles. If product in eyes, wash it out immediately with water. If product on skin, immediately wash area with soap and water. Wash hands after use. After each days use, wash gloves, goggles and contaminated clothing.

First Aid Instructions:

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766. If swallowed, do NOT induce vomiting.

First Aid Warnings:

DIRECTIONS FOR USE

Crop	Disease Controlled	State	Rate		WHP	Critical Comments
			Per Hectare	High Volume		
Apricots	Prune Rust (<i>Tranzschelia discolor</i>)	SA only	-	Dilute spraying 16 mL/100L 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 NAADCO PROPICONAZOLE 500 FUNGICIDE at the full recommended rates of application. This use is subject to a DMI anti-resistance strategy.
Bananas (including bananas inter-planted into avocados)	Leaf spot (<i>Mycosphaerella musicola</i>), Leaf Speckle (<i>Mycosphaerella musae</i>), Cordana Leaf Spot (<i>Cordana johnstonii</i>)	Sth Qld, NSW, only	Ground Application: 100 to 200 mL plus 3 to 5 L of a water miscible oil, in a convenient volume of water. Aerial Application: 200 mL plus 3 to 5 L of a water miscible oil, in a minimum of 30 L of water Aerial Application without water: 200 mL plus 8 to 10 L of spraying oil (This use does not require further dilution with water)	-		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. NSW, Sth Qld: Ground and Aerial Application: Commence spraying at the start of the summer rainy season and apply a maximum of 5 Group 3 sprays per season. Apply a maximum of 2 consecutive sprays of NAADCO Propiconazole 500 Fungicide at 21 to 28 day intervals before applying further treatments of a protectant fungicide from a different activity group.
		Nth Qld, WA, NT only Qld, WA, NT only	Ground Application: 200 mL + 3 to 5 L of water miscible oil in a convenient volume of water Aerial: 200 mL + 3 to 5 L of a water miscible oil in a minimum of 30 L of water Aerial Application without Water: 200 mL + 8 to 10 L of spraying oil. (This does not require further dilution with water)	-	1 day	Nth Qld, WA, NT: Ground and aerial applications: Commence spraying at the start of the wet season. Apply a regular schedule of protectant sprays. When the disease potential is high. Apply a maximum of 2 consecutive sprays of NAADCO Propiconazole 500 Fungicide at 14 to 21 day intervals before applying further treatments of a protectant fungicide from a different activity group. Apply a maximum of 6 Group 3 sprays per season. Continue with treatments using an alternative protectant fungicide for the remainder of the season. Use the lower rates of oil in Nth Qld. DO NOT apply during July, August, September and October.
Barley	Powdery Mildew (<i>Blumeria graminis</i>)	All States	75 to 250 mL	-	Harvest 4 weeks	Spray at the first sign of the disease during the tillering stage (Z21-Z29). A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves.
	Barley Scald (<i>Rhynchosporium secalis</i>)		250 mL	Grazing 7 days	Powdery Mildew: Higher rates provide longer protection.	
	Spot Form Net Blotch		125-250 mL		Apply after flag leaf is around 70% emerged (Z38) 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	250 to 500 mL	-	-	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	<i>Stem Rust</i> (<i>Puccinia graminis f.sp avenar</i>)	All States	250 mL	-	Harvest 4 weeks	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.
	<i>Crown Rust</i> (<i>Puccinia coronatoa f.sp avenae</i>)		125 to 250 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.
	<i>Suppression of Septoria Leaf Blotch</i> (<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.
Peanuts	Early Leaf Spot (<i>Cercospora arachidicola</i>), Late Leaf Spot (<i>Cercosporidium personatum</i>)	Sth Qld, NSW, WA only	200 to 300 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 NAADCO PROPICONAZOLE 500 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 only	300 mL			
Peppermint, Spearmint grown for oil production only	Mint Rust (<i>Puccinia menthae</i>)	NSW, Vic, Tas only	250 mL	-	5 weeks	Apply 2 to 5 applications at 10 to 14 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>Gloeotinia granigena</i>)	Vic only	250 mL	-	4 weeks	Apply at ear emergence and against anthesis.
Plums for Prune Production	Prune Rust (<i>Tranzschelia discolor</i>)	NSW, Vic, SA, only	-	Dilute Spraying 16 mL/100 L water Concentrate Spraying Refer to the Mixing/ Application Section	1 day	Apply by dilute or concentrate spraying equipment. Apply the same total 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 application 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 NAADCO Propiconazole 500 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 only	-	5 to 10 mL/100L	-	Pre-plant 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
Poppies (<i>Papaver somniferum</i>)	Leaf Smut (<i>Entyloma fuscum</i>)	Tas only	250 mL	-	4 weeks	Usage recommended by poppy contract-companies. Apply as a mid season application in the full flower /petal drop period when disease is present.
StoneFruit	Brown Rot (Blossom Blight) (blossom phase) (<i>Monolinia laxa</i>)	Vic, Tas, WA only.	-	Dilute Spraying 12.5mL/100L water	1 day	Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product 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. The last Blossom Blight spray and the first Brown Rot (fruit phase) spray should be regarded as consecutive applications. 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. Apply 3 weeks and 1 week before harvest. Only 2 consecutive applications of DMI fungicides can be made during this period. 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 (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.				
Sugarcane	Pineapple Disease (<i>Ceratocystis paradoxa</i>)	Qld, NSW, WA only	-	10 mL/100L	-	Ensure thorough coverage of the cut ends of sugarcane sets.
Wheat	Stripe Rust (<i>Puccinia striiformis</i>)	Qld, NSW, Vic, SA, WA only.	125 to 250 mL	-	Harvest 4 Weeks	Spray between stem elongation (Z30) and end of flowering (Z69) 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.				
	Powdery Mildew (<i>Blumeria framinis</i>)	All States	75 to 250 mL			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.
	Stem Rust (<i>Puccinia graminis</i>)		250 mL		Harvest 4 Weeks	Apply at the first sign of disease and before there are more than 2 pustules per tiller. Ensure thorough coverage of stems and leaves.
	Septoria Tritici Blotch (<i>Mycosphaerella graminicola</i>)		125 to 250 mL	-	Grazing 7 days	Apply once between 70% flag leaf emergence (Z38) and early flowering (Z61). Use the higher rate under high infection pressure or where longer residual protection is required.

