POISON

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

Bumper® 625 EC
Fungicide

ACTIVE CONSTITUENT: 625 g/L PROPICONAZOLE
SOLVENT: 335.5 g/L LIQUID HYDROCARBON

GROUP 3 FUNGICIDE

Controls certain fungal diseases of bananas, peanuts, perennial ryegrass, pineapples, stone fruit, sugarcane, turf, wheat and other crops in certain states as specified in the Directions for Use table.

ADAMA ESSENTIALS

adama.com **CONTENTS: 1 L - 1000 L**

DIRECTIONS FOR USE

Restraints: DO NOT apply to turf under heat or moisture stress.
DO NOT apply more than one application per year on the following couch varieties: G29, Greenless Park, National Park, Tifway, Sportsway and Wagga City.

CROP	DISEASE	STATE	RATE		WHP	CRITICAL COMMENTS
			PER HECTARE	HIGH VOLUME PER 100 L		
Apricots	Prune Rust (*Tranzschelia discolor*)	SA only		**Dilute Spraying:** 13 mL **Concentrate Spraying:** Refer to 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 five applications to any individual tree during the season. **Protective Treatment** Spray Mancozeb or Zineb mixed with BUMPER 625 EC at the full recommended rates of application. **This use is subject to a DMI anti-resistance strategy.**

CROP	DISEASE	STATE	RATE		WHP	CRITICAL COMMENTS
			PER HECTARE	HIGH VOLUME PER 100 L		
Bananas (including bananas inter-planted with avocados)	Leaf Spot (*Mycosphaerella musicola*), Leaf Speckle (*Mycosphaerella musae*), Cordana Leaf Spot (*Cordana johnstonii*)	NSW, WA, Sth Qld only	**Ground Application:** 80 to 160 mL + 3 to 5 L of water miscible oil, in a convenient volume of water. **Aerial Application:** 160 mL + 3 to 5 L of a water miscible oil, in a minimum of 30 litres of water. **Aerial Application without water** 160 mL + 8 to 10 litres 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. **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, 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 protective 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 (*Mycosphaerella musicola*), Leaf Speckle (*Mycosphaerella musae*), Cordana Leaf Spot (*Cordana musae*)	Nth Qld, NT, WA only	**Ground Application:** 160 mL + 3 to 5 L of water miscible oil, in a convenient volume of water. **Aerial Application:** 160 mL + 3 to 5 L of a water miscible oil, in a minimum of 30 litres of water. **Aerial Application without water:** 160 mL + 8 to 10 litres of spraying oil. (This use does not require further dilution with water.)			
	Black Sigatoka *(Mycosphaerella fijiensis var* difformis)	Qld, NT, WA only				
Barley	Powdery Mildew (*Blumeria graminis*)	All States	60 to 200 mL		Harvest 4 weeks Grazing 7 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. **Powdery Mildew:** Higher rates provide longer protection.
	Barley Scald (*Rhynchosporium secalis*)		200 mL			
	Spot Form Net Blotch (*Pyrenophora teres f. maculata*)					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 (*Puccinia boroniae*)	WA, Tas only	200 mL to 400 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	Stem Rust (*Puccinia graminis f.sp.avanae*)	All States	200 mL		Harvest 4 weeks Grazing 7 days	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 (*Puccinia coronata f.sp.avanae*)		100 to 200 mL			Apply after flag blade leaf is fully emerged or Z39 and before disease levels reach 1% of flag leaf area. Consider control of 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 (*Leptosphaeria avenaria*)					Apply after flag blade leaf is fully emerged or Z39 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.

CROP	DISEASE	STATE	RATE		WHP	CRITICAL COMMENTS
			PER HECTARE	HIGH VOLUME PER 100 L		
Peanuts	Early Leaf Spot (*Cercospora arachidicola*), Late Leaf Spot (*Cercosporidium personatum*)	NSW, WA, Sth Qld only	160 to 240 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 BUMPER 625 EC 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 (*Puccinia arachidis*)	Sth Qld, WA only	240 mL			
Peppermint, Spearmint grown for oil production only	Mint Rust (*Puccinia menthae*)	Tas, Vic, NSW only	200 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 (*Puccinia graminis*), Blind Seed Disease (*Gloeotinia granigena*)	Vic only	200 mL	-	4 weeks	Apply at ear emergence and again at anthesis.
Plums for Prune Production	Prune Rust (*Tranzschelia discolor*)	NSW, SA, Vic, WA only	-	**Dilute Spraying:** 13 mL **Concentrate Spraying:** Refer to 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 five applications to any individual tree during the season. **Protective Treatment** Spray Mancozeb or Zineb mixed with BUMPER 625 EC at the full recommended rates of application. **This use is subject to a DMI anti-resistance strategy.**
Pineapples	Base Rot *(Thielaviopsis paradoxa)*	Qld, WA, NT only	-	4 to 8 mL	-	**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.
Poppies *(Papaver somni-ferum)*	Leaf Smut (*Entyloma fuscum*)	Tas only	200 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) (*Monilinia laxa*)	Vic, WA, Tas only	-	**Dilute Spraying:** 10 mL **Concentrate Spraying:** Refer to 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. **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 two consecutive applications of DMI fungicides can be made during this period.
	Brown Rot (blossom phase) (*Monilinia fructicola*)	NSW, SA, Qld, Tas, WA only				
	Brown Rot (fruit phase) (*Monilinia fructicola*)	Qld, NSW, Tas, Vic, SA, WA only				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 two 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.

