

Bayer Environmental Science
Material Safety Data Sheet
Bayfidan® Turf Fungicide



Version / AUS
10200006929

Revision Date: 30.11.2011

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **Bayfidan® Turf Fungicide**
Other names: None
Product code (UVP): 04902750
Recommended use: Fungicide

Chemical formulation: Emulsifiable concentrate (EC)

Company: Bayer Environmental Science
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SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE	NON-DANGEROUS GOODS
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Hazardous classification:	Hazardous (National Occupational Health and Safety Commission - NOHSC).
R-phrases(s):	R36/38 - Irritating to eyes and skin.
S-phrases(s):	See sections 4, 5, 6, 7, 8, 10, 13.
ADG Classification:	Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule):	Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Triadimenol 250 g/L

Chemical Name	CAS-No.	Concentration [%]
Triadimenol	55219-65-3	23.00
N-Methyl-2-pyrrolidone	872-50-4	> 25.00
Alkylaryl/polyglycol ether	104376-75-2	> 1.00 - < 25.00
Other ingredients (non-hazardous) to 100 %		



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 Material 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. If symptoms persist, call a physician.

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.
Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which should not be used for safety reasons

High volume water jet.

Hazards from combustion products

In the event of fire the following may be released:
Hydrogen chloride (HCl)
Hydrogen cyanide (hydrocyanic acid)
Carbon monoxide (CO)
nitrogen oxides (NO_x)

Precautions for fire-fighting

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.



SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with spilled product or contaminated surfaces.
Use personal protective equipment.
Remove all sources of ignition.

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 safe handling, see section 7.
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.
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 out of the reach of children.
Store in a place accessible by authorized persons only.
Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.

Advice on common storage:

Keep away from food, drink and animal feedingstuffs.

Flammability

C1 Combustible Liquids Flash Point > 60 °C - ≤ 150 °C

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Triadimenol	55219-65-3	1.61 mg/m ³ (TWA)		OES BCS
N-Methyl-2-pyrrolidone	872-50-4	103 mg/m ³ / 25 ppm (TWA)	08 2005	AU OEL

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N-Methyl-2-pyrrolidone	872-50-4	309 mg/m ³ / 75 ppm (STEL)	08 2005	AU OEL
N-Methyl-2-pyrrolidone	872-50-4	19 ppm (TWA)		OES BCS

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

Biological limit values: None

Personal protective equipment - End user

Respiratory protection: Wear an approved respirator suitable for organic vapour/mist if exposure to vapours or mists is likely or ventilation is inadequate.

Hand protection: Elbow-length PVC or nitrile gloves.

Eye protection: Goggles.

Skin and body protection: Cotton overall buttoned to the neck and wrist.
Washable hat.

Engineering Controls

Advice on safe handling:
Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Liquid, clear
Colour: Light brown
Odour: Aromatic

Safety data

pH: 6.0 - 8.0 at 1 % (23 °C)
Flash point: 93 °C
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. 1.09 g/cm³ at 20 °C
Water solubility: Emulsifiable
Partition coefficient: n-octanol/water: No data available



SECTION 10. STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended storage conditions.
Hazardous reactions:	No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	LD ₅₀ (rat) > 2,000 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity:	LC ₅₀ (rat) > 0.412 mg/L Determined in the form of a respirable aerosol. Highest attainable concentration. Test conducted with a similar formulation.
Acute dermal toxicity:	LD ₅₀ (rat) > 5,000 mg/kg Test conducted with a similar formulation.
Skin irritation:	No skin irritation (rabbit). Test conducted with a similar formulation.
Eye irritation:	Slight irritant effect - does not require labelling (rabbit). Test conducted with a similar formulation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish:	LC ₅₀ (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 42 mg/L Exposure time: 96 h
Toxicity to aquatic invertebrates:	EC ₅₀ (Water flea (<i>Daphnia magna</i>)) 253 mg/L Exposure time: 48 h
Toxicity to aquatic plants:	EC ₅₀ (<i>Pseudokirchneriella subcapitata</i>) 41.13 mg/L Growth rate Exposure time: 72 h

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

According to national and international transport regulations not classified as dangerous goods.



SECTION 15. REGULATORY INFORMATION

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

Australian Pesticides and Veterinary Medicines Authority approval number: 30676.

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information

Bayfidan® is registered trademark of Bayer.

This MSDS 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 MSDS 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.

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

END OF MSDS