

# Emerald<sup>®</sup>

## FUNGICIDE

**GROUP 29 FUNGICIDE**

**Active Constituent:** 500g/L FLUAZINAM

**Poison Schedule:** S6 (POISON)

**APVMA Approval No:** 85383

Situations: Turf including Bowling Greens, Fairways, Golf Greens, Racetracks and Sports Fields and Tees  
Controls/Supresses: Dollar Spot, Helminthosporium Disease and Grey Leaf Spot For the control of Dollar spot, Helminthosporium Disease, Anthracnose and Grey Leaf Spot

**Pack Size:**

1L (6 x 1L per carton)

**Dangerous Goods Class:**

Not classified as a dangerous good under the Australian Code for Transport and Storage of Dangerous Goods in Australia.

**DIRECTIONS FOR USE**

**RESTRAINTS**

For PROFESSIONAL use only.

DO NOT apply Emerald<sup>®</sup> to home lawns (turf) or any other residential turf.

DO NOT apply by aircraft.

DO NOT apply Emerald<sup>®</sup> through any type of irrigation system or ultra-low volume spray system.

DO NOT apply Emerald<sup>®</sup> using handwand or backpack.

**SPRAY DRIFT RESTRAINTS**

Specific definitions for terms used in this section of the label can be found at [pvma.gov.au/spraydrift](http://pvma.gov.au/spraydrift).

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a COARSE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas are observed (see the 'Mandatory downwind buffer zone' section of the following table titled 'Buffer zones for boom sprayers').

Buffer zones for boom sprayers	
Application rate	Mandatory downwind buffer zones
	Natural aquatic areas
Up to maximum label rate	100 metres

Situation	Diseases Controlled	Rate	Critical Comments
Turf including but not limited to bowling greens, fairways, golf greens, racetracks, sports fields and tees	Dollar Spot ( <i>Sclerotinia homeocarpa</i> ) Helminthosporium Disease ( <i>Bipolaris</i> spp., <i>Drechslera</i> spp. and <i>Exserohilum</i> spp.) Grey Leaf Spot ( <i>Pyricularia grisea</i> ) Anthracnose ( <i>Colletotrichum graminicola</i> )	1-1.5L/ha	Emerald should be applied as a preventative treatment. Spray when conditions are favourable for disease development and/or as soon as possible after first symptoms are detected. Make a second application 7 to 14 days later if conditions continue to favour disease development. Use rates towards the higher end of the range and shorten intervals. DO NOT mow or water treated area until turf or lawn is thoroughly dry, ideally allow 24 hours.
	Algae		Repeat applications at 7 to 14 day interval if conditions favour disease development. Use rates towards the higher end of the range and shorten intervals when there is high disease pressure. DO NOT mow or water treated area until turf or lawn is thoroughly dry, ideally allow 24 hours.
	<i>Pythium</i> spp		EMERALD® should be applied in a preventative or early curative program with 2 to 4 fungicide sprays per season preferably from different MoA fungicides. Start spraying when conditions are favourable for disease development and/or as soon as possible after first symptoms are detected. Make a second application 7 to 14 days later if conditions continue to favour disease development. Use rates towards the higher end of the range and use shorter spray interval during high disease pressure. Refer to Application sections for detailed information.

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL  
UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.  
WITHHOLDING PERIODS  
DO NOT GRAZE OR CUT FOR STOCK FOOD  
DO NOT GRAZE TREATED AREAS OR FEED TURF CLIPPINGS FROM TREATED AREAS TO  
ANIMALS INCLUDING POULTRY**



## GENERAL INSTRUCTIONS

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#### MIXING

Add the required amount of product to the partly-filled spray tank with the agitator in operation. Fill the tank with water, and continue agitation during spraying and after a stoppage.

