

# Emerald<sup>®</sup>

## FUNGICIDE

GROUP	29	FUNGICIDE
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**Active Constituent:** 500g/L FLUAZINAM

**Poison Schedule:** S6 (POISON)

**APVMA Approval No:**

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:**

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### DIRECTIONS FOR USE

#### RESTRAINTS

**DO NOT** apply EMERALD to home lawns (turf) or any other residential turf.

**DO NOT** apply by aircraft.

**DO NOT** apply EMERALD through any type of irrigation system or ultra-low volume spray system.

**DO NOT** apply EMERALD using hand wand or backpack.

#### SPRAY DRIFT RESTRAINTS

**DO NOT** apply with spray droplets smaller than a **COARSE** spray droplet size category according to nozzle manufacturer specifications that refer to ASAE S572 Standard or BCPC Guideline.

**DO NOT** apply when wind speed is less than 3 or more than 20 kilometres per hour as measured at the application site.

**DO NOT** apply during surface temperature inversion conditions at the application site.

Users of this product **MUST make an accurate written record** of the details of each spray application within 24 hours following application and **KEEP** this record for a minimum of 2 years. The spray application details that must be recorded are:

1. Date and start and finish times of application;
  2. Location address and areas sprayed;
  3. Full name of this product;
  4. Amount used per hectare and number of hectares applied to;
  5. Situation and disease;
  6. Wind speed and direction during application;
  7. Air temperature;
  8. Nozzle brand, model and type and spray system pressure measured during application;
  9. Name and address of person applying this product.
- (Additional record details may be required by the State or Territory where this product is used).

#### MANDATORY NO-SPRAY ZONES

**DO NOT** apply if there are aquatic and wetland areas, including aquacultural ponds or surface streams and rivers with 100 metres downwind from the application area for ground application. **DO NOT** apply when the wind direction is toward aquatic areas to minimize drift to these areas.

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 spp.</i> , <i>Drechslera spp.</i> and <i>Exserohilum spp.</i> ) Grey Leaf Spot ( <i>Pyricularia grisea</i> ) Anthracnose ( <i>Colletotrichum graminicola</i> )	1-1.5L/ha in 400L-800L water	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.

**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

##### 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

Application volume for leaf and crown diseases (Dollar Spot, Helminthosporium Disease, Grey Leaf Spot & Anthracnose) should be adequate to ensure thorough and even coverage of the turf leaves and penetration into the crowns. 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. Do not apply more than 3 applications of EMERALD per season.

##### 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

Re-entry statement for use on golf courses:

DO NOT allow entry onto treated areas of golf courses, until the spray has dried. If prior entry is necessary, wear cotton overalls, buttoned to the neck and wrist (or equivalent clothing) and elbow -length chemical resistant gloves.



Re-entry statement for occupational users for other turf situations:

DO NOT allow entry into treated areas until 5 days after application. If prior entry is necessary, wear cotton overalls over normal clothing, buttoned to the neck and wrist (or equivalent clothing) and a washable hat and elbow-length chemical resistant gloves.

Re-entry statement for the general public for other turf situations:

DO NOT allow entry into treated areas until 5 days after application.

#### **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.

#### **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.

APVMA Approval No:

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