SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Azoxy 250 SC NZ Fungicide**
Product Use:	Fungicide for the control of various diseases of turf as per the Directions for Use.
Restriction of Use:	Refer to Section 15
Manufacturer:	**Turf Culture Pty Ltd** 43 Gap Road, Sunbury, Vic 3429 Australia Phone: +61 1300 11 8873 Fax: +61 3 8888 9991 www.turfculture.co.nz
New Zealand Supplier:	**PGG Wrightson Turf Ltd** 3/118 Savill Drive, Mangere East, Auckland 2024, New Zealand Phone: +64 09 570 2570 www.pggwrightsonturf.co.nz
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	9 August 2021

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR100712

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute inhalation toxicity Cat. 4	H332	Harmful if inhaled.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P391	Collect spillage.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Ensure the container is empty. Triple rinse empty container and add reinstate to spray tank. Recycle punctured container without caps through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose. Disposal of this product only by using according to this label, or at an approved landfill or other approved facility.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Conc%	CAS NUMBER.
Azoxystrobin	250g/L	131860-88-8
Propylene glycol	>1 - <10	57-55-6
Non hazardous	To 100	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Take special care if exposed person is wearing contact lenses. Immediately call a POISON CENTER or doctor/physician.

If on Skin — Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

If Swallowed — If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

If Inhaled	No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Most important symptoms and effects, both acute and delayed
Symptoms:

Ingestion:	Refer to Section 11 for full details.
Inhalation:	Harmful if inhaled. Refer to Section 11 for full details.
Skin:	May cause mild skin irritation. Refer to Section 11 for full details.
Eye:	This product is an eye corrosive. Refer to Section 11 for full details.

Section 5. Fire Fighting Measures

Hazard Type	There is little risk of an explosion from this product if commercial quantities are involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating.
Hazards from decomposition products	Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
Suitable Extinguishing media	Suitable extinguishing media are carbon dioxide, dry chemical, foam, water fog.
Precautions for firefighters and special protective clothing	Recommended personal protective equipment is full fire kit and breathing apparatus. If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire.
HAZCHEM CODE	**2X**

Section 6. Accidental Release Measures

Wear full protective clothing including eye/face protection as detailed in Section 8. All skin areas should be covered. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product.

In the event of a major spill, prevent spillage from entering drains or watercourses.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area-preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe dust, fumes, gas, mist, vapours or spray.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Propane-1,2-diol, [57-55-6] Particulates only	-	10	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2020 12TH EDITION.

Engineering Controls

This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Personal Protection Equipment

Eyes	Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.
Skin & hands	Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types. We suggest that protective clothing be made from the following materials: Rubber and PVC
Respiratory	Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian/New Zealand Standard mentioned above. Otherwise, not normally necessary.
General	Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

Section 9 Physical and Chemical Properties

Appearance	Milky light orange coloured suspension.
Odour	Not available
Odour Threshold	Not available
pH	3.0-3.5 (1% in water)
Boiling Point	Approximately 100°C at 100kPa.
Melting Point	Below 0°C.
Freezing Point	Below 0°C.
Flash Point	Not applicable.
Flammability	Non Flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	2.37 kPa at 20°C (water vapour pressure).
Vapour Density	As for water
Specific Gravity	1.083
Water Solubility	Completely soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid	Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not triggered. Short Term Exposure: Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased. Long Term Exposure**:** Azoxystrobin: A 90-day feeding study (rat), liver toxicity was observed at 2000 ppm. This was manifest as gross distension of the bile duct, increased numbers of lining cells and inflammation of the duct. There is no evidence of neurotoxicity in any of the studies conducted with azoxystrobin.
Dermal	Not triggered.
Inhalation	Harmful if inhaled.
Eye	Causes severe eye damage. Short Term Exposure: This product is eye corrosive. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage. Long Term Exposure: can cause permanent eye damage.
Skin	Not triggered. Short Term Exposure: This product is a mild skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.
Target Organs	Azoxystrobin: Liver Propylene Glycol: Kidney, liver, CNS

Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.

Persistence and degradability	This product rapidly biodegrades in soils.
Bioaccumulation	This product is unlikely to accumulate in body tissues.
Mobility in Soil	This product is unlikely to be mobile in soils.
Other adverse effects	No data available

For Azoxystrobin:

Fish: LC_{50} rainbow trout 96hr: 2.4mg/L **Algae:** EbC_{50} 0.23 (biomass) & 0.26 (growth rate)mg/L
Bees: LD_{50} 200µg/bee **Daphnia:** EbC_{50} 48hr 0.47mg/L
Worms: LD_{50} (*Eisenia foetida*) 881mg/kg; NOEC = 10 mg/kg

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Ensure the container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle punctured container without caps through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.
Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Road and Rail Transport

UN No:	3082
Class-primary	9
Packing Group	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin 25%)

Air Transport

UN No:	3082
Class-primary	9
Packing Group	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin 25%)

Marine Transport

UN No:	3082
Class-primary	9
Packing Group	III
Marine Pollutant	Yes
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin 25%)

Limited Quantities Statement:
If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR100712

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required

HSNO Additional Controls (Restrictions of use)	
77A	This substance must not be applied onto or into water.
77A – Maximum Application Rate	*The maximum application rate for Turf Culture Azoxy 250 SC NZ Fungicide shall be 595 g of active ingredient per hectare, with a maximum application frequency of two times per season (autumn, winter, spring, summer) and a minimum application interval of 21 days.*
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 3	Hazardous substances in a place other than a workplace
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides
ACVM Act and Regulations	
ACVM Reg No.	Not applicable.

Section 16 Other Information

Glossary

Cat	Category
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness.

As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

Issue Date:	9 August 2021	Review Date:	9 August 2026