#### APPLICATION

Algae, Leaf and Crown Diseases: Application volume for Algae, leaf and crown diseases should be adequate to ensure thorough and even coverage or penetration of the turf leaves, crowns or soil surface, depending on which disease is being targeted. Ideal application volumes should be between 400 – 800 L/ha. For best results use coarse [Turbo Teejet\* or AIXR Teejet\* (11004 or 11005)] nozzles, at 5 km/h and 3 bar pressure. In higher cut turf (>15mm) a significant spray shielding effect can occur, impacting negatively on spray penetration and even coverage at low application volumes. Good control requires good coverage. Application should be made in sufficient water to ensure thorough coverage.

Root Diseases: Application volume should be as high as possible (approximately 1000L/ha) to ensure placement close to the soil surface. When lower application volumes are used, washing in should commence as soon as possible after application. For best results use extremely coarse droplets [Turbo Floodjet\* (TF5) or TurfJet\* (TTJ10)] and total application volume of approximately 1000 L/ha. Preferably spray onto wet or dewy grass. Irrigate with 6 to 10 mm of water commencing immediately after application.

#### FUNGICIDE RESISTANCE WARNING

For fungicide resistance management EMERALD® Fungicide is a Group 29 fungicide. Some naturally occurring fungi resistant to the product and other Group 29 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if EMERALD or other Group 29 fungicides are used repeatedly. These resistant fungi will not be controlled by this product or other Group 29 fungicides, thus resulting in a reduction in efficacy and possible yield loss. Since occurrence of resistant fungi is difficult to detect prior to use, Colin Campbell (Chemicals) Pty Ltd. accepts no liability for any losses that may result from the failure of this product to control resistant fungi.

#### PRECAUTIONS

##### Re-entry

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DO NOT enter (or allow public entry to) treated areas until the spray has dried.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment that may cause drift onto nearby plants/crops, cropping lands or pastures.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very highly toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

#### 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 or pressure rinse container for disposal. Add rinsings to spray tank. Dispose of the rinsate by adding it to the spray tank. Do not dispose of undiluted chemicals on site. 1L – If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury 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 compliance with relevant local, state or territory government regulations. DO NOT burn empty containers or product.



## **SAFETY DIRECTIONS**

Harmful if swallowed. Poisonous if inhaled. Will irritate the eyes and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Do not inhale spray mist. When opening the container and preparing the product for use, wear cotton overalls over normal clothing, buttoned to the neck and wrist (or equivalent clothing) a washable hat and elbow-length PVC gloves. If product on skin, immediately wash skin area with soap and water. If product in eyes wash out immediately with 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 and respirator and if rubber wash with detergent and warm water.

## **Additional hazard and precautionary statement required by WHS**

May cause an allergic skin reaction. Causes damage to organs through prolonged or repeated exposure. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation or rash occurs : Get medical attention.

Not combustible. Use extinguishing media suited to burning materials. Store locked up. Dispose of contents and containers as specified on the registered label.

## **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

## **SDS**

Additional information is listed in the safety data sheet (SDS). A safety data sheet for EMERALD is available from [www.campbellchemicals.com.au](http://www.campbellchemicals.com.au) or telephone (02) 9725-2544.

**CONDITIONS OF SALE:** Agricultural, horticultural and pastoral preparations in their application involve varying factors such as differing conditions, soil, climate and methods of application over which Colin Campbell (Chemicals) Pty Ltd (Company) does not have control. Whilst the Company believes that all goods sold by it are true to label and are effective and safe for the purpose indicated, the Company expressly excludes all conditions, guarantees and warranties, whether express, implied, statutory or otherwise, relating in any way to the goods and accepts no responsibility for any loss, harm or damage whatsoever suffered from the use of the goods for any purpose or purposes. Notwithstanding the foregoing, where any legislation implies any condition, guarantee or warranty (each, a Statutory Guarantee) and that legislation prohibits provisions excluding, restricting or modifying the application of, the exercise of a right conferred by or liability under such Statutory Guarantee, such Statutory Guarantee shall not be excluded. However the Company's liability for any breach of such Statutory Guarantee shall, if permitted by that legislation, be limited at the Company's option to the replacement of the goods or the supply of equivalent goods, or the payment of the cost of replacing the goods or of acquiring equivalent goods.

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