

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **ETHOMATE® Herbicide**
 Product Use: Herbicide
 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: 22 February 2023

Section 2. Hazards Identification

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

EPA Approval No: HSR000826

Pictograms



Ecotoxic

Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.
-	H421	Very toxic to the soil environment.

Prevention Code	Prevention Statement
P103	Read label before use.
P273	Avoid release to the environment.

Response Code	Response Statement
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	

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

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Ethofumesate	<60%	26225-79-6
Inerts & Surfactants	<20%	Proprietary
Water	Balance	7732-18-5

Section 4. First Aid Measures

Routes of Exposure:

- If in Eyes Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
- If on Skin In case of skin contact, immediately flush skin with plenty of water and soap. Remove contaminated clothing. Cold water may be used. Wash clothing before reuse. Get medical attention if irritation persists.
- If Swallowed Do not induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
- 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: None known.

Advice to Physician: Treat Symptomatically

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Oxides of carbon, sulphur and nitrogen may be released.
Suitable Extinguishing media	Dry chemical, carbon dioxide, foam, water mist. Do not use high power water jet.
Precautions for firefighters and special protective clothing	Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or gases. All run-off must be contained.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and an approved pesticide respirator or air-supplied respirator. Evacuate all unnecessary personnel. Extinguish any sources of ignition. Spills may be slippery and should be cleaned up immediately.

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

Large Spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains. Dispose of contained wastes in accordance with the requirements of Local Authorities as detailed in Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Avoid release to the environment.
- When mixing or applying, avoid inhalation of vapors or spray mist and contact with skin and eyes.
- Wear protective clothing, gloves and goggles.
- Do not eat or drink while using.
- Wash hands and face before meals and after work.
- Wash protective clothing after work.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- 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).
- Packaging Materials: HDPE Plastic bottle.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

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

No ingredients have exposure limits

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 NOV 2019 11TH EDITION.

Engineering Controls

Ensure ventilation is adequate, generally natural ventilation is adequate.

Personal Protection Equipment



Eyes	Wear chemical goggles or face shield.
Hands	Elbow-length chemical resistant gloves
Respiratory	Where insufficient ventilation, use suitable respiratory protection.
General	Avoid inhaling 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	Liquid
Colour	White
Odour	Mild aromatic
Odour Threshold	Not available
pH	7-8
Boiling Point	Not available
Melting Point	Not available
Freezing Point	< 0°C
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	6.45 x 10 ⁻⁷ mm Hg (active ingredient)
Vapour Density	Not available
Specific Gravity or density	Approx. 1.12 (refer to specific batch)
Solubility	Dispersible
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Octanol/Water Particle Coefficient	2.69 (active ingredient)

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	None expected.
Conditions to Avoid	Extreme heat or cold.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	Oxides of carbon, sulphur and nitrogen may be released.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable. LD50 >6000mg/kg (rat)
Dermal	Not applicable. LD50 >2000mg/kg (rabbit)
Inhalation	Not applicable. LC50 >0.57 g/m ³ (rat 4hr)
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.

STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

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

Product: Fish Toxicity	LC50 (96 hr): 22-40mg/l (rainbow trout).
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Individual component information (Please refer to www.epa.govt.co.nz for full details):

Ethofumesate (Cas No 26225-79-6):

Route	Species	Duration	Value LC50/EC50
Acute aquatic, fish	Cyprinus carpio	96 hr	11 mg/L as/l
Chronic aquatic, fish	Oncorhynchus mykiss	21 day	0.8 mg/L as/l
aquatic, Crustacean	Daphnia	48 hr	13.52 – 22 mg/L
Aquatic, Algal	Algae	-	3.9 mg/L
Bioaccumulative	No		
Rapidly Degradable	No		
Very ecotoxic in the soil environment	Root absorbed herbicide; persistent.		Soil DT 50 > 30 days: yes

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

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	3082
Class - Primary	9
Packing Group	III

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S (ethofumesate)
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
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This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR000826

GHS Classification: Aquatic Chronic 2

HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	1000L
Emergency Response Plan (Schedule 5)	1000L
Secondary Containment (Schedule 5)	1000L
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
HSNO Additional Controls (Restrictions of use)	
77A	This substance must not be applied onto or into water.
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators. Schedule 8A.
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides
ACVM Act and Regulations	
See www.foodsafety.govt.nz for registration Conditions	P9807

Section 16	Other Information
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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 Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
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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