

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Flutriafol 25/Cypermethrin 4
Liquid Seed Dressing**

Other Names: Flutriafol + Cypermethrin Seed Dressing, a Group 3 Fungicide & 3A Insecticide.
Use: Agricultural seed dressing fungicide for wheat, barley, oats and triticale.
Company: Apparent Pty Ltd
Address: Suite G.08 762 Toorak Road, Hawthorn East, Vic 3123
PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Email: enquiries@apparentag.com.au
Emergency Contact: 0411 227 338

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**

Globally Harmonised System (GHS) classification of the substance/mixture:

Acute Toxicity – Oral: Category 4.
Specific Target Organ Toxicity (Single Exposure) – Category 3.
Toxic to Reproduction – Category 1B.
Hazardous to the Aquatic Environment – Acute Hazard – Category 1.
Hazardous to the Aquatic Environment – Long-Term Hazard – Category 4.

Signal Word: DANGER

Hazard statements:

H302 Harmful if swallowed.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child.
H400 Very toxic to aquatic life.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Response (Cont)

P391 Collect Spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

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

Pictograms:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Flutriafol	76674-21-0	25 g/L
Cypermethrin	52315-07-8	4 g/L
Ethylene Glycol	107-21-1	488 g/L
N-methyl pyrrolidone	872-50-4	1-9% w/w
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: If swallowed do not induce vomiting; seek medical advice immediately and show the product label or contact the Poisons Information Centre on 13 11 26. Rinse mouth thoroughly with water. Do not give anything by mouth to a semi-conscious or unconscious person. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Eye contact: If in eyes, immediately hold eyelids open and wash with clean water until chemical is removed. If irritation persists, seek medical advice.

Skin contact: Remove contaminated clothing and wash affected areas thoroughly with soap and water. Launder contaminated clothing before re-use. If irritation persists, seek medical advice.

Inhalation: Overexposure by inhalation is unlikely. Check for other causes of observed symptoms, move victim to fresh air and seek medical advice.

Advice to Doctor: Treat Symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Not flammable. Use extinguishing media suitable for surrounding area.

Extinguishing media: Not flammable. Use extinguishing media suitable for surrounding area. Extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained.

Hazards from combustion products: There is no risk of an explosion from this product under normal circumstances if involved in a fire. Product is unlikely to decompose until heated to dryness. On further heating will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

SECTION 5 FIRE FIGHTING MEASURES (Continued)

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

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield. In the case of spillage, stop leak if safe to do so, and contain spill. Absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste in accordance with the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons.

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. 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.

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Product is poisonous if swallowed. May irritate the eyes and skin. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. DO NOT inhale dust, vapour or spray mist. When preparing and using the product wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield. 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, face shield or goggles and contaminated clothing.

Conditions for Safe Storage: Store in the closed, original container in a cool, dry place out of the reach of children. DO NOT store in direct sunlight. Not classified as a Dangerous Good. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: Exposure guidelines have not been established for this product by Safe Work Australia, however the following guidelines are for ingredients in this product.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
Ethylene glycol (vapour) (Skin*)	52 mg/m (20 ppm)	104 mg/m ³ (40 ppm)
Ethylene glycol (particulate) (Skin*)	10 mg/m	-
N-methyl pyrrolidone (Skin*)	1 mg/m ³	-

TWA = Time-weight Average. STEL = Short term Exposure Limit.

* The 'skin' notation refers to the potential for dermal absorption of the material including mucous membranes and the eyes by contact with vapours or direct skin contact.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in well ventilated areas. Keep containers closed when not in use.

Personal Protective Equipment (PPE):

General: When preparing and using the product wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield. 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, face shield or goggles and contaminated clothing.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Personal Hygiene: Product is poisonous if swallowed. May irritate the eyes and skin. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. DO NOT inhale dust, vapour or spray mist. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear red liquid.
Odour:	No data.
Boiling point:	Approximately 100°C.
Freezing point:	Approximately 0°C.
Specific Gravity:	1.1 approx at 20°C.
Solubility in Water:	Suspends in water.
pH:	No data available.
Flammability:	Not flammable.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	Not flammable.
Flammability Limits (%):	Not applicable.
Poisons Schedule:	This product is a Schedule 6 (S6) poison.
Formulation type:	Liquid (LC).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Avoid strong oxidising agents, strong Acids and strong Alkalis.

Hazardous decomposition products: Product is unlikely to decompose until heated to dryness. On further heating may emit toxic fumes.

Hazardous reactions: Hazardous polymerisation will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

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.

Potential Health Effects:

ACUTE EFFECTS

Ingestion: LD₅₀ (rat) 1140 mg/kg for Flutriafol. LD₅₀ (rat) 250 - 4150 mg/kg for cypermethrin. LD₅₀ (rat) 4700 mg/kg for ethylene glycol. Estimated Acute oral LD₅₀ for this product > 2000 mg/kg.

Skin: May cause mild skin irritation. Can be absorbed through the skin but not readily absorbed in toxic amounts. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Eye: The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.

Inhalation: May cause irritation to the respiratory tract.

Long Term Exposure:

Data indicates no teratogenic effects for flutriafol. At doses toxic to maternal animals, flutriafol has been shown to produce developmental toxicity in a number of species. The solvent, N-methyl pyrrolidone (NMP), may cause effects on the cardiovascular and skeletal systems of developing embryos.

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)

Kidney damage has been noted in laboratory animals that have been fed excessive doses of ethylene glycol. Evidence from animal studies indicates that repeated or prolonged exposure to flutriafol (in significant quantities) can result in liver damage.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology:

Species	Flutriafol	Cypermethrin
Rainbow trout	LC ₅₀ (96 hr) = 61 mg/L	LC ₅₀ (96hr) = 0.00069 mg/L
Daphnia magna	LC ₅₀ (48 hr) = 78 mg/L	LC ₅₀ (48 hr) = 0.0003 mg/L
Mallard ducks	LD ₅₀ for (female) > 5,000 mg/kg	LD ₅₀ > 10,000 mg/kg

Not toxic to birds. No threat to bees as product is used as a seed dressing.

Environmental Fate: Average field half-life of cypermethrin in soil is 60 days. Flutriafol is essentially insoluble in water and has low mobility in soil. There is evidence of rapid degradation in soil and hydrolysis in water. The expected half-life in water is 5 days. The product is applied to seed for sowing - use pattern restricts movement into the environment.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Wear prescribed protective clothing and equipment. 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. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals. Ideally the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

Disposal of empty containers: Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface 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. Do not burn empty containers or product.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 3,000 kg or litres under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082. (See special provision AU01).

This product is classified as 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 Cypermethrin). Hazchem code ●3Z. Hazard Identification Number (HIN) 90.

SECTION 15 REGULATORY INFORMATION

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. 81175

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia. (Xn - harmful, Xi - irritant).

SECTION 15 REGULATORY INFORMATION (Continued)

This product is not classified as a Dangerous Good according to the ADG Code (7th Ed).

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: 11 May 2016. Valid for 5 years till 11 May 2021 (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).

Carcinogen: An agent which is responsible for the formation of a cancer.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Lavage: A general term referring to cleaning or rinsing.

Mutagen: An agent capable of producing a mutation.

Myotoxic: Having or being a toxic effect on muscle.

Pneumonitis: A general term that refers to inflammation of lung tissue.

PPE: Personal protective equipment.

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. (2016).
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