

**Bayer Environmental Science**  
**Safety Data Sheet**  
**DEDICATE® TURF FUNGICIDE**



Version / AUS  
102000011306

Revision Date: 13.06.2012

**SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product name: **Dedicate® Turf Fungicide**  
Other names: None  
Product code (UVP): 05686600  
Recommended use: Fungicide

Chemical formulation: Suspension concentrate (=flowable concentrate)(SC)

Company: Bayer CropScience Pty. Ltd.  
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**SECTION 2. HAZARDS IDENTIFICATION**

HAZARDOUS SUBSTANCE	Emergency Overview	DANGEROUS GOODS
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Hazardous classification:	Hazardous (National Occupational Health and Safety Commission - NOHSC).
R-phrases(s):	R43 - May cause sensitization by skin contact. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R63 - Possible risk of harm to the unborn child.
S-phrases(s):	See sections 4, 5, 6, 7, 8, 10, 13.
ADG Classification:	Not a "Dangerous good" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea, Dedicate Turf Fungicide is a MARINE POLLUTANT. See Section 14.
SUSMP classification (Poison Schedule):	Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons).

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature: Tebuconazole 200 g/L  
Trifloxystrobin 100 g/L

Chemical Name	CAS-No.	Concentration [%]
Tebuconazole	107534-96-3	18.20
Trifloxystrobin	141517-21-7	9.10



Other ingredients (non-hazardous) to 100 %		
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**SECTION 4. FIRST AID MEASURES**

**If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.**

**Inhalation**

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

**Skin contact**

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

**Ingestion**

Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth.

**Notes to physician**

**Treatment**

Treat symptomatically.

**SECTION 5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

- Water spray
- Carbon dioxide (CO<sub>2</sub>)
- Foam
- Sand

**Hazards from combustion products**

- In the event of fire the following may be released:
- Hydrogen cyanide (hydrocyanic acid)
  - Carbon monoxide (CO)
  - Nitrogen oxides (NO<sub>x</sub>)
  - Hydrogen fluoride

**Precautions for fire-fighting**

- In the event of fire and/or explosion do not breathe fumes.
- In the event of fire, wear self-contained breathing apparatus.
- Contain the spread of the fire-fighting media.
- Do not allow run-off from fire-fighting to enter drains or water courses.

**Hazchem Code** •3Z



**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Avoid contact with spilled product or contaminated surfaces.  
Use personal protective equipment.

**Environmental precautions**

Do not allow to get into surface water, drains and ground water.

**Methods for cleaning up**

Clean contaminated floors and objects thoroughly, observing environmental regulations.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**Additional advice**

Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

**SECTION 7. HANDLING AND STORAGE**

**Handling**

Hygiene measures:

Avoid contact with skin, eyes and clothing.  
Keep working clothes separately.  
Wash hands immediately after work, if necessary take a shower.  
Remove soiled clothing immediately and clean thoroughly before using again.  
Garments that cannot be cleaned must be destroyed (burnt).  
Wash hands before breaks and immediately after handling the product.

Advice on protection against fire and explosion:

Keep away from heat and sources of ignition.

**Storage**

Requirements for storage areas and containers:

Keep containers tightly closed in a dry, cool and well-ventilated place.

Suitable materials:

HDPE (high density polyethylene)

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Tebuconazole	107534-96-3	0.2 mg/m <sup>3</sup> (TWA)		OES BCS
Trifloxystrobin	141517-21-7	2.7 mg/m <sup>3</sup> (TWA)		OES BCS

For further details on the Occupational Exposure Standards, see Section 16.

**Personal protective equipment - End user**

Respiratory protection: Not normally required.

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Hand protection: Elbow-length chemical resistant gloves.  
Eye protection: Not normally required.  
Skin and body protection: Cotton overall buttoned to the neck and wrist.

