

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: EPOZOLE
OTHER NAME: Suspension concentrate containing 125g/L epoxiconazole
USE: Fungicide
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: HSR101056

HAZARD CLASSIFICATIONS: Reproductive toxicity Category 2, Carcinogenicity Category 2, Specific target organ toxicity (repeated) Category 2, Hazardous to the aquatic environment chronic Category 3.

PICTOGRAMS:



SIGNAL WORD: WARNING

HAZARD STATEMENTS: Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life and with long lasting effects.

PREVENTION: Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist/vapours/spray.
Avoid release to the environment.
Use personal protective equipment as required.

RESPONSE: If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

STORAGE: Store locked up.

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

TRANSPORT: Epazole is not classified as Dangerous Goods for Transport (NZS 5433:2020).

LABEL: Do not apply directly into or onto water.
Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Epoxiconazole	133855-98-8	11 – 12*
Ethylene glycol	107-21-1	1 - 9
Other ingredients	Trade secret	balance

*equivalent to 125 g/L epoxiconazole

This is a commercial product whose exact ratio of components may vary slightly.

4. FIRST - AID MEASURES

If exposed or concerned, get medical advice. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor.

Have product label or SDS at hand.

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 if you feel unwell.
Inhalation	Remove patient to fresh air. Keep in position comfortable for breathing. Get medical advice/attention if you feel unwell. 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 with plenty of soap and water. Do NOT scrub the skin. If irritation persists, get medical advice. Wash contaminated clothing before reuse.
Eye contact	If in eyes, rinse cautiously for several minutes-. Remove contact lenses if present, and easy to do. 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:	Water fog or fine 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 that can be sealed, for reuse or disposal. Absorb liquid spills with inert 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.

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. 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 locked well-ventilated area away from foodstuffs, fertilisers and seeds. For guidance refer to the current version of NZS 8409 Management of Agrichemicals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Worksafe NZ (13th edition, April 2022)

<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>
Ethylene glycol	Inhalation	Vapour, mist	50 ppm ; 127 mg/m ³

Protective Equipment: When opening the container, preparing to measure, load or when applying: wear safety goggles or a face shield, impermeable gloves, cotton overalls buttoned to the neck and wrist, a washable hat, 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: Opaque, white to clear beige liquid

Odour: Slight aromatic

Odour threshold: No information available.

pH: 6.0 - 9.0 (1% aqueous)

Melting point/freezing point: Not available

Initial boiling point/range: Not available

Flashpoint: Non-flammable; >100°C

Flammability (solid, gas): Not applicable

Upper/lower flammability limits: Not available

Vapour pressure: Not available

Vapour density: Not available

Relative density: 1.05

Solubilities: Disperses 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: Not specified.

Incompatible substances or materials: Not specified.

Hazardous polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not classified.

Aspiration hazard: Not classified.

Respiratory irritation: May be slightly irritating.

Skin corrosion/irritation:	Mild irritant.
Serious eye damage/irritation:	May be mildly irritating to eyes.
Respiratory or skin sensitization:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Epoxiconazole is classified as may cause cancer.
Reproductive toxicity:	Epoxiconazole is classified as may cause reproductive or developmental effects.
Specific organ toxicity:	May cause damage to organs on repeated or prolonged exposure. Epoxiconazole affects the liver.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Epoxiconazole (active)</u> Oral, rat LD ₅₀ 3160 mg/kg bw Dermal, rabbit LD ₅₀ 2000 mg/kg bw Inhalation, rat LC ₅₀ 4 hr >5.3 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Product is classified as being harmful to aquatic life with long-lasting effects.
Ecotoxicological information:	<u>Epoxiconazole (active)</u> Fish: Rainbow trout LC ₅₀ (96 h) 2.2 - 4.6 mg/L; NOEC (juvenile growth) (28 d) 0.01 mg/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 8.7 mg/L; NOEC (reproduction) (21 d) 0.63 mg/L Algae: EC ₅₀ (72 h) growth 2.3 mg/L Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7d) growth, 0.014 mg/L Bird: <i>Colinus virginianus</i> LD ₅₀ >2000 mg/kg bw
Persistence and degradability:	Epoxiconazole is not readily biodegradable. DT ₅₀ (typical) 353.5; persistent.
Potential to be bioaccumulative:	Not expected to be bioaccumulative. Epoxiconazole Log K _{OW} 3.44.
Mobility in soil:	Epoxiconazole water solubility 6.63 mg/L. Expected to have low leachability in soil.
Other adverse effects:	No information available.
Environmental Exposure Limits (EEL):	Not applicable.

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Do not contaminate any water supply with product or used container. Dispose of product only by using according to label or dispose of at an approved landfill. Do not burn product.
Container Disposal:	Ensure container is completely empty. Triple rinse with water add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326 www.agrecovery.co.nz). Do not use container for any other purpose.

14. TRANSPORT INFORMATION

Epazole is not classified as Dangerous Goods for the purposes of transport (NZS 5433:2020)

UN Number: Non-regulated

Proper Shipping Name:

DG Class:

Packing Group:

Marine Pollutant:

HAZCHEM

15. REGULATORY INFORMATION

New Zealand	Approved pursuant to the ACVM Act 1997, P9279 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR101056
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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:	No
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	1000 L
Additional controls	-

16. OTHER INFORMATION

Version: 1.0

Issue Date: 4 September 2023

Reason for Issue: New Safety Data Sheet.

Replaces: Not applicable.

References:

Supplier Safety Data Sheets

NZ EPA Approved Hazardous Substances Databases.

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

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

University of Hertfordshire Pesticides Properties Database (PPDB)

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.