

CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY INSTRUCTIONS BEFORE OPENING OR USING



Impala Fungicide

ACTIVE CONSTITUENTS: 96 g/L AZOXYSTROBIN
194 g/L TRITICONAZOLE

GROUP	3	11	FUNGICIDE
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**For Broad Spectrum Control of Fungal Diseases in Turf as specified
in the Directions for Use**

APVMA Approval No.: 80146/100311



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DIRECTIONS FOR USE**Restraints**

DO NOT use in the home garden
DO NOT apply by aircraft
DO NOT use this product through any type of irrigation system or ultra low volume spray system
DO NOT apply to turf under heat or moisture stress
DO NOT apply to waterlogged soil
DO NOT apply more than 1 application per year on couch varieties C29, Greenlees Park, National Park, Tifway, Sportsway and Wagga City
DO NOT apply if heavy rains or storms that are likely to cause runoff are forecast within 3 days.
DO NOT irrigate to the point of runoff for at least 3 days after application

Spray Drift Restraints

DO NOT apply Impala Fungicide with spray droplets smaller than a MEDIUM spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the British Crop Production Council 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 must KEEP this record for at least 2 years.

The spray application details that must be recorded are:

1. Date with start and finish times of application
2. Location address and paddock(s) sprayed
3. Full name of this product
4. Amount of product used per hectare and number of hectares applied to
5. Crop or situation and weed or pest
6. Wind speed and direction during application
7. Air temperature and relative humidity during application
8. Nozzle brand, type, spray angle, nozzle capacity 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 use)

DO NOT apply if there are sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat within 40 metres downwind from the application area.

DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 20 metres downwind from the application area.

DO NOT apply if there are livestock, pasture or any land that is producing feed for livestock within 15 metres downwind from the application area.

Situation	Disease	Rate	Critical Comments
Turf	Anthracnose (<i>Colletotrichum graminicola</i>), Brown Patch (<i>Rhizoctonia solani</i>), Helminthosporium Disease (<i>Bipolaris spp</i> , <i>Drechslera spp</i> , <i>Exserohilum spp</i>), Take-All Patch (<i>Gaeumannomyces graminis var. avenae</i>), Fusarium (<i>Fusarium nivale</i> , <i>Microdochium nivale</i>)	6 L/ha or 60 mL/100 m ²	Apply Impala Fungicide in a preventative fungicide program containing fungicides from different chemical groups. Begin applications before symptoms occur when conditions first favour disease and continue applications while conditions remain favourable for disease development. Apply no more than 2 consecutive Impala Fungicide applications at 28-day intervals for all diseases.
	Dollar Spot (<i>Sclerotinia homoeocarpa</i>)		Apply Impala Fungicide in a preventative fungicide program containing fungicides from different chemical groups. Begin applications before symptoms occur when conditions first favour disease and continue applications while conditions remain favourable for disease development. Apply no more than 2 consecutive Impala Fungicide applications at 21 day intervals for Dollar Spot.
	Pythium Leaf Blight, Pythium Root Rot, Seedling Damping Off (<i>Pythium spp</i>)		Apply Impala Fungicide in a preventative fungicide program containing fungicides from different chemical groups. Begin applications before symptoms occur when conditions first favour disease and continue applications while conditions remain favourable for disease development. Apply no more than 2 consecutive Impala Fungicide applications at 14 to 21 day intervals for Pythium. In high pressure curative situations use a suitable curative fungicide first and then follow up with Impala Fungicide.
	Ectotrophic Root Infecting Fungi (ERI) Spring Dead Spot (<i>Ophiosphaerella narmari</i>), Take-all Patch (<i>Gaeumannomyces graminis var. avenae</i>)		Autumn strategy Preventative applications: Spray in January to April, after renovation and recovery of active growth. Make a second application 1 month later. DO NOT renovate treated greens until active growth has recommenced in Spring. Refer to Application sections for detailed information.
	Ectotrophic Root Infecting Fungi (ERI) Couchgrass Decline (<i>Gaeumannomyces graminis var. graminis</i>), Take-all Patch (<i>Gaeumannomyces graminis var. avenae</i>)		Spring and summer strategy Preventative applications: Spray in September to November, after renovation and recovery of active growth. Make a second application 1 month later. Early curative applications: Spray as soon as possible after first symptoms are detected. Make a second application 1 month later. Refer to Application section for detailed information.

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

WITHHOLDING PERIOD

DO NOT GRAZE TREATED AREAS OR FEED TURF CLIPPINGS FROM TREATED AREAS TO ANIMALS INCLUDING POULTRY

WARNING

Impala Fungicide is extremely phytotoxic to certain apple varieties.

DO NOT spray Impala Fungicide where spray drift may reach apple trees.

DO NOT spray when conditions favour drift beyond the area intended for application. Conditions that may contribute to drift include thermal inversions, excessive wind speed, certain sprayer nozzle/pressure combinations, small spray droplet size, etc.

GENERAL INSTRUCTIONS

Impala Fungicide contains 96 g/L azoxystrobin & 194 g/L triticonazole in the form of a suspension concentrate.

