

Safety Data Sheet



Exteris Stressgard® Turf Fungicide

Version 2 / AUS
102000028296

Revision Date: 01.06.2020
Print Date: 01.06.2020

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Exteris Stressgard® Turf Fungicide
Product code (UVP) 81753938

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Fungicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia

Telephone (03) 9248 6888
Telefax (03) 9248 6800
Responsible Department 1800 804 479 Technical Information Service
Website www.es.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Skin sensitisation: Category 1
H317 May cause an allergic skin reaction.

Effects on or via lactation
H362 May cause harm to breast-fed children.

Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

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Fluopyram
Trifloxystrobin

Signal word: Warning

Hazard statements

H317 May cause an allergic skin reaction.
H362 May cause harm to breast-fed children.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P260 Do not breathe mist.
P263 Avoid contact during pregnancy/ while nursing.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Fluopyram/Trifloxystrobin 12.5:12.5 g/l
Suspension concentrate (=flowable concentrate)(SC)

| Chemical name | CAS-No. | Concentration [%] |
|---|-------------|-------------------|
| Fluopyram | 658066-35-4 | 1.19 |
| Trifloxystrobin | 141517-21-7 | 1.19 |
| iso-Tridecyl alcohol, ethoxylated, phosphated | 73038-25-2 | > 5.00 - < 10.00 |
| Alcohols, C12-16, ethoxylated (>5-15 EO) | 68551-12-2 | > 1.00 - < 25.00 |
| potassium hydroxide; caustic potash | 1310-58-3 | >= 0.50 - < 2.00 |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | > 0.005 - < 0.05 |
| Other ingredients (non-hazardous) to 100% | | |

SECTION 4. FIRST AID MEASURES

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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.

4.1 Description of first aid measures

| | |
|-----------------------|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| Inhalation | Move to fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Call a physician or poison control center immediately. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. |
| Eye contact | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

| | |
|-------------------|--|
| Suitable | Water spray, Carbon dioxide (CO ₂), Foam, Sand |
| Unsuitable | High volume water jet |

5.2 Special hazards arising from the substance or mixture In the event of fire the following may be released: Hydrogen fluoride, Hydrogen cyanide (hydrocyanic acid), Hydrogen chloride (HCl), Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

| | |
|--|--|
| Special protective equipment for firefighters | In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit. |
| Further information | 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



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SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

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

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean floors and contaminated objects with plenty of water.

6.4 Reference to other sections 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

7.1 Precautions for safe handling

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

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Keep away from direct sunlight. Protect from frost.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|-----------------------------------|-------------|-----------------------------------|---------|----------|
| Fluopyram | 658066-35-4 | 0.34 mg/m ³ (TWA) | | OES BCS* |
| Trifloxystrobin | 141517-21-7 | 2.7 mg/m ³ (SK-SEN) | | OES BCS* |
| 1,2-Propanediol (Particulate.) | 57-55-6 | 10 mg/m ³ (TWA) | 12 2011 | AU NOEL |
| 1,2-Propanediol | 57-55-6 | 474 mg/m ³ /150 ppm | 12 2011 | AU NOEL |

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| (Total vapour and particulates.) | | (TWA) | | |
|--|-----------|-------------------------------|---------|----------|
| potassium hydroxide; caustic potash | 1310-58-3 | 2 mg/m ³ (PEAK) | 12 2011 | AU NOEL |
| potassium hydroxide; caustic potash | 1310-58-3 | 2 mg/m ³ (TLV) | | OES BCS* |

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection

Respiratory protection is not required under anticipated circumstances of exposure.
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

| | |
|----------------------|--|
| Material | Nitrile rubber |
| Rate of permeability | > 480 min |
| Glove thickness | > 0.4 mm |
| Protective index | Class 6 |
| Directive | Protective gloves complying with EN 374. |

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 4 suit.
If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

General protective measures

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

Engineering Controls

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|--|
| Form | suspension |
| Colour | green |
| Odour | characteristic |
| Odour Threshold | No data available |
| pH | 5.0 - 7.0 (100 %) (23 °C) |
| Melting point/range | No data available |
| Boiling Point | No data available |
| Flash point | > 93.3 °C |
| Flammability | No data available |
| Auto-ignition temperature | 420 °C |
| Minimum ignition energy | Not applicable |
| Self-accelarating decomposition temperature (SADT) | No data available |
| Upper explosion limit | No data available |
| Lower explosion limit | No data available |
| Vapour pressure | No data available |
| Evaporation rate | No data available |
| Relative vapour density | No data available |
| Relative density | No data available |
| Density | 1.05 g/cm ³ (20 °C) |
| Water solubility | dispersible |
| Partition coefficient: n-octanol/water | Fluopyram: log Pow: 3.3 Trifloxystrobin: log Pow: 4.5 (25 °C) |
| Viscosity, dynamic | 60 - 200 mPa.s (20 °C) Velocity gradient 20 /s 25 - 75 mPa.s (20 °C) Velocity gradient 100 /s |
| Viscosity, kinematic | No data available |
| Surface tension | 33.0 mN/m (20 °C) |
| Oxidizing properties | No oxidizing properties |
| Explosivity | Not explosive |
| 9.2 Other information | Further safety related physical-chemical data are not known. |



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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg
Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (Rat) > 4.62 mg/l
Test conducted with a similar formulation.

Acute dermal toxicity LD50 (Rat) > 5,000 mg/kg
Test conducted with a similar formulation.

Skin corrosion/irritation slight irritation (Rabbit)
Test conducted with a similar formulation.

