

SAFETY DATA SHEET



Page 1 of Total 6
Date of Issue: February 2014
MSDS No. FMC/FLU250/1

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: FMC FLUTRIAFOL 250 FUNGICIDE

Other Names: Flutriafol. Group 3 Fungicide.
Use: Agricultural fungicide for control of certain fungal diseases.
Company: FMC Australasia Pty Ltd.
Address: 5 Palmer Place, Murarrie, Qld 4172
Telephone Number: 07 3908 9208 **Fax Number:** 07 3908 9221
Emergency Telephone Number: 1800 033 111 (All hours - Australia wide).

SECTION 2 HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code.**

GHS Classification:

Acute Toxicity – Inhalation: Category 4.
Acute Toxicity – Oral: Category 4.
Eye Damage/Irritation: Category 1.
Specific Target Organ Toxicity (Repeated Exposure): Category 2.

Signal Word: DANGER.

Hazard Statements:

H302 Harmful if swallowed.
H332 Harmful if inhaled.
H318 Causes serious eye damage.
H373 May cause damage to organs (liver) through prolonged or repeated exposure.

Precautionary statements:

Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P314 Get medical advice/attention if you feel unwell.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P330 Rinse mouth.
P310 Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Disposal

P501 Dispose of contents/container in accordance with national regulations.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Pictograms:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Flutriafol	76674-21-0	250 g/L
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

- Swallowed:** DO NOT induce vomiting. Rinse any residual product from mouth and lips. Give water to drink and seek medical help. Phone Australia 13 11 26.
- Eye:** Flush with running water until product is removed (at least 5 mins.) Seek medical advice if irritation persists.
- Skin:** Remove contaminated clothing. Wash thoroughly under running water using a mild soap. Seek medical advice if irritation, reddening and/or other damage occurs.
- Inhaled:** Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Advice to Doctors: Treat symptomatically. No specific antidote is known.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Considered low risk due to water content, however upon evaporation of water the product is combustible. Low risk of explosion if involved in a fire.

Extinguishing media: Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff. Preferred extinguishing media: alcohol resistant foam, CO₂ or dry chemical. Soft stream water fog if no alternatives. DO NOT use water jet. Contain all runoff.

Hazards from combustion products: This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion that can be both toxic and irritating.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

SECTION 6 ACCIDENTIAL RELEASE MEASURES

Emergency procedures: Isolate and post spill area. Keep out unprotected persons and animals. Wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and goggles and disposable face mask. Large spills should be dyked or covered to prevent dispersal. Vacuum shovel or pump spilled material into an approved container and dispose of as listed in section 13 or in accordance with the requirements of Local or State Waste Management Authorities.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution.

SECTION 6 ACCIDENTIAL RELEASE MEASURES (Continued)

Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

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

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Ensure containers are kept closed until using product. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves and face shield or goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

Conditions for Safe Storage: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. This product is a Schedule 6 Poison (S6) and must be stored and sold in accordance with the relevant Health Department regulations

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:

No exposure limits have been assigned by Safe Work Australia to the ingredients in this product.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in well ventilated area only. Keep containers closed when not in use.

Personal Protective equipment (PPE):

General: When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves and face shield or goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous yellow liquid suspension.
Odour:	Feint.
Boiling point:	Data not available.
Freezing point:	Data not available.
Specific Gravity:	Approximately 1.1.
pH:	Data not available.
Solubility in Water:	Product suspends in water.
Flammability:	Not flammable.
Flashpoint (°C):	Not flammable.
Flammability Limits (%):	Not established.
Poisons Schedule:	Product is a schedule 6 (S6) poison.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture. Some settling might occur, and containers should be agitated at least once every 12 months to resuspend any sediment.

SECTION 10 STABILITY AND REACTIVITY (Continued)

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Do not store below 4°C. Avoid oxidizing materials.

Incompatible materials: Strong acids, bases or oxidizing agents.

Hazardous decomposition products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

Hazardous reactions: Does not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Potential Health Effects:

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Acute

Swallowed: Acute Oral LD₅₀ (rat) = 1140 mg/kg (Flutriafol). Accidental swallowing of small amounts of this product is not expected to cause injury – low acute oral toxicity.

Eye: Can be severely irritating to the eyes. Can cause eye damage unless immediately washed out of the eyes.

Skin: Acute dermal LD₅₀ (rat) > 1,000 mg/kg (Flutriafol). May irritate the skin. Non-sensitising.

Inhaled: Should not cause severe effects if treated promptly. May cause irritation to the respiratory tract.

Chronic: Exposure to humans most commonly occurs through spray mist or accidental ingestion of product.

Chronic toxicity: Evidence from animal studies indicates that repeated or prolonged exposure to flutriafol can result in embryo/fetotoxic effects and liver disorders but no reproductivity effects were found for flutriafol at maternal nontoxic doses. There is no evidence of teratogenic, mutagenic or carcinogenic effects.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is not readily biodegradable. However, likely to degrade slowly in the soil or water and not cause long term problems. The product is toxic to fish, aquatic invertebrates and aquatic plants and harmful to bees. Fish: Rainbow trout 96 hr LC₅₀ = 12.54 mg/L; Invertebrates *Daphnia magna* 48 hr EC₅₀ = 8.08 mg/L; Green algae 72 hr EC₅₀ = 6.30 mg/L. It is not considered as harmful to birds and soil micro- and macroorganisms. LD₅₀ female mallard: > 5000 mg/kg; Bees: LD₅₀ > 5 µg/bee.

Environmental Properties: Flutriafol has moderate mobility in soil. Absorption depends on soil pH and organic matter content. Flutriafol is not readily degradable. Degradation half-lives vary with circumstances, but are usually over 1 year in soil and water.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills & Disposal: In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated below or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons. Keep material out of streams and sewers. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

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

Disposal of empty, non-returnable containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the container below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Empty containers and product should not be burnt.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: FMC Flutriafol 250 SC Fungicide is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail in containers less than 3000 litres. Bulk shipments should use UN 3082, as per below.

Marine and Air Transport: FMC Flutriafol 250 SC Fungicide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:- UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 25% Flutriafol).

SECTION 15 REGULATORY INFORMATION

Classified as a hazardous substance according to criteria of Safe Work Australia. (Xi). Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 6 poison. This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 69525. Product is not classified as a Dangerous Good according to the ADG Code (7th Ed) in containers less than 3000 litres. Product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). *Requirements concerning special training:* Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 7 February 2014. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this SDS:

- ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- Ataxia: Inability to control the coordinate movements of the muscles.
- Bradycardia: Is a resting heart rate of under 60 beats per minute (adults).
- Carcinogen: An agent which is responsible for the formation of a cancer.
- Clonic: An abnormality in neuromuscular activity characterized by rapidly alternating muscular contraction and relaxation.
- Genotoxic: Capable of causing damage to genetic material, such as DNA.
- Haematopoietic: Pertaining to the formation of blood or blood cells.
- Lavage: The irrigation or washing out of an organ, as of the stomach or bowel.
- Mutagen: An agent capable of producing a mutation.
- Oedema: Accumulation of fluid in tissues.



SECTION 16 OTHER INFORMATION (Continued)

NOHSC: National Occupational Health and Safety Commission.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia website. (2014).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS