

## Section 1 - Identification of Chemical Product and Company

### Statement of Hazardous Nature

This product is classified as: Hazardous according to the criteria of NOHSC Australia.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

<b>Farmoz Pty Ltd</b> , Suite 1, Level 4, Building B 207 Pacific Highway, St Leonards, NSW 2068 ACN 050 328 973	Telephone (02)9431 7800 (24 hours) Fax (02)9431 7700
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**Substance:** Flutriafol is an azole derived fungicide.  
**Trade Name:** Farmoz Jubilee In-Furrow & Foliar Fungicide  
**Product Use:** Agricultural fungicide for uses as described on product label.  
**Creation Date:** June, 2002  
**Revision Date:** November, 2003

## Section 2 – Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Flutriafol	76674-21-0	25	not set	not set
Other non hazardous ingredients	secret	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 3 - Hazards Identification

**Risk Phrases:** R22. Harmful if swallowed.

**Safety Phrases:** S20, S24/25. When using, do not eat or drink. Avoid contact with skin and eyes.

**SUSDP Classification:** S6

**ADG Classification:** None allocated. Not a Dangerous Good.

**UN Number:** None allocated

### Emergency Overview

**Physical Description & colour:** Blue or yellow coloured liquid.

**Odour:** No data.

**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, this 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 inhalation.

#### Skin Contact:

**Short term exposure:** Available data shows that this product is not harmful.

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

#### Eye Contact:

**Short term exposure:** This product is believed to be mildly 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 harmful, but symptoms are not available.

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

### MATERIAL SAFETY DATA SHEET

**Carcinogen Status:**

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

**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 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:** If significant skin contact occurs, wash gently and thoroughly with water (use non-abrasive soap if necessary) until chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts). If symptoms of poisoning occur, contact a Poisons Information Centre, or call a doctor.

**Eye Contact:** Quickly and gently blot or brush product away. Flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, or until the product is removed, while holding the eyelid(s) open. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

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**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:** Not Combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:** Immediately evacuate the area of unnecessary personnel.

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

**Upper Flammability Limit:** No data.

**Lower Flammability Limit:** No data.

**Autoignition temperature:** No data.

**Flammability Class:** No data.

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**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.

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**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 persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this class of poison. Store packages of this product in a cool place. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Check packaging - there may be further storage instructions on the label.

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**Section 8 Exposure Controls and Personal Protection**

The following Australian Standards will provide general advice regarding safety clothing and equipment:

**MATERIAL SAFETY DATA SHEET**

This revision issued: November, 2003

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**Exposure Limits****TWA (mg/m<sup>3</sup>)****STEL (mg/m<sup>3</sup>)**

Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

The ADI for Flutriafol is set at 0.01mg/kg/day. The corresponding NOEL is set at 1mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, January 2001.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, PVC.

**Respirator:** If there is a significant chance that vapours or mists are likely to build up in the area where this product is being used, we recommend that you use a respirator. It should be fitted with a suitable cartridge. Otherwise, not normally necessary.

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## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Blue or yellow coloured liquid.
<b>Odour:</b>	No data.
<b>Boiling Point:</b>	Approximately 100°C at 100kPa.
<b>Freezing/Melting Point:</b>	Approximately 0°C.
<b>Volatiles:</b>	Water component.
<b>Vapour Pressure:</b>	2.37 kPa at 20°C (water vapour pressure).
<b>Specific Gravity:</b>	1.09
<b>Water Solubility:</b>	Dispersible.
<b>pH:</b>	No data.
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water distribution:</b>	No data
<b>Autoignition temp:</b>	No data.

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## Section 10 – Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** None known.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Hydrogen fluoride gas and other compounds of fluorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

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## Section 11 – Toxicological Information

**Target Organs:** There is no data to hand indicating any particular target organs.

<b>Classification of Hazardous Ingredients</b>	
<b>Ingredient</b>	<b>Risk Phrases</b>
<b>Flutriafol</b>	None allocated
<b>Flutriafol:</b> LD <sub>50</sub> Oral, Rat 1140-1480mg/kg	LD <sub>50</sub> Dermal, Mouse = >1000mg/kg
LD <sub>50</sub> Dermal, Rabbit >2000mg/kg	LC <sub>50</sub> Inhalation, Rat = 1.65mg/L/4hr

### MATERIAL SAFETY DATA SHEET

## Section 12 – Ecological Information

This product is harmful to aquatic organisms. This product is toxic to bees. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

### Flutriafol:

**Birds:** LD<sub>50</sub> female mallard: >5000mg/kg

**Fish:** LC<sub>50</sub> rainbow trout: 61mg/L

LC<sub>50</sub> mirror carp: 77mg/L

**Bees:** LD<sub>50</sub> >5µg/bee

**Daphnia:** EC<sub>50</sub> 78mg/L

## 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.

## Section 14 – Transport Information

**ADG Code:** This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

## 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:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<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>NOHSC</b>	National Occupational Health and Safety Commission
<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 Farnoz 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. Farnoz 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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<http://www.kilford.com.au/> Phone (02)9251 4532