

## Flutriafol

Issued: July, 2010

### Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

**Trade Name:** UNITED FARMERS FLUTRIAFOL IN-FURROW & FOLIAR FUNGICIDE  
**Substance:** Flutriafol is an azole derived fungicide.  
**Product Use:** Agricultural fungicide for use as described on the product label.  
**Company Identification:** Ravensdown Fertiliser Co-operative Limited – Incorporated in New Zealand  
**Address:** 2 Birksgate Rd  
Rous Head  
North Fremantle, WA 6160  
**Customer Centre:** 1800 624 122  
**Poisons Information Centre:** 13 1126 in Australia, 0800 764 766 in New Zealand  
**Emergency Telephone Number:** For specialist advice call 1800 705 766 (24hr) (Emergencies Only)  
**Transport Emergency:** IN AN EMERGENCY, DIAL 000 – FIRE or POLICE

### Section 2: HAZARD IDENTIFICATION

**Statement of Hazardous Nature:** This product is classified as: Hazardous according to the criteria of NOHSC Australia. This product does not meet the criteria of the Australian Dangerous Goods (ADG) Code.  
**Risk Phrases:** R20 Harmful by inhalation  
R22 Harmful if swallowed  
R36 Irritating to the eyes  
**Safety Phrases:** S20 When using, do not eat or drink  
S23 Do not breathe vapours or spray mist  
S38 In case of insufficient ventilation, wear suitable respiratory equipment  
S24/25 Avoid contact with the skin and eyes  
S36/37 Wear suitable protective clothing and gloves

### Section 3: COMPOSITION INFORMATION

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 4: FIRST AID MEASURES

#### Emergency Overview

#### Physical Description & Colour:

Blue or yellow coloured liquid.

#### Odour:

No data.

#### Major Health Hazards:

Harmful if swallowed, by inhalation, eye irritant.

#### 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 (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

<b>Inhalation:</b>	If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.
<b>Skin Contact:</b>	Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.
<b>Eye Contact:</b>	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical advice immediately. Take special care if exposed person is wearing contact lenses.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

## Section 5: FIRE FIGHTING MEASURES

<b>Fire and Explosion Hazards:</b>	There is no risk of explosion from this product under normal circumstances if it is involved in a fire. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are likely to be irritating if inhaled.
<b>Extinguishing Media:</b>	Not combustible. Use extinguishing media suited to burning materials.
<b>Fire Fighting:</b>	If a significant quantity of this product is involved in a fire, call the fire brigade.
<b>Flash point:</b>	Does not burn.
<b>Upper Flammability Limit:</b>	Does not burn.
<b>Lower Flammability Limit:</b>	Does not burn.
<b>Autoignition temperature:</b>	Not applicable - does not burn.
<b>Flammability Class:</b>	Does not burn.

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Spills and Disposal:</b>	Wear appropriate protective clothing. Exclude non-essential people from the area. Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of waste safely in an approved landfill.
<b>Protective Clothing:</b>	For appropriate personal protective equipment see section 8.
<b>Environmental Precaution:</b>	Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.

## Section 7: HANDLING AND STORAGE

<b>Handling:</b>	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.
<b>Storage:</b>	This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

## Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

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

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**.

<b>Exposure Limits:</b>	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, Dec 2004.
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No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

<b>Ventilation:</b>	No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.
<b>Eye Protection:</b>	Eye protection such as protective glasses or goggles is recommended when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

**Skin Protection:** You should avoid contact even with mild skin irritants. Therefore you should wear suitable impermeous elbow-length gloves and facial protection when handling this product. See below for suitable material types.

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

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being used.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical Description & colour:** Blue or yellow coloured liquid.  
**Odour:** No data.  
**Boiling Point:** Approximately 100°C at 100kPa.  
**Freezing/Melting Point:** Approximately 0°C.  
**Volatiles:** Water component.  
**Vapour Pressure:** 2.37kPA at 20°C (water vapour pressure).  
**Vapour Density:** No data.  
**Specific Gravity:** 1.09 approx  
**Water Solubility:** Dispersible.  
**pH:** No data.  
**Volatility:** No data.  
**Odour Threshold:** No data.  
**Evaporation Rate:** No data.  
**Coeff Oil/water Distribution:** No data  
**Autoignition temp:** Not applicable – does not burn.

## 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:** Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** No particular incompatibilities.

**Fire Decomposition:** Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. 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. Oxides of phosphorus and other phosphorus compounds. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgement, and unconsciousness followed by coma and death.

**Polymerisation:** This product will not undergo polymerisation reactions.

## Section 11: TOXICOLOGICAL INFORMATION

### Potential Health Effects

#### Inhalation

**Short Term Exposure:** Available data indicates that this product is harmful, but symptoms are not available. In addition product may be mildly irritating, although 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 indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly 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:** This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

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

#### Ingestion

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

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

**Toxicity:** For Flutriafol:  
LD<sub>50</sub> Oral Rat 1140-1480mg/kg LD<sub>50</sub> Dermal Mouse => 1000mg/kg  
LD<sub>50</sub> Inhalation Rat = 1.65mg/L/4hr LD<sub>50</sub> Dermal Rabbit >2000mg/kg

**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.

## 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.

### For Flutriafol:

**Birds:** LD<sub>50</sub> female mallard: >5000mg/kg  
**Fish:** LC<sub>50</sub> mirror carp: 77mg/L LC<sub>50</sub> rainbow trout: 61mg/L  
**Bees:** LD<sub>50</sub> >5µ/bee  
**Daphnia:** EC<sub>50</sub> 78mg/L

## Section 13: DISPOSAL INFORMATION

Follow label advice for the disposal of empty containers, packaging and for the return of refillable containers.

**Product Disposal:** For the disposal of unwanted / unusable chemicals, seek advice from suppliers, local government, your local Waste Management Authority and consult ChemClear, 1800 008 182  
<http://www.chemclear.com.au/>

**Container Disposal:** Where possible, used containers should be recycled after triple rinsing. Check with local suppliers and or DrumMUSTER <http://www.drummuster.com.au/>. Otherwise, bury at an authorised landfill. Before disposing of unwanted containers or used packaging on a property, ensure that all appropriate regulations, both Local and State Government, are observed. Significant penalties may apply.

## 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.  
**UN Number:** None allocated  
**SUSDP Classification:** S6  
**ADG Classification:** None allocated. Not a Dangerous Good under the ADG Code.

## Section 15: REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database. The following ingredients: Flutriafol, are mentioned in the SUSDP.

## Section 16: OTHER INFORMATION

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

This MSDS supersedes all others

Please read all labels carefully before using product.

This MSDS is prepared in accord with the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]