

Safety Data Sheet



Interface® Stressgard® Turf Fungicide

Version 2.1 / AUS
102000021104

Revision Date: 02.07.2024
Print Date: 02.07.2024

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Interface® Stressgard® Turf Fungicide
Product code (UVP) 79653646, 81777721

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 2022 Environmental Science AU Pty Ltd
ABN 49 656 513 923

Address Suite 2.06, Level 2, 737 Burwood Road
Hawthorn East, Australia 3123

Telephone (03) 7019 3839

1.4 Emergency telephone no. +61 2 9037 2994

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Carcinogenicity: Category 2
H351 Suspected of causing cancer.

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

Labelling according to specific Australian legislation

Hazard label for supply/use required.

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Hazardous components which must be listed on the label:

Iprodione
Trifloxystrobin

Signal word: Warning

Hazard statements

H351 Suspected of causing cancer.
H362 May cause harm to breast-fed children.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P263 Avoid contact during pregnancy and 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/face protection.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No additional hazards known beside those mentioned.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Iprodione/Trifloxystrobin 256.40 : 16.00 g/l
Suspension concentrate (=flowable concentrate)(SC)

Chemical name	CAS-No.	Concentration [%]
Iprodione	36734-19-7	23.10
Trifloxystrobin	141517-21-7	1.44
(3R)-3-ethoxy-2-methylnonane	78330-20-8	>= 1.00 - <= 3.00
1,2-Propanediol	57-55-6	>= 1.00 - <= 5.00
1,2-Benzisothiazol-3(2H)-one	2634-33-5	>= 0.005 - <= 0.05
2-Methyl-2H-isothiazol-3-one	2682-20-4	>= 0.0015 - <= 0.10
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.

4.1 Description of first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
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	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	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.
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4.3 Indication of any immediate medical attention and special treatment needed

Treatment	Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.
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SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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 cyanide (hydrocyanic acid), Hydrogen fluoride, Hydrogen chloride (HCl), Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x)
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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.
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Further information Keep out of smoke. Fight fire from upwind position. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses. Avoid contact with spilled product or contaminated surfaces.

Hazchem Code •3Z

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. Retain and dispose of contaminated wash water. If the product contaminates rivers and lakes or drains inform respective authorities.

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 contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

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.

Advice on protection against fire and explosion No special precautions required.

Hygiene measures Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove and wash contaminated gloves, including the inside, before re-use. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

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Print Date: 02.07.2024**7.2 Conditions for safe storage, including any incompatibilities**

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

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
Iprodione	36734-19-7	1.7 mg/m ³ (TWA)		OES BCS*
Trifloxystrobin	141517-21-7	2.7 mg/m ³ (SK-SEN)		OES BCS*
1,2-Propanediol (Total vapour and particulates.)	57-55-6	474 mg/m ³ /150 ppm (TWA)	12 2011	AU NOEL
1,2-Propanediol (Particulate.)	57-55-6	10 mg/m ³ (TWA)	12 2011	AU NOEL

*OES BCS: 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).

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Skin and body protection	Wear standard coveralls and Category 3 Type 6 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	suspension
Colour	green
Odour	musty
Odour Threshold	No data available
pH	4.0 - 7.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	No flash point - Determination conducted up to the boiling point.
Flammability	No data available
Auto-ignition temperature	No data available
Thermal decomposition	No data available
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	1.11 g/cm ³ (20 °C)
Water solubility	dispersible

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Partition coefficient: n-octanol/water	Trifloxystrobin: log Pow: 4.5 (25 °C)
Viscosity, dynamic	550 - 1,000 cps (25 °C)
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Not explosive
9.2 Other information	Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	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
Acute inhalation toxicity	LC50 (Rat) > 2.56 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. highest concentration tested
Acute dermal toxicity	LD50 (Rat) > 5,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	slight irritation (Rabbit)
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test Skin: Non-sensitizing. (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment mutagenicity

Iprodione was not mutagenic or genotoxic based on the overall weight of evidence 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.

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Assessment carcinogenicity

Iprodione caused at high dose levels an increased incidence of tumours in the following organ(s): Liver, Testes. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Iprodione did not cause reproductive toxicity in a two-generation study in rats.

Trifloxystrobin caused reduced body weight development in offspring during lactation only at doses also producing systemic toxicity in adult rats.

Assessment developmental toxicity

Iprodione caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Iprodione 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

Iprodione: 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

Iprodione caused specific target organ toxicity in experimental animal studies in rats in the following organ(s): Adrenal gland.

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

Caution!

Harmful if swallowed., Avoid contact with skin, eyes and clothing., Wash thoroughly with soap and water after handling.

Avoid contact or inhalation of spray mist.

Harmful if swallowed., Do not take internally.

This product or its components may have target organ effects., This product or its components may have long term (chronic) health effects.

Toxic to fish and aquatic invertebrates.

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

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Mixture of chemicals

Refer to Section 2.1

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).
No further toxicological information is available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 1.47 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.6 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	ErC50 (Raphidocelis subcapitata (freshwater green alga)) 5.32 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.
Toxicity to other organisms	LD50 (Apis mellifera (bees)) Exposure time: 48 d Non-hazardous for bees.

12.2 Persistence and degradability

Biodegradability	Iprodione: Not rapidly biodegradable Trifloxystrobin: Not rapidly biodegradable
Koc	Iprodione: Koc: 202 - 543 Trifloxystrobin: Koc: 2377

12.3 Bioaccumulative potential

Bioaccumulation	Iprodione: Bioconcentration factor (BCF) 70 Does not bioaccumulate. Trifloxystrobin: Bioconcentration factor (BCF) 431 Does not bioaccumulate.
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12.4 Mobility in soil

Mobility in soil	Iprodione: Moderately mobile in soils Trifloxystrobin: Slightly mobile in soils
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12.5 Other adverse effects

Additional ecological information	No other effects to be mentioned.
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SECTION 13. DISPOSAL CONSIDERATIONS

Triple or preferably pressure rinse containers before disposal. Dispose of rinsings in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. 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.

SECTION 14. TRANSPORT INFORMATION

ADG

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

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SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994

Australian Pesticides and Veterinary Medicines Authority approval number: 68029

SUSMP classification (Poison Schedule)

Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Interface® and Stressgard® are Registered Trademarks.

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
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 sensitizer
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

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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.

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