

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: Cymoxanil
 Product Use: A curative fungicide for control of downy mildew in garlic and onions and late blight in potatoes
 Restriction of Use: Refer to Section 15
 New Zealand Supplier: **Agrisource 2000 Ltd**
 Address: 45 Kitchener Road
 Pukekohe, Auckland
 Telephone: +64 9 237 0422
Emergency No: 0800 764 766 (National Poison Centre)
 Date of SDS Preparation: 20 February 2023

Section 2. Hazards Identification

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

EPA Approval No: HSR100090

Pictograms



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.
Hazardous to terrestrial vertebrates	H433	Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P261	Avoid breathing dust, fumes, gas, mist, vapours or spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
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.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see first aid instruction on this label).
P330	Rinse mouth.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. Keep out of reach of children. Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Cymoxanil	45	57966-95-7
Inert Ingredients	55	-

Section 4. First Aid Measures

Routes of Exposure:

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/attention.
If on Skin	If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water.
If Swallowed	Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or

waistband. Get medical attention if symptoms appear.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed.

Symptoms: Harmful if swallowed. Causes serious eye irritation. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.

Notes to physician Treat symptomatically. No specific antidote is known.

Section 5. Fire Fighting Measures

Hazard Type	This product is non-flammable, non-explosive and is non-combustible.
Hazards from decomposition products	HCl, carbon dioxide and NO ₂ . Traces of other toxic gases cannot be excluded under certain fire conditions.
Suitable Extinguishing media	Fog, dry chemical powder, CO ₂ , Alcohol or polymer foam, water spray.
Precautions for firefighters and special protective clothing	Wear protective clothing and self-contained breathing apparatus. Do not breathe smoke or gases. Run-off from fire control may be a pollution hazard.
HAZCHEM CODE	2Z

Section 6. Accidental Release Measures

Personal precautions: Avoid contact with skin and eyes. Do not inhale dust or spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when cleaning up spill. Wash hands and face once spill has been cleaned up.

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

Methods for cleaning up: In the case of spillage, contain spilled material. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum or shovel waste into a drum. To decontaminate spill area, tools and equipment, wash with water. Dispose of contained wastes in accordance with the requirements of Local Authorities.

Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.

- When mixing or applying, Avoid contact with skin and eyes and inhalation of concentrate or spray mist.
- Do not eat or drink while using.
- Wear protective clothing, gloves and goggles. See section 8.
- Wash protective clothing after work.
- Avoid release to the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in a cool, dry, well ventilated place and protect from sunlight.
- Keep from contact with fertilizers, insecticides, fungicides and seeds.
- Keep out of reach of children.
- Store in original container, tightly closed, away from foodstuffs.
- This product may cause dust explosion, if water soluble bag is broken.
- Fine dust particles can form explosive mixtures with air.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

[None assigned. See Note 1]

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 APRIL 2022 13TH EDITION.

Note 1.

No exposure limits (WES, or EELs) have been specifically assigned for this product. TEL values for Triadimenol: ADE = 0.05 mg/kg bw/day, PDE [food] = 0.04 mg/kg bw/day, PDE [drinking water] = 0.01 mg/kg bw/day.

Engineering Controls

Use in well ventilated areas.

Personal Protection Equipment



Eyes	Wear chemical goggles or face shield.
Skin	Wear suitable protective gloves (e.g. Polyvinyl chloride – PVC). After contamination with product change the gloves immediately. Wear suitable protective clothing.
Respiratory	Where insufficient ventilation, use suitable respiratory protection.
General Hygiene	Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

Section 9 Physical and Chemical Properties

Appearance	Granules
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Product Name: Curfew
Date of SDS: 20 February 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Colour	Beige
Odour	Not available
Odour Threshold	Not available
pH	5.47 (1% in water)
Boiling Point	Not available
Melting /Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Bulk Density	Approx. 0.49
Solubility	Disperses in water
Octanol/water partition coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Octanol/Water Particle Coefficient	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal conditions of use.
Possibility of hazardous reactions	None expected.
Conditions to Avoid	None specified.
Incompatible Materials	None known.
Hazardous Decomposition Products	Fire: HCl, carbon dioxide and NO ₂ . Traces of other toxic gases cannot be excluded under certain fire conditions.

Section 11 Toxicological Information

Acute Effects:

Swallowed	LD50: 860 mg/kg (Mouse)
Dermal	Not applicable. LD50: >5000mg/kg
Inhalation	Not applicable. Granule.
Eye	Causes serious eye irritation.
Skin	Skin sensitizer - may cause rash.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Harmful to human target organs (liver) on prolonged or repeated exposure via ingestion.

Section 12. Ecotoxicological Information

Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms.

Product:	
Persistence and degradability	Not rapidly degradable.
Bioaccumulation	Not bioaccumulative.
Mobility in Soil	No data available
Other adverse effects	No data available

Data for technical active ingredient Cymoxanil:

Aquatic:

LC50 = 10 mg/L, 96 hr (Rainbow trout)

EC50 (Daphnia trout / 48hr) >100 mg/l

Algae:

EC50 (algae, 72hr) 5.2 mg/L

Do not allow to enter waterways.

Non-toxic to terrestrial invertebrates.

Contact LC50 Honeybee > 100 µg/bee.

Section 13. Disposal Considerations

Disposal Method:

Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.

Container Disposal: Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.

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, Rail, Sea and Air Transport

UN No	3077
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYMOXANIL)
Marine Pollutant	Yes
Special Provisions	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 hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR100090

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	100kg
Emergency Response Plan (Schedule 5)	100kg
Secondary Containment (Schedule 5)	Not required
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Location Certificate	Not required
Restrictions of use	Refer to EPA website for full control details www.epa.govt.co.nz
HPC Notice Part 4 Subpart B	The maximum application rate for Curfew 450 WDG shall be 164 g ai/ha (364g Curfew), with a maximum application frequency of 5 applications per season and a minimum application interval of 5 days.
ACVM Registration Number (See www.foodsafety.govt.nz for registration Conditions).	P8010

Section 16 Other Information**Glossary**

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 APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the Agrisource 2000 Ltd, if further information is required.

Issue Date: 17 February 2023

Review Date: 17 February 2028