CROP	DISEASE	STATE	RATE		WHP	CRITICAL COMMENTS
			PER HECTARE	HIGH VOLUME PER 100 L		
Sugarcane	Pineapple Disease (*Ceratocystis paradoxa*)	Qld, NSW, WA only	-	8 mL	-	Ensure thorough coverage of the cut ends of sugar cane setts.
TURF Bent Grass in bowling greens, parks and sporting areas.	Dollar Spot *(Sclerotinia homeocarpa)*	Vic only	12 to 24 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 14-28 days later if conditions continue to favour disease development. Use rates towards the lower end of the range as a preventive program and against light to moderate infection. Use rates towards the higher end of the range and shorter intervals as a preventive 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.		NSW, Qld, SA, WA only				
Couch Turf in bowling greens, parks and sporting areas.	Spring Dead Spot (*Leptosphaeria* spp.)	NSW, Qld, Vic, SA, WA only	24 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. BUMPER 625 EC 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.
Wheat	Stripe Rust (*Puccinia striiformis*)	All States	100 or 200 mL	-	Harvest 4 weeks Grazing 7 days	Spray between jointing and end of flowering when 10-20% of leaves are infected. A repeat spray 21-28 days later may be required. Use higher rate under high infection pressure or when longer residual protection is required.
	Powdery Mildew (*Blumeria graminis*)		60 to 200 mL			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. Higher rates provide longer protection.
	Stem Rust (*Puccinia graminis*)		200 mL			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 (*Mycosphaerella graminicola*)		100 or 200 mL			Apply once between 70% flag leaf emergence and early flowering. Use the higher rate under high infection pressure or where longer residual protection is required.
	Leaf Rust (*Puccinia recondita*) f.sp. tritici; Puccinia triticina		60 to 200 mL			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.
	Septoria Nodorum Blotch (*Phaeosphaeria nodorum*)					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.

CROP	DISEASE	STATE	RATE		WHP	CRITICAL COMMENTS
			PER HECTARE	HIGH VOLUME PER 100 L		
Wheat – *continued*	Yellow Spot (*Pyrenophora tritici-repentis*)	All States	100 to 200 mL	-	Harvest 4 weeks Grazing 7 days	Apply once between 70% flag leaf emergence and early flowering. Use the higher rate under high infection pressure or where longer residual protection is required. Apply after 70% flag leaf emergence and before disease levels reach 5% on flag leaf. Higher rates give longer residual protection and often better economic returns.

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.**

BARLEY, OATS, POPPIES, WHEAT: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

FORAGE & FODDER OF CEREAL GRAINS (WHEAT, BARLEY OATS):
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

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

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

PINEAPPLES, SUGARCANE, TURF: **WITHHOLDING PERIOD NOT REQUIRED WHEN USED AS DIRECTED.**

GENERAL INSTRUCTIONS

BUMPER® 625 EC Fungicide contains Propiconazole, a systemic foliar fungicide with protective and curative action. BUMPER 625 EC acts as an ergosterol biosynthesis inhibitor. BUMPER 625 EC mixes readily with water. Read Directions for Use and Safety Directions before opening or using this product.

FUNGICIDE RESISTANCE WARNING

GROUP **3** FUNGICIDE

BUMPER 625 EC Fungicide is a member of the DMI group of fungicides. For fungicide resistance management BUMPER 625 EC is a Group 3 fungicide. Some naturally occurring individual fungi resistant to BUMPER 625 EC 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 BUMPER 625 EC and 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, Adama Australia Pty. Ltd. accepts no liability for any losses that may result from the failure of BUMPER 625 EC to control resistant fungi.

MIXING

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

Pineapples – Preplant dip: Add the required amount of BUMPER 625 EC 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 2-3 leaves green and functioning through grain filling stage. With aircraft, as a guide, apply 10-20 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.

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

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

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 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 the 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 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:
   3x (ie 1500 L ÷ 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 spraying.

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

BUMPER 625 EC is compatible with many commonly used orchard sprays which includes Axiom® Plus and some formulations of azinphos methyl, demeton-s-methyl, diazinon, methomyl liquid, propargite, parathion, dimethoate, copper oxychloride, mancozeb, zineb and chlorothalonil. Mixtures with more than one of the above are not recommended.

PRECAUTIONS

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 are required.

STORAGE AND DISPOSAL

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 chemicals on site. If recycling, replace cap and return clean containers to recycler or a 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 500 mm below the surface in a 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.

Envirodrum Micro Matic Valve (110 L)

Store 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 Envirodrum with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the Envirodrum to the point of purchase. The Envirodrum remains the property of Adama Australia Pty. Ltd.

1000 L

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 Adama Australia Pty. Ltd. should be advised immediately. This minibulk container is reusable and remains the property of Adama Australia 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 Adama AustraliaPty. Ltd. for cleaning, relabelling and refilling.

SAFETY DIRECTIONS

Harmful if swallowed. Will damage eyes. Will irritate the nose and throat, and skin. Avoid contact with eyes and skin. Do not inhale vapour. When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves, goggles and a disposable mist face mask to cover the mouth and nose. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant 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 day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. 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 BUMPER 625 EC is available from Adama on request. Call Customer Service on (02) 9431 7800.

CONDITIONS OF SALE: The use of BUMPER® 625 EC Fungicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia Pty. Ltd., regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Adama Australia Pty. Ltd. accepts no responsibility for any consequence whatsoever resulting from the use of this product.

NOT A DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE.

Adama Australia Pty. Ltd. ABN 55 050 328 973
Suite 1, Level 4, Building B,
207 Pacific Highway
St Leonards NSW 2065 Australia
Tel: (02) 9431 7800 Fax: (02) 9431 7700

APVMA Number: 69815/61801