#### Engineering controls

Advice on safe handling:

No engineering controls are required for the normal use of this product according to label.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form: Liquid, suspension  
Colour: Off-white  
Odour: Weak, characteristic

#### Safety data

pH: 6.0 - 8.0 at 100 % (23 °C)  
Flash point: > 100 °C  
Not relevant; aqueous solution  
Ignition temperature: No data available  
Upper explosion limit: No data available  
Lower explosion limit: No data available  
Vapour pressure: No data available  
Relative vapour density: No data available  
Density: ca. 1.10 g/cm<sup>3</sup> at 20 °C  
Water solubility: No data available  
Partition coefficient: n-octanol/water: No data available

### SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.  
Conditions to avoid: Extremes of temperature and direct sunlight.  
Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.



**SECTION 11. TOXICOLOGICAL INFORMATION**

**Potential health effects**

Inhalation: Product is of low toxicity via the inhalation route, however inhalation of large amounts may be harmful.

Skin: Not irritating to skin.

Eye: Not irritating to eyes.

Ingestion: Product is of low toxicity via the oral route, however it may be harmful if a large amount is ingested.

**Animal toxicity studies**

Acute oral toxicity: LD<sub>50</sub> (rat) ca. 2,500 mg/kg  
Test conducted with a similar formulation.

Acute inhalation toxicity: LC<sub>50</sub> (rat) > 2.43 mg/L  
Exposure time: 4 h  
Highest attainable concentration.  
Determined in the form of a respirable aerosol.  
Test conducted with a similar formulation.

Acute dermal toxicity: LD<sub>50</sub> (rat) > 4,000 mg/kg  
Test conducted with a similar formulation.

Skin irritation: No skin irritation (rabbit).  
Test conducted with a similar formulation.

Eye irritation: No eye irritation (rabbit).

Sensitisation: Non-sensitizing (guinea pig).  
OECD Test Guideline 406, Magnusson & Kligman test  
Test conducted with a similar formulation.

**Assessment mutagenicity**

Tebuconazole was not mutagenic or genotoxic in a battery of *in vitro* and *in vivo* mutagenicity studies.  
Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.

**Assessment carcinogenicity**

Tebuconazole is not carcinogenic.  
Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.

**Assessment toxicity to reproduction**

Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.

**Assessment developmental toxicity**

The European Union has classified tebuconazole as having a possible risk of harm to the unborn child.  
Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.

**Chronic toxicity**

Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.



**Assessment neurotoxicity**

Trifloxystrobin - No evidence of adverse effects relevant to humans was obtained in tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**

Toxicity to fish: LC<sub>50</sub> (Rainbow trout (*Oncorhynchus mykiss*)) 0.286 mg/L  
Exposure time: 96 h

Toxicity to aquatic invertebrates: EC<sub>50</sub> (Water flea (*Daphnia magna*)) 0.224 mg/L  
Exposure time: 48 h

Toxicity to aquatic plants: *Pseudokirchneriella subcapitata* 0.99 mg/L  
Growth rate Exposure time: 72 h

**Additional ecological information**

The ecological data refer to a similar formulation.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Metal drums and plastic containers**

Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

**SECTION 14. TRANSPORT INFORMATION**

**ADG**

UN-Number: **3082**  
Class: 9  
Subsidiary Risk: None  
Packaging group: III  
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOL, TRIFLOXYSTROBIN SOLUTION)  
Hazchem Code: •3Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

**IMDG**

UN-Number: **3082**  
Class: 9  
Subsidiary Risk: None  
Packaging group: III  
EmS: F-A , S-F  
Marine pollutant: YES  
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



(TEBUCONAZOL, TRIFLOXYSTROBIN SOLUTION)

**IATA**

UN-Number:	<b>3082</b>
Class:	9
Subsidiary Risk:	None
Packaging group:	III
Environm. Hazardous Mark:	YES
Description of the goods:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOL, TRIFLOXYSTROBIN SOLUTION )

**SECTION 15. REGULATORY INFORMATION**

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994.

Australian Pesticides and Veterinary Medicines Authority approval number: 62638.

See also Section 2.

**SECTION 16. OTHER INFORMATION**

**Trademark information**

Dedicate® is registered trademark of Bayer.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

**Further details on the Occupational Exposure Standards mentioned in Section 8:**

CEILING: Ceiling Limit Value

OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

SKIN\_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Reason for revision: Changed name from Material Safety Data Sheet to Safety Data Sheet.

END OF SDS