

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: THIOZOLE

OTHER NAME: Emulsifiable concentrate containing 250 g/L prothioconazole

USE: Fungicide for control of diseases in wheat, barley and rye grass seed crops.

SUPPLIER NAME: AGPRO NZ Ltd

SUPPLIER ADDRESS: 10 Polaris Place, East Tamaki, Auckland 2013
PO Box 58-963, Botany, Auckland 2163

SUPPLIER CONTACT: 09 273 3456 or freephone 0508 536 536
www.agpro.co.nz

POISON INFORMATION: National Poison Centre, 0800 POISON (0800 764 766) 24 hours

CHEMICAL EMERGENCY: 0800 CHEMCALL (0800 243 622) 24 hours

2. HAZARDS IDENTIFICATION

NEW ZEALAND: Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996

APPROVAL NUMBER: HSR001661

HAZARD CLASSIFICATIONS: Eye irritation Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment chronic Category 2.

PICTOGRAMS:


SIGNAL WORD: WARNING

HAZARD STATEMENTS: Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life and with long lasting effects.

PREVENTION: Do not breathe mist/vapours/spray.
Wash hands thoroughly after handling.
Wear protective gloves and eye or face protection.
Avoid release to the environment.

RESPONSE: Get medical advice if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing. If eye irritation persists: Get medical advice.
Collect spillage.

STORAGE: Refer Section 7

DISPOSAL: Dispose of unwanted product and used packaging in compliance with local regulations.

TRANSPORT: Thiozole is classified as Dangerous Goods Class 9 for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Prothioconazole	178928-70-6	25*
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	< 15
Calcium dodecylbenzene sulfonate	26264-06-2	< 5
Dearomatised petroleum distillate	64742-48-9	< 60
Other ingredients	Trade secret	balance

* equivalent to 250 g/L prothioconazole

4. FIRST - AID MEASURES

Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. Have product label or SDS at hand.

If exposed, get medical advice if you feel unwell.

Ingestion	If swallowed, do NOT induce vomiting. Rinse mouth with water. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice.
Inhalation	Remove patient to fresh air. Keep in position comfortable for breathing. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and seek medical assistance immediately.
Skin contact	Remove contaminated clothing and wash affected area with soap and running water. If irritation persists, get medical advice. Wash contaminated clothing before reuse.
Eye contact	If in eyes flush with plenty of water holding eyelids open if necessary. Remove contact lenses if present, after a few minutes, then continue flushing with water. Get medical advice if irritation persists.
Advice to Doctor	No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability:	Non-flammable.
Hazardous Combustion Products:	If involved in a fire, may evolve toxic/harmful compounds.
Extinguishing Media:	Foam, water fog or spray, carbon dioxide or dry chemical as appropriate to surrounding materials.
Protective Equipment:	Full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Wear personal protective equipment. Exclude non-essential people from the area. Contain spillage. Collect spillage in labelled containers than can be closed, for reuse or disposal. For small liquid spills absorb spillage with sawdust or other inert absorbent material, and place in a sealable labelled waste container. Dispose of waste safely in an approved landfill or hazardous waste facility.
Environmental Precautions:	Prevent from entering drains, waterways or sewers. If spill does enter waterways immediately contact local authority. Thiozole is a herbicide and spillage on soil may damage crops.

7. HANDLING AND STORAGE

Handling:	Keep out of reach of children. Read label before use. Keep container tightly closed when not in use. Use only according to label. Wear personal protective equipment. Avoid contact with skin and eyes and inhalation of vapours or spray mist. Use outdoors or in well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Do not apply directly into or onto water. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area.
Storage:	Signage, an emergency response plan and secondary containment are required when more than 1000 L is on site. Store in original container tightly closed and in a secure well-ventilated area away from foodstuffs, fertilizer and seed. For guidance refer to the current version of NZS 8409 Management of Agrichemicals and the Health and Safety at Work (Hazardous Substances) Regulations 2017.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Worksafe NZ (12th edition, November 2020)

<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>
No ingredients listed	-	-	-

Protective Equipment: When opening the container, preparing to measure, load or when applying: wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**,

Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Engineering Controls: Handle outdoors or in a well-ventilated area. Use local exhaust ventilation, or other engineering controls as appropriate to conditions.

