

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

1 Identification

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

Other Means of Identification: Mixture APVMA Approval Number: 89652

Recommended Use of the Chemical and Restriction on Use: Seed dressing.

Details of Manufacturer or Importer:

Titan Ag Pty Ltd Princes Street Marina Suite 15/16 Princes Street Newport NSW 2106

Phone Number: 02 9999 6655

Emergency telephone number: 02 9999 6655

2 Hazard(s) Identification

Hazardous Nature:

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.



GHS08 Health hazard

Reproductive toxicity – Category 1B	H360D May	v damage the unborn child.



Skin corrosion/irritation – Category 2

Eye damage/irritation – Category 2A

Specific target organ toxicity (single exposure) –

Category 3

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Flammable liquids – Category 4 H227 Combustible liquid.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360D May damage the unborn child.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 1)

	(Conta. c	n page i
P271	Use only outdoors or in a well-ventilated area.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for	r
	breathing.	
P305+P351+P338	FIF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses	, if
	present and easy to do. Continue rinsing.	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
P312	Call a POISON CENTER/doctor if you feel unwell.	
P321	Specific treatment (see on this label).	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P370+P378	In case of fire: Use CO2, powder or water spray to extinguish.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	
P405	Store locked up.	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Comp	ponents:		
CAS: 34590-94-8	Dipropylene glycol monomethyl ether	30-60%	
	Flammable liquids – Category 4, H227		
CAS: 107-21-1	Ethylene glycol	49.5%	
	 Acute toxicity - oral – Category 4, H302; Specific target organ toxicity (single exposure) – Category 3, H335 		
CAS: 872-50-4	N-methyl-2-pyrrolidone	0-10%	
	Reproductive toxicity – Category 1B, H360D; Skin corrosion/irritation – Category 2, H315; Eye damage/irritation – Category 2A, H319; Specific target organ toxicity (single exposure) – Category 3, H335		
CAS: 76674-21-0	Flutriafol	2.5%	
	Aquatic Chronic 2, H411; Acute toxicity - oral – Category 4, H302; Acute toxicity - dermal – Category 4, H312; Aquatic Acute 2, H401		
CAS: 52315-07-8	Cypermethrin	0.4%	
	Specific target organ toxicity (repeated exposure) – Category 2, H373; Aquatic Chronic 1, H410 (M=100000); Acute toxicity - oral – Category 4, H302; Skin corrosion/irritation – Category 2, H315; Skin sensitisation – Category 1, H317; Specific target organ toxicity (single exposure) – Category 3, H335		

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

(Contd. on page 3)

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 2)

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation, headache and drowsiness.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Harmful if swallowed. May cause intoxication leading to vomiting, cyanosis, headache, muscle

tenderness, convulsions and unconsciousness.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen and hydrogen fluoride.

This product is not flammable, but may burn or decompose in a fire.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Clean equipment with methylated spirits, not water.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container. Keep container closed when not in use. Protect from extreme heat and direct sunlight. Keep away from strong oxidising agents.

Treated seed should be kept apart from untreated seed. Containers of treated seed must be clearly marked.

8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 34590-94-8 Dipropylene glycol monomethyl ether

WES TWA: 308 mg/m³, 50 ppm

Sk

(Contd. on page 4)

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 3)

CAS: 107-21-1 Ethylene glycol

WES STEL: 104** mg/m³, 40** ppm TWA: 10* 52** mg/m³, 20** ppm

Sk;*particulate;**vapour

CAS: 872-50-4 N-methyl-2-pyrrolidone

WES STEL: 309 mg/m³, 75 ppm

TWA: 103 mg/m³, 25 ppm

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection: Respiratory protection is not required under normal use conditions.

Skin Protection: Skin protection is not required under normal use conditions.

Eye and Face Protection: Eye protection is not required under normal use conditions.

9 Physical and Chemical Properties

Appearance:

Form: Liquid Red Colour:

Odour: No information available **Odour Threshold:** No information available pH-Value: No information available Melting point/freezing point: No information available Initial Boiling Point/Boiling Range: No information available

Flash Point: 82.5 °C **Flammability** Combustible

Auto-ignition Temperature: No information available **Decomposition Temperature:** No information available

Explosion Limits:

Lower: No information available Upper: No information available Vapour Pressure: No information available

Relative Density:

Vapour Density: No information available **Evaporation Rate:** No information available

Solubility in Water: Soluble

Partition Coefficient (n-octanol/water): No information available

Organic solvents:

Physical state Liquid

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Extreme heat and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon and nitrogen and hydrogen fluoride.

