

1 Identification

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural fungicide

Details of Manufacturer or Importer:

Titan Ag Pty Ltd
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:

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

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



health hazard

STOT RE 1

H372 Causes damage to organs through prolonged or repeated exposure.



environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Acute Toxicity (Inhalation) 4

H332 Harmful if inhaled.

Skin Corrosion/Irritation 2

H315 Causes skin irritation.

Aquatic Acute 2

H401 Toxic to aquatic life.

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands 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.

P280 Wear protective gloves.

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 1)

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314 Get medical advice/attention if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

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

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 136426-54-5	Fluquinconazole (ISO) ⚠ Acute Toxicity (Oral) 3, H301; Acute Toxicity (Inhalation) 3, H331; ⚠ STOT RE 1, H372; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Toxicity (Dermal) 4, H312; Skin Corrosion/Irritation 2, H315	16.7%
CAS: 57-55-6	Propylene glycol	11.0%
CAS: 4719-04-4	2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol ⚠ Acute Toxicity (Inhalation) 3, H331; ⚠ STOT RE 1, H372; ⚠ Acute Toxicity (Oral) 4, H302; Skin Sensitisation 1, H317	0.55%

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.

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: Harmful if inhaled. May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. May cause nausea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen and organic compounds typical of incomplete combustion.

Product is not flammable, but may decompose in a fire.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 2)

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. Avoid the formation of aerosols. Use only outdoors or in a well-ventilated area.

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 container tightly closed when not in use. Opened containers must be resealed and stored upright to prevent leakage. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, strong acids and strong bases.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 57-55-6 Propylene glycol**

NES	TWA: 474* 10** mg/m ³ , 150* ppm *vapour & particulates;**particulates only
WES	TWA: 474* 10** mg/m ³ , 150* ppm *vapour & particulates;**particulates only

Engineering Controls:

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Elbow-length PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 3)

the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	No information available
Odour:	No information available
Odour Threshold:	No information available
pH-Value:	Approximately neutral
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	~1
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Soluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

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

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products:

Oxides of carbon and nitrogen and organic compounds typical of incomplete combustion.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****CAS: 136426-54-5 Fluquinconazole (ISO)**

Oral	LD ₅₀	112 mg/kg (rat)
Dermal	LD ₅₀	625-2,679 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	0.754 mg/l (rat)

CAS: 57-55-6 Propylene glycol

Oral	LD ₅₀	2,000 mg/kg (rat)
Dermal	LD ₅₀	20,800 mg/kg (rabbit)

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 4)

CAS: 4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol		
Oral	LD ₅₀	~100 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	0.371 mg/l (rat)

Acute Health Effects**Inhalation:** Harmful if inhaled. May cause respiratory irritation.**Skin:** Causes skin irritation.**Eye:** May cause eye irritation.**Ingestion:** Harmful if swallowed. May cause nausea and vomiting.**Skin Corrosion / Irritation:** Causes skin irritation.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**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:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

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

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for fluquinconazole for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.5 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', 2019).

12 Ecological Information

Ecotoxicity:

Fluquinconazole:

LD50 oral >2000 mg/kg (bobwhite quail and mallard ducks)

LC50 (14 d) >1000 mg/kg soil (eisenia foetida earthworms)

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

CAS: 136426-54-5 Fluquinconazole (ISO)	
EC ₅₀	46 mg/l (senastrum capricornutum)
LC ₅₀ /96 h	1.34 mg/l (bluegill)
	1.9 mg/l (rainbow trout)
LC ₅₀ /48 h	>5 mg/l (daphnia)
CAS: 4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	
EC ₅₀ /72 h	6.66 mg/l (green algae)

(Contd. on page 6)

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 5)

Persistence and Degradability: No further relevant information available.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** No further relevant information available.**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**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated**Marine pollutant:** Symbol (fish and tree)

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 7732-18-5	Water
CAS: 136426-54-5	Fluquinconazole (ISO)
CAS: 57-55-6	Propylene glycol
CAS: 4719-04-4	2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 12.02.2019**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

LC₅₀: Lethal concentration, 50 percentLD₅₀: 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)

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

Acute Toxicity (Dermal) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

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

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 12.02.2019

Revision: 12.02.2019

Product Name: TITAN FLUQUICONAZOLE 167 SEED TREATMENT

(Contd. of page 6)

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 - February 2016"

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.