

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Curfew** (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 |
| 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 sensitiser - 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.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 |

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.

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