ERI Disease Management

Using fungicides for the control of ERI diseases has to be in conjunction with management practices aiming to optimise fertility, drainage, soil structure and pH, while minimising turf stress.

TURF NUTRITION

This product acts very rapidly and where the turf is of a low nutritional status, a slight yellowing may be seen. This will be corrected by nitrogenous fertiliser application. Where possible, it is recommended that the fertiliser program should precede the fungicide application.

GROWTH REGULATOR EFFECTS

- On turf that is primarily *Poa annua* Impala Fungicide may give a growth regulator effect.
- Applications made to *Poa annua* treated with a growth regulator (i.e. trinexapac-ethyl) may result in overregulation, discolouration and possible thinning, when high rates of the growth regulator are being used. Reducing growth regulator rates or eliminating an application is suggested when using Impala Fungicide.
- Tank-mixing of Impala Fungicide with a growth regulator is not suggested on *Poa annua* turf. For best results, separate these applications.
- Treatments may cause Bentgrass to be darker green in colour and tighter in texture.
- Varietal differences in certain ultradwarf couch grasses may produce transient discolouration on some varieties (such as Tifeagle, Tifdwarf (Tifton 419) and Tifgreen (Tifton 328)). It is recommended that small areas be tested for turf safety before large-scale application occurs. Avoid exceeding application rates through overlapping sprayed areas. Turf safety testing is best assessed at 1-4 weeks after application.
- One of Impala Fungicide's active constituents is 'triticonazole', which is a member of the triazole chemical family. Members of this family may have growth regulatory effects. This may be more evident on ultradwarf couch grass varieties (such as Tifeagle, Tifdwarf (Tifton 419) and Tifgreen (Tifton 328)). This should be taken into consideration when applying Impala Fungicide leading into or during turf renovation periods.

COMPATIBILITY

DO NOT mix with products or fertiliser with high salt content, i.e. ferrous sulphate or ammonium sulphate. As formulations of other manufacturers' products are beyond the control of Turf Culture Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

APPLICATION

Ensure even application in order to achieve even disease control. Avoid overlapping sprays.

Leaf and Crown Diseases: Application volume for leaf and crown infecting diseases (Anthracnose, Brown Patch, Dollar Spot, Helminthosporium diseases, Pythium Blight, and Fusarium) should be adequate to ensure thorough and even coverage of the turf leaves and penetration to the crowns. Ideal application volume should be 350 to 500 L/ha. Example: For best results use medium [e.g. XR Teejet* (11004 or 10005)] to coarse [e.g. Turbo Teejet* or AIXR Teejet* (11004 or 11005)] nozzles, at 5 km/h and 3 bar pressure. In higher cut turf (≥ 15 mm) a significant spray shielding effect can occur, impacting negatively on spray penetration and even coverage at low application volumes.

Root Diseases: Application volumes for root infecting diseases (Brown Patch, Couchgrass Decline, Pythium Root Rot, Spring Dead Spot and Take-all Patch) should be as high as possible (approximately 1000 L/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. Example: For best results use extremely coarse droplets [e.g. 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 within 1 hour of application.

FUNGICIDE RESISTANCE WARNING

GROUP	3 11	FUNGICIDE
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Impala Fungicide is a combination of a member of the DMI and quinone outside inhibitors (QoIs) groups of fungicides. For fungicide resistance management Impala Fungicide is both a Group 3 and a Group 11 fungicide. Some naturally occurring individual fungi resistant to Impala Fungicide and other Group 3 and/or Group 11 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled by Impala Fungicide or other Group 3 and/or Group 11 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, Turf Culture Pty Ltd accepts no liability for any losses that may result from the failure of Impala Fungicide to control resistant fungi. Fungicides belonging to Group 11 should not exceed $\frac{1}{3}$ (one third) of the total number of fungicide applications for a season.

PRECAUTIONS

DO NOT apply using spraying equipment carried on the back of the user.
DO NOT apply using low pressure hand spray equipment.

Re-entry Periods

Public

Do not allow entry into treated areas until the spray has dried.

Workers

Do not enter treated areas until the spray has dried when conducting low exposure activities such as mowing and irrigation, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

Do not enter into treated areas for 16 days when conducting high exposure activities such as transplantation and hand weeding, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

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

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND THE ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

Integrated Pest Management

Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods.

Minimise spray drift to reduce harmful effects on beneficial arthropods in no-crop areas.

Risk to non-target insects: Impala Fungicide may have adverse effects on some non-target beneficial insects, in particular predatory bugs. This should be taken into account where Integrated Pest Management utilising these organisms is practiced.

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 designated collection point.

If not recycling, 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 compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SAFETY DIRECTIONS

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. In addition, when mixing and loading for boomspray equipment wear cotton overalls, over normal

clothing, buttoned to the neck and wrist. In addition, if applying by high-pressure hand wand wear cotton overalls, over normal clothing, buttoned to the neck and wrist. Wash hands after use. After each day's use wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Telephone Australia 13 11 26.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which is available from the supplier or from the manufacturer's website: www.turfculture.com.au

CONDITIONS OF SALE

The use of Impala Fungicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Turf Culture 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 Turf Culture Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

In a Transport Emergency Dial 000 Police or Fire Brigade