

## Section 1 - Identification of Chemical Product and Company

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**Substance:** Ethofumesate is a benzofuranyl alkanesulfonate derivative.  
**Trade Name:** Farmoz Matrix 500 Selective Herbicide  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Creation Date:** November, 2002  
**Revision Date:** August, 2008

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of ASCC Australia.

Not subject to the ADG Code when transported by Road and Rail. (ADG 7, Special Provision AU01).

**Risk Phrases:** R51/53. Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

**Safety Phrases:** S57, S60, S61. Use appropriate container to avoid environmental contamination. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety Data Sheets.

**SUSDP Classification:** S5

**ADG Classification:** Class 9: Miscellaneous Dangerous Goods.

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

### Emergency Overview

**Physical Description & colour:** Milky white to buff coloured liquid.

**Odour:** Mild aromatic odour.

**Major Health Hazards:** no significant risk factors have been found for this product.

### Potential Health Effects

#### Inhalation

**Short term exposure:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

**Long Term exposure:** No data for health effects associated with long term inhalation.

#### Skin Contact:

**Short term exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

**Long Term exposure:** No data for health effects associated with long term skin exposure.

#### Eye Contact:

**Short term exposure:** Available data shows that this product is not harmful. However product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

**Long Term exposure:** No data for health effects associated with long term eye exposure.

#### Ingestion:

**Short term exposure:** Available data shows that this product is not harmful. This product is unlikely to cause any irritation problems in the short or long term.

**Long Term exposure:** No data for health effects associated with long term ingestion.

#### Carcinogen Status:

**ASCC:** No significant ingredient is classified as carcinogenic by ASCC.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

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## Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Ethofumesate	26225-79-6	50	not set	not set
Other non hazardous ingredients	secret	5-10	not set	not set
Water	7732-18-5	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

## Section 4 - First Aid Measures

### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed.

**Ingestion:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

## Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

**Extinguishing Media:** Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

**Flash point:** Will not burn until water component is driven off.

**Upper Flammability Limit:** Does not burn.

**Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Does not burn.

**Flammability Class:** Does not burn.

## Section 6 - Accidental Release Measures

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

## Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to

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## Section 11 - Toxicological Information

The studies below were carried out with Ethofumesate technical (97.4%), the active ingredient for this formulated product.

**Sub-Chronic Toxicity:** Results from the 90-day animal studies suggest no target organ effects under the conditions of normal handling and use.

**Chronic Toxicity:** In two-year feeding studies with animals, adverse effects were only observed at very high doses. These include: a reduced weight gain in males and increased liver weight in females (rats, 5000 ppm); an increase of liver weight in females (hamsters, 2000 ppm); an increased liver weight in both males and females (dogs, 20,000 ppm).

**Reproductive & Developmental Toxicity study.** No adverse effects of Ethofumesate were observed in a three generation rat

**Teratogenicity:** No teratogenic effects were seen in rats at dose levels up to 80 mg/kg/day. In rabbits, no adverse effects of biological significance were observed at the low dose (30 mg/kg/day); slight embryo-lethal effects were noted at 300 mg/kg/day; severe maternal toxicity and moderate embryo-lethal effects were observed at the highest dose (3,000 mg/kg/day). No malformations were observed even at the highest dose.

**Mutagenicity:** Ethofumesate was not mutagenic or genotoxic when tested in the Ames genetic mutation assay and in four other mutagenesis systems.

## Classification of Hazardous Ingredients

Ingredient	Risk Phrases
No hazardous ingredients present in hazardous concentrations.	

## Section 12 - Ecological Information

Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash waters.

## Section 13 - Disposal Considerations

**Disposal:** Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed. Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

## Section 14 - Transport Information

**Not subject to the ADG Code when transported by Road and Rail. (ADG 7, Special Provision AU01).**

**ADG Code:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Hazchem Code:** 3Z

**Special Provisions:** 179, 274, AU01

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

**Dangerous Goods Class:** Class 9: Miscellaneous Dangerous Goods.

**Packaging Group:** III

**Packaging Method:** P001, IBC03, LP01

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

## Section 15 - Regulatory Information

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database.

## Section 16 - Other Information

**This MSDS contains only safety-related information. For other data see product literature.**

**Acronyms:**

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

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<b>AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>ASCC</b>	Office of the Australian Safety and Compensation Council
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

Contact Points:

Call Farmoz on (02)9431 7800

Fax: (02)9431 7700 and ask for the technical manager.

Police and Fire Brigade:

Dial 000

Emergency contact:

1800 024 973 (24 hours)

**If ineffective:**

**Dial Poisons Information Centre  
(13 1126 from anywhere in Australia)**

The information contained in this Material Safety Data Sheet is provided in good faith and is believed to be correct at the date hereof. However, it is expected that individuals receiving the information will exercise their independent judgement in determining its appropriateness for a particular purpose. Farmoz Pty Ltd makes no representation as to the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability whatsoever, whether with respect to negligence or otherwise, for any loss or damage arising from or connection with the supply or use of the information in this Material Safety Data Sheet.

Please read all labels carefully before using product.

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