Serious eye damage/eye irritation Mild eye irritation. (Rabbit)
Test conducted with a similar formulation.

Respiratory or skin sensitisation Sensitising (Mouse)
OECD Test Guideline 429, local lymph node assay (LLNA)
Test conducted with a similar formulation.

Assessment mutagenicity

Fluopyram was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Fluopyram caused at high dose levels an increased incidence of tumours in rats in the following organ(s): Liver.

Fluopyram caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Thyroid.

The tumours seen with Fluopyram were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers these tumours is not relevant to humans.
Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Fluopyram caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to

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the parent animals. The reproduction toxicity seen with Fluopyram is related to parental toxicity.
Trifloxystrobin caused reduced body weight development in offspring during lactation only at doses also producing systemic toxicity in adult rats.

Assessment developmental toxicity

Fluopyram caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Fluopyram are related to maternal toxicity.

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

Assessment STOT Specific target organ toxicity – single exposure

Fluopyram: Based on available data, the classification criteria are not met.

Trifloxystrobin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Fluopyram did not cause specific target organ toxicity in experimental animal studies.

Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

May cause sensitisation by skin contact.

Mild eye irritation.

Skin contact, Eye contact, Ingestion, Inhalation

Early onset symptoms related to exposure

Refer to Section 4

Delayed health effects from exposure

Refer to Section 11

Exposure levels and health effects

Refer to Section 4

Interactive effects

Not known

When specific chemical data is not available

Not applicable

Mixture of chemicals

Refer to Section 2.1

Further information

No further toxicological information is available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 1.42 mg/l

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| | Exposure time: 96 h |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 0.75 mg/l |
| | Exposure time: 48 h |
| | LC50 (Mysidopsis bahia (mysid shrimp)) 0.00862 mg/l |
| | Exposure time: 96 h |
| | The value mentioned relates to the active ingredient trifloxystrobin. |
| Toxicity to aquatic plants | EC50 (Raphidocelis subcapitata (freshwater green alga)) 5.25 mg/l |
| | Growth rate; Exposure time: 72 h |
| | EC10 (Desmodesmus subspicatus (green algae)) 0.0025 mg/l |
| | Growth rate; Exposure time: 72 h |
| | The value mentioned relates to the active ingredient trifloxystrobin. |

12.2 Persistence and degradability

| | |
|-------------------------|---------------------------|
| Biodegradability | Fluopyram: |
| | Not rapidly biodegradable |
| | Trifloxystrobin: |
| | Not rapidly biodegradable |

| | |
|------------|----------------------------|
| Koc | Fluopyram: Koc: 279 |
| | Trifloxystrobin: Koc: 2377 |

12.3 Bioaccumulative potential

| | |
|------------------------|--|
| Bioaccumulation | Fluopyram: Bioconcentration factor (BCF) 18 |
| | Does not bioaccumulate. |
| | Trifloxystrobin: Bioconcentration factor (BCF) 431 |
| | Does not bioaccumulate. |

12.4 Mobility in soil

| | |
|-------------------------|---|
| Mobility in soil | Fluopyram: Moderately mobile in soils |
| | Trifloxystrobin: Slightly mobile in soils |

12.5 Other adverse effects

| | |
|--|-----------------------------------|
| Additional ecological information | No other effects to be mentioned. |
|--|-----------------------------------|

SECTION 13. DISPOSAL CONSIDERATIONS

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 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. Do not reuse container for any other purpose.

SECTION 14. TRANSPORT INFORMATION

ADG

| | |
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| UN number | 3082 |
| Transport hazard class(es) | 9 |

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| | |
|--------------------------|--|
| Subsidiary Risk | None |
| Packaging group | III |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION) |
| Hazchem Code | •3Z |

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- a) packagings that do not incorporate a receptacle exceeding 500 kg(L); or
- b) IBCs

IMDG

| | |
|----------------------------|--|
| UN number | 3082 |
| Transport hazard class(es) | 9 |
| Subsidiary Risk | None |
| Packaging group | III |
| Marine pollutant | YES |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION) |

IATA

| | |
|----------------------------|---|
| UN number | 3082 |
| Transport hazard class(es) | 9 |
| Subsidiary Risk | None |
| Packaging group | III |
| Environm. Hazardous Mark | YES |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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: 83704

SECTION 16. OTHER INFORMATION

Trademark information Exteris Stressgard® is a Registered Trademark of the Bayer Group.

Abbreviations and acronyms

| | |
|---------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute toxicity estimate |
| AU OEL | Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment) |
| CAS-Nr. | Chemical Abstracts Service number |
| CEILING | Ceiling Limit Value |



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| Conc. | Concentration |
| EC-No. | European community number |
| ECx | Effective concentration to x % |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| EN | European Standard |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) |
| ICx | Inhibition concentration to x % |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal concentration to x % |
| LDx | Lethal dose to x % |
| LOEC/LOEL | Lowest observed effect concentration/level |
| MARPOL | MARPOL: International Convention for the prevention of marine pollution from ships |
| N.O.S. | Not otherwise specified |
| NOEC/NOEL | No observed effect concentration/level |
| OECD | Organization for Economic Co-operation and Development |
| OES BCS | OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard" |
| PEAK | 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. |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SK-SEN | Skin sensitiser |
| SKIN_DES | SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure. |
| STEL | 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. |
| TWA | 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. |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

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.

Reason for Revision:

The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 11: Toxicological information on STOT (Specific Target Organ Toxicity) and CMR (Carcinogenic, Mutagenic and toxic to Reproduction). Section 12. Ecological information.

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