SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Whirlwind 430 Fungicide**

Other Names:	Tebuconazole. Group 3 Fungicide.
Use:	Agricultural fungicide for control of certain fungal diseases in crops.
Company:	AIRR Apparent Pty Ltd
Address:	15/16 Princes Street, Newport NSW 2106.
Phone Number:	03 5820 8400
Email:	enquiries@apparentag.com.au
Emergency Contact:	0437 303 689

SECTION 2 HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code*.

* Not subjected to the ADG code when transported in Australia by Road or Rail in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as a Dangerous Good (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

Globally Harmonised System (GHS) classification of the substance/mixture:

Acute toxicity – Oral: Hazard category 4
Carcinogenicity – Hazard category 1.
Reproductive toxicity – Hazard category 2.
Specific Target Organ Toxicity (repeated exposure) – Hazard category 1.
Hazardous to the Aquatic Environment (chronic) – Hazard category 1.

Signal Word: DANGER.

Hazard statements:

H302	Harmful if swallowed.
H350i	May cause cancer by inhalation.
H361d	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands, arms and face thoroughly after handling.
P260	Do not breathe mist, vapours or spray.
P264	Wash hands, arms and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P281	Wear protective gloves and protective clothing.

Response:

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice.
P330	Rinse mouth.
P391	Collect spillage.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/container in accordance with national regulations.

Pictograms:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	*CAS NUMBER*	*PROPORTION*
Tebuconazole	107534-96-3	430 g/L
Silica dioxide	7631-869	< 1%
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: Rinse any residual product from mouth and lips. Give water to drink and seek medical help. Contact a doctor or Poisons Information Centre Phone Australia 13 11 26.

Eye contact: Flush with running water until product is removed. Seek medical advice if irritation persists.

Skin contact: Remove contaminated clothing. Wash thoroughly under running water using a mild soap. Seek medical advice if irritation, reddening and/or other damage occurs.

Inhalation: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Advice to Doctor: Treat symptomatically. For large ingestions, gastric lavage and administration of activated charcoal and sodium sulphate should be considered. Monitor kidney and respiratory functions.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Product is non-combustible. Generally considered a low risk due to the water content, but once the water has evaporated the product will burn.

Extinguishing media: Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff.

Hazards from combustion products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes. Will not polymerise.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures:
Accidental release: Wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves. Evacuate unprotected and unnecessary personnel from area of spill.

SECTION 6 ACCIDENTAL RELEASE MEASURES (Continued)

If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourse. In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product.

Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Launder protective clothing before storage or re-use.

Material and methods for containment and cleanup procedures:
To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container, preparing the spray and using prepared spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves. After use, and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Conditions for Safe Storage: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. This product is a Schedule 5 Poison (S5) and must be stored and sold in accordance with the relevant Health Department regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
Exposure limits have been assigned by Safe Work Australia to some minor ingredients in this product.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m³)
Fumed silica (respirable dust)	2 mg/m³	-
Glycerin mist	10 mg/m³	-

Biological Limit Values:
No biological limit allocated.

Engineering controls:
Use in ventilated areas. Supplement natural ventilation if necessary.
Keep containers closed when not in use. No special engineering controls are required.

Personal Protective Equipment (PPE):
General: When opening the container, preparing the spray and using prepared spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves. After use, and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Personal Hygiene: Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off white liquid suspension.
Odour: Faint/slight odour.
Boiling point: No data available.
Freezing point: Just below 0°C.
Solubility in Water: Fully miscible. Tebuconazole will be suspended, not dissolved.
Specific Gravity: Approximately 1.1

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (Continued)

Flammability: Non-Combustible liquid.
Poisons Schedule: S5.
Formulation type: Suspension Concentrate (SC).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product should be stable in storage for at least 2 years after manufacture. Some settling might occur, and containers should be agitated at least once every 12 months to resuspend any sediment.

Conditions to avoid: Do not store in excessive heat conditions.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: In a fire, the formation of toxic fumes including hydrogen chloride, hydrogen cyanide and oxides of carbon and nitrogen can be expected.

Hazardous reactions: Not likely to polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Potential Health Effects:

ACUTE EFFECTS

Swallowed: Acute Oral LD_{50} (rat) > 3000 mg/kg (similar formulation). Accidental swallowing of small amounts of this product is not expected to cause injury – low acute oral toxicity.

Eye: Mild irritant. May cause discomfort if contact is prolonged.

Skin: Acute dermal LD_{50} (rat) > 2,000 mg/kg (similar formulation). Slightly irritating, but not a skin sensitiser.

Inhaled: Should not cause severe effects if treated promptly. May cause irritation to the respiratory tract. Acute inhalation LC_{50} > 5.1 mg/L/4 hrs (similar formulation).

Chronic toxicity: Evidence from animal studies indicates that repeated or prolonged exposure to Tebuconazole can result in developmental effects and Safe Work Australia has classified Tebuconazole in the occupational environment as a reproduction development substance - Category 3 substance 'having possible risk of harm to the unborn child'. There is no evidence of mutagenic or genotoxic effects in a series of *in vitro* and *in vivo* mutagenicity studies.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: Low hazard to birds, earthworms and bees. Moderate toxicity to fish and aquatic organisms. Fish: Rainbow trout 96 hr LC_{50} = 19.9 mg/L; Invertebrates *Daphnia magna* 48 hr EC_{50} = 31.0 mg/L; fresh water algae 48 hr EC_{50} = 3.8 mg/L (*Selenastrum capricornutum*) and 15.2 mg/L (*Desmodesmus subspicatus*). Birds LD_{50} Japanese quail: > 2000 mg/kg, Bobwhite quail LC_{50} = 1988 mg/kg; Bees: LD_{50} = 83 µg/bee.

Environmental Fate: Tebuconazole has low mobility in soil. Tebuconazole is not readily degradable in laboratory soil studies, but under field conditions it degrades much more rapidly and does not accumulate.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see Section 8. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

Disposal of empty containers: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. 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.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 500 kg (L) or less; or in IBC's under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082. (See special provision AU01).

Marine and Air Transport: Apparent Whirlwind 430 Fungicide is classified as a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-
UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Tebuconazole). Hazchem code ●3Z. Hazard Identification Number (HIN) 90. Emergency Guide 47 (Australian Standards).

SECTION 15 REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 5 poison.
This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 66903.
This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xn: Harmful.
This product is not classified as a Dangerous Good according to the ADG Code in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. This product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 16 OTHER INFORMATION

Issue Date: 8 November 2021. Valid for 5 years till 8 November 2026 (5 year update).

Key to abbreviations and acronyms used in this SDS:

ADG Code:	Australian Dangerous Goods Code (for the transport of Dangerous Goods by Road and Rail).
Carcinogen:	An agent which is responsible for the formation of a cancer.
Genotoxic:	Capable of causing damage to genetic material, such as DNA.
HSIS:	Hazardous Substances Information System.
Lacrimation:	The production, secretion, and shedding of tears.
Lavage:	A general term referring to cleaning or rinsing.
Mutagen:	An agent capable of producing a mutation.
Pneumonitis:	A general term that refers to inflammation of lung tissue.
PPE:	Personal protective equipment.
Teratogen:	An agent capable of causing abnormalities in a developing foetus.
TWA:	The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
Safe Work Australia:	Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

SECTION 16 OTHER INFORMATION

References

1. "Hazardous Chemicals Information System". Safe Work Australia HCIS website. (2021).
2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2017 (7th Ed).

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.

End SDS.