(Contd. on page 5)

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 4)

11 Toxicological Information

Toxicity:

LD50/LC5	LD50/LC50 Values:				
CAS: 3459	CAS: 34590-94-8 Dipropylene glycol monomethyl ether				
Oral LD50 5,135 mg/kg (Rattus norvegicus (rat))		5,135 mg/kg (Rattus norvegicus (rat))			
	LD50	>19,000 mg/kg (Oryctolagus cuniculus (rabbit))			
CAS: 107-	21-1 Ethy	lene glycol			
Oral	LD50	5,840 mg/kg (Rattus norvegicus (rat))			
CAS: 872-	50-4 N-me	ethyl-2-pyrrolidone			
Oral	LD50	4,150 mg/kg (Rattus norvegicus (rat))			
Dermal	LD50	>5,000 mg/kg (Rattus norvegicus (rat))			
CAS: 7667	74-21-0 Flu	utriafol			
Oral	LD50	1,140-1,480 mg/kg (Rattus norvegicus (rat))			
Dermal	LD50	>1,000 mg/kg (Rattus norvegicus (rat))			
Inhalation	LC50/4 h	>5.2 mg/l (Rattus norvegicus (rat))			
CAS: 5231	15-07-8 Cy	permethrin			
Oral	LD50	500 mg/kg (ATE)			
		287 mg/kg (Rattus norvegicus (rat))			
	LD50	1,600 mg/kg (Rattus norvegicus (rat))			
		>2,000 mg/kg (Oryctolagus cuniculus (rabbit))			
Dermal	LD50	>2,000 mg/kg (Rattus norvegicus (rat))			
Inhalation	LC50/4 h	3.3 mg/l (ATE)			
	LC50	3.56 mg/l (Rattus norvegicus (rat))			

Acute Health Effects

Inhalation: May cause respiratory irritation, headache and drowsiness.

Skin: Causes skin irritation.

Eye: Causes serious eye irritation.

Ingestion:

Harmful if swallowed. May cause intoxication leading to vomiting, cyanosis, headache, muscle tenderness, convulsions and unconsciousness.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: Based on classification principles, the classification criteria are not met.

Reproductive Toxicity: May damage fertility or the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No data associated with long term health effects.

Existing Conditions Aggravated by Exposure: No data available.

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 5)

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for Flutriafol for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and

Veterinary Chemicals', 2024)

12 Ecological Information

_						
_	CO	to	vi	^i	ŧ١	,.
_	υu	ιu	ואי	u	L١	٠.

CAS: 76674-21-0 Flutriafol

Oral LD50 >5,000 mg/kg (Anas platyrhynchos (mallard duck))

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

CAS: 107-21-1	Ethylene	glycol
---------------	----------	--------

EC50/48 h	49,000 mg/l (Daphnia magna (water flea))
EC50/96 h	6,500-13,000 mg/l (Chlorophyta (green algae))
LC50/96 h	22,810 mg/l (Oncorhynchus mykiss (rainbow trout))

CAS: 872-50-4 N-methyl-2-pyrrolidone

EC50/48 h	4,897	mg/l	(Daphnia	magna	(water f	flea))
-----------	-------	------	----------	-------	----------	-------	---

EC50/72 h 672 mg/l (Desmodesmus subspicatus (green algae)) LC50/96 h >500 mg/l (Oncorhynchus mykiss (rainbow trout))

CAS: 76674-21-0 Flutriafol

EC50/48 h	67 mg/l (Daphnia magna (water flea))
LC50/96 h	33 mg/l (Lepomis macrochirus (bluegill))
LC50	77 mg/l (Cyprinus carpio (mirror carp))

61 mg/l (Oncorhynchus mykiss (rainbow trout))

CAS: 52315-07-8 Cypermethrin

LC50/96 h | 0.0018 mg/l (Lepomis macrochirus (bluegill))

0.0002 mg/l (Daphnia magna (water flea))

0.0082 mg/l (Oncorhynchus mykiss (rainbow trout))

Persistence and Degradability: No data available on finished product.

Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: Low mobility in soil.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated

ADG, IMDG, IATA

Proper Shipping Name Not regulated

ADG, IMDG, IATA

Dangerous Goods Class Not regulated

according to WHS Regulations

Date of issue: 12.08.2025 Revision date: 04.08.2025

Product Name: TITAN FLUTRIAFOL 25/CYPERMETHRIN 4 LIQUID SEED DRESSING

(Contd. of page 6)

ADG Class: -

Packing Group: Not regulated

ADG, IMDG, IATA -

15 Regulatory Information

Australian Invent	Australian Inventory of Industrial Chemicals:	
CAS: 34590-94-8	Dipropylene glycol monomethyl ether	
CAS: 107-21-1	Ethylene glycol	
CAS: 872-50-4	N-methyl-2-pyrrolidone	
CAS: 52315-07-8	Cypermethrin	

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

Australian Pesticides and Veterinary Medicines Authority:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 89652.

16 Other Information

Date of Preparation or Last Revision: 04.08.2025

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable liquids – Category 4: Flammable liquids – Category 4

Acute toxicity - oral - Category 4: Acute toxicity - Category 4

Skin corrosion/irritation - Category 2: Skin corrosion/irritation - Category 2

Eye damage/irritation - Category 2A: Serious eye damage/eye irritation - Category 2A

Skin sensitisation – Category 1: Skin sensitisation, Hazard Category 1

Reproductive toxicity - Category 1B: Reproductive toxicity - Category 1B

Specific target organ toxicity (single exposure) - Category 3: Specific target organ toxicity (single exposure) - Category 3:

Specific target organ toxicity (repeated exposure) – Category 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - June 2023".

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Titan Ag Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.