

SAFETY DATA SHEET

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

Section 1.	Identification of the material and the supplier
Product:	ETHOMATE [®]
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	on: 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



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
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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.
lf 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 None known.

Symptoms:

Advice to Physician: Treat Symptomatically

Section 5. F	ire Fighting Measures
Hazard Type	Non Flammable
Hazards from	Oxides of carbon, sulphur and nitrogen may be released.
combustion products	
Suitable	Dry chemical, carbon dioxide, foam, water mist. Do not use high power water jet.
Extinguishing media	
Precautions for	Wear full protective clothing and self-contained breathing apparatus. Do not
firefighters and	breathe smoke or gases. All run-off must be contained.
special protective	
clothing	
HAZCHEM CODE	3Z

Section 6. **Accidental Release Measures**

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, longsleeved 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.

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	
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WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m³	STEL ppm mg/m³

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
рН	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	Not available
Limits	
Vapour Pressure	6.45 x 10-7mm 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	Not available
Temperature	
Kinematic Viscosity	Not available
Octanol/Water Particle	2.69 (active ingredient)
Coefficient	

Section 10. Stability and Reactivity

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

Acute Effects:

Swallowed	Not applicable. LD50 >6000mg/kg (rat)
Dermal	Not applicable. LD50 >2000mg/kg (rabbit)
Inhalation	Not applicable. LC50 >0.57 g/m3 (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	Deat absorbed barbiside: paraistant		Soil DT 50 > 30
environment	Root absorbed herbicide; persistent.		days: yes

Do not allow to enter waterways.

Section 13.	Disposal Considerations	
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Disposal Method:

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

FREE RECYCLING		
4	AGRECOVERY	
l	.agrecovery.co.nz	

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	
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

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 <u>www.foodsafety.govt.nz</u> for registration	P9807				
Conditions					

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
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

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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

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