Hygiene Precautions: Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing and equipment daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown liquid
Odour:	Petroleum-like
Odour threshold:	No information available
pH (1% aqueous solution)	5.0 - 6.0
Melting point/freezing point:	Not available
Initial boiling point/range:	Not available
Flashpoint:	Non-flammable
Flammability (solid, gas):	Not applicable
Upper/lower flammability limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	ca 1.02
Solubilities:	Forms emulsion in water
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	No information available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions in original container for at least two years.
Conditions to avoid:	Keep out of direct sunlight and away from flames/ignition sources.
Incompatible substances or materials:	No specific information available.
Hazardous polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Not classified as acutely toxic if swallowed, in contact with skin or if inhaled.
Aspiration hazard:	Not classified. Thiozole does contain a hydrocarbon solvent.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Not classified.
Serious eye damage/irritation:	Severe eye irritant.
Respiratory or skin sensitization:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
Reproductive toxicity:	Not classified.
Specific organ toxicity:	May cause damage organs or systems through prolonged or repeated exposure. Prothioconazole may cause damage to the liver or kidneys.
Narcotic effects:	Thiozole does contain a hydrocarbon solvent and over-exposure may result in drowsiness or dizziness.
Toxicological information:	<u>Prothioconazole (active)</u> Oral, rat LD ₅₀ >6200 mg/kg bw Dermal, rat LD ₅₀ 2000 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) >4.99 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Thiozole is classified as being toxic to aquatic life with long-lasting effects.
Ecotoxicological information:	<u>Prothioconazole (active)</u> Fish: <i>Oncorhynchus mykiss</i> LC ₅₀ (96 h) 1.83 g/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 1.3 mg/L Algae: <i>Pseudokirchneriella subcapitata</i> EC ₅₀ (72 hr) growth 2.18 mg/L Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7d) growth, >0.18 mg/L Bird: <i>Colinus virginianus</i> LD ₅₀ >2000 mg/kg bw
Persistence and degradability:	DT ₅₀ (typical) 14.1 days.
Potential to be bioaccumulative:	Not expected to be bioaccumulative.
Mobility in soil:	Active ingredient has limited solubility in water.
Other adverse effects:	No information available.
Environmental Exposure Limits (EEL)	Not Applicable

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Dispose of product only by using according to label or dispose of at an approved landfill.
Container Disposal:	Ensure container is completely empty. Triple rinse with water and add rinsate to spray tank. Dispose of empty clean container to recycler for agricultural chemicals, otherwise crush and bury in an approved landfill. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

UN Number:	3082
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (prothioconazole 25%)
DG Class:	9
Packing Group:	III
Marine Pollutant:	Yes
HAZCHEM	3Z

Do not carry more than 10L of Thiozole on a passenger services vehicle.

15. REGULATORY INFORMATION

New Zealand	Registered pursuant to the ACVM Act 1997, No. P9354	
	See www.foodsafety.govt.nz for registration conditions	
	Approved pursuant to the HSNO Act 1996, Approval Code HSR001661	
	See www.epa.govt.nz for Controls and www.worksafe.govt.nz .	
Qualifications		Not Required
Tracking:		Not Required
Safety Data Sheet:		Any quantity
Restricted to workplace only:		Yes
Quantity that must be secured when unattended:		Not Applicable
Fire extinguishers		Not Required
Quantity for secondary containment and emergency response plan:		1000 L
Quantity for signage:		1000 L
Quantity for Location certificate		Not Required
Records of use (3 kg or more applied to area within 24 hours)		Not Required
Quantity that requires management in accordance with HSW HS Regulations		Not Applicable
Environmental Exposure Limits (EEL)		Not Applicable
<u>Additional controls</u>		
The following application area is set 200 g ai/ha (maximum of 3 applications per year).		
Shall only be used for application to cereal crops and ryegrass seed crops.		

16. OTHER INFORMATION

Version: 1.1

Issue Date: 15 June 2023

Reason for Issue: Supplier's contact details updated

Replaces: Replaces version 1.0 dated February 2022

References:

ECHA European Chemical Agency

NZ EPA Approved Hazardous Substances Databases.

Supplier Safety Data Sheets

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

NZS 5433:2020 New Zealand Standard Transport of Dangerous Goods on Land

Abbreviations:

ACVM	Agricultural Chemicals and Veterinary Medicines Group
ADI	Acceptable Daily Intakes
BCF	Bioconcentration factor
CAS Number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters

HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC ₅₀	Median Lethal Concentration
LD ₅₀	Median Lethal Dose (50% population)
SDS	Safety Data Sheet
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average
UN Number	United Nations Number
WES-STEL	Workplace exposure standards – Short-term exposure limit
WES-TWA	Workplace exposure standards – Time-weighted average

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

End of Safety Data Sheet.