	Leaf Rust (<i>Puccinia recondita f.sp. tritici</i> ; <i>Puccinis triticina</i>)		75 to 250 mL		Apply after flag leaf is 70% emerged(Z38) 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.
	Septoria Nodorum Blotch (<i>Phaeosphaeria nodorum</i>)			-	Apply after flag leaves are around 70% emerged(Z38) 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.
	Yellow Spot (<i>Pyrenophora tritici-repentis</i>),		125 to 250 mL		Apply once between 70% flag leaf emergence (Z38) and early flowering (Z61). Use higher rate under high infection pressure or where longer residual protection is required. Apply after 70% flag leaf emergence (Z38) and before disease levels reach 5% on flag leaf. Higher rates give longer residual protection and often better economic returns.

TURF

Crop	Disease Controlled	State	Rate	Critical Comments
Bent Grass in bowling greens, parks and sporting areas.	Dollar Spot (<i>Sclerotinia homeocarpa</i>)	Vic only	15 to 30 mL/100 m ² in 10 to 20 L water.	Spray when conditions are warm and humid, from September to March. Make a second application 14 to 28 days later if conditions continue to favour disease development. Use rates towards the lower end of the range as a preventative program and against light to moderate infection. Use rates towards the higher end of the range and shorter intervals as a preventative or curative treatment when conditions are highly favourable for the disease.
Bent, Queensland Blue Couch Grasses in bowling greens, golf greens, parks and sporting areas		Qld, NSW, SA, WA only		
Couch Turf in bowling greens, parks and sporting areas.	Spring Dead Spot (<i>Leptosphaeria</i> spp.)	Qld, NSW, Vic, SA, WA only	30 mL/100 m ² in 150 L of water	Apply as a soil drench and water in immediately, ensuring thorough mixing with the soil. Spray in January to March, after renovation and recovery of active growth. Make a second application one month later where infection is severe. DO NOT renovate treated greens until active growth has recommenced in Spring. DO NOT spray in the Spring/Summer period prior to renovation. NAADCO PROPICONAZOLE 500 FUNGICIDE may cause bleaching of the grass after application in late Summer/Autumn and also produce a greening effect in the following Spring. Couch may be slow to recommence active growth in the Spring, particularly in cooler regions. These effects should be allowed to grow out before treating again. DO NOT apply more than twice per year.

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

GENERAL INSTRUCTIONS

MIXING

Add the required amount directly to the spray tank and mix well.

Pineapples Preplant Dip

Add the required amount of NAADCO Propiconazole 500 Fungicide directly to the dip and mix well. Avoid excessive contamination of the dip with organic matter.

Application

Cereals: May be applied by boom spray or aircraft. Ensure complete coverage of all leaves and stems is obtained. The object of spraying is to keep the upper 2 to 3 leaves green and functioning through grain filling stage. With aircraft, as a guide apply 10 to 20 L/ha with the lower rate being used when applications are made with a cross wind of not less than 5 knots. Use the higher rates when applying to dense crops.

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

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 Direction 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 provides 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 2000 L/ha
2. Your chosen concentrate spray volume: for example 500 L/ha
3. The concentration factor in this example is 4 x (ie $2000 \text{ L}/500 \text{ L} = 4$)
4. If the dilute label rate is 25 mL/100 L, then the concentrate rate becomes 4 x 25, that is 100 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, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry best practices.

Compatibility

NAADCO Propiconazole 500 Fungicide is compatible with a wide range of agricultural products. For further information contact your local NAADCO representative.