

MATERIAL SAFETY DATA SHEET



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Emergency Contact:
1800 033 111

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: eChem Tebuconazole 430 Fungicide

Full Product Name: eChem Tebuconazole 430 Fungicide.
Other Names: Tebuconazole. Group 3 Fungicide.
Use: An agricultural liquid fungicide for control of certain fungal diseases.
Company: eChem (Australia) Pty Ltd.
Address: Level 4, Lantos Place 80 Stamford Road, Indooroopilly QLD 4068
ACN/ABN: 089 133 095.
Telephone Number: 02 6750 8019 **Fax Number:** 02 6752 3123
Emergency Contact: 1800 033 111

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.**

Risk Phrases: R22 Harmful if swallowed.
R63 Possible risk of harm to the unborn child.

Safety Phrases: S2 Keep out of reach of children.
S13 Keep away from food, drink and other animal foodstuffs.
S20/21 When using do not eat or drink/smoke.
S24/25 Avoid contact with skin/eyes.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:	CAS NUMBER	PROPORTION
CHEMICAL		
Tebuconazole	107534-96-3	430 g/L
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: Immediately hold eyes open and flood with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

Skin contact: Remove contaminated clothing and launder before re-use. Wash skin with soap and water. If skin is irritated, seek medical advice.

Inhalation: Remove to fresh air and observe until recovered. Seek medical advice if effects persist.

SECTION 4 FIRST AID MEASURES (Continued)

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: Generally considered a low risk due to the water content, but once the water has evaporated the product is combustible.

Extinguishing media: Use carbon dioxide, dry chemical or foam. If no alternative use water fog and contain all run off. Violent steam generation or eruption may occur if directed water stream is applied on hot liquids. If containers are ruptured contain all runoff.

Hazards from combustion products: On burning will produce toxic and noxious vapours, including hydrogen chloride, hydrogen cyanide and oxides of carbon and nitrogen can be expected.

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. Evacuate personnel to a safe area.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Isolate and post spill area. Keep out unprotected persons and animals. Wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves. Large spills should be dyked. Absorb spilled material with absorbent material such as sand, clay or cat litter. Vacuum, shovel or pump spilled material into an approved container and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep material out of streams and sewers.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

SECTION 7 HANDLING AND STORAGE

Precautions for safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and 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 well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations. Not classified as a Dangerous Good.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**National Exposure Standards:**

No exposure standard has been assigned by Safe Work Australia to this material.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that vapours and mists are minimised.

Personal Protective equipment (PPE):

General: When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and 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.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Personal Hygiene: 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:	No data available.
Specific Gravity:	Approximately 1.1.
Solubility in Water:	Suspends in water.
pH:	No data available.
Flammability:	Non flammable liquid.
Flashpoint (°C):	Not flammable.
Poisons Schedule:	This product is a schedule 5 (S5) poison.
Formulation type:	Suspension Concentrate.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable for a period of 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: Incompatible with strong oxidizing agents, strong acids and strong bases.

Hazardous Decomposition Products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

Hazardous Reactions: Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Does not 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 LD₅₀ (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 LD₅₀ (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 LC₅₀ > 5.1 mg/L/4 hrs (similar formulation).

Long Term Exposure: Evidence from animal studies indicates that repeated or prolonged exposure to Tebuconazole can result in developmental effects and is classified as '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 LC₅₀ = 19.9 mg/L; Invertebrates *Daphnia magna* 48 hr EC₅₀ = 31.0 mg/L; fresh water algae 48 hr EC₅₀ = 3.8 mg/L (*Selenastrum capricornutum*) and 15.2 mg/L (*Desmodesmus subspicatus*). Birds LD₅₀ Japanese quail: > 2000 mg/kg, Bobwhite quail LC₅₀ = 1988 mg/kg; Bees: LD₅₀ = 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:****1) After intended use - 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 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.

2) After spill or accident

Keep material out of streams and sewers. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

SECTION 14 TRANSPORT INFORMATION

Transport: This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Marine and Air Transport: This product is not classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA).

This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

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 under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 68710.

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 for packs less than 3000 litres (SP AU01) (7th Ed).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 10 July 2013. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this MSDS:

- ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- ASCC: Australian Safety & Compensation Council (formally known as the National Occupational Health & Safety Commission (NOHSC)).
- Carcinogen: An agent which is responsible for the formation of a cancer.
- Genotoxic: Capable of causing damage to genetic material, such as DNA.
- Mutagenic: Able to produce a mutation (a change in the genetic material of cells).
- Neurotoxicity: An adverse change in the structure or function of the nervous system.
- Oedema: Accumulation of fluid in tissues.
- PPE: Personal protective equipment.
- Teratogen: An agent capable of causing abnormalities in a developing foetus, that is causing birth defects.
- 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).

References

1. "Search Hazardous Substances". Safe Work Australia HSIS website. (2013).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

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.

End MSDS