

## 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.

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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)<br>⚠ 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<br>⚠ 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.

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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 <sup>3</sup> , 150* ppm<br>*vapour & particulates;**particulates only |
| WES | TWA: 474* 10** mg/m <sup>3</sup> , 150* ppm<br>*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

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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:**

|   |                           |
|---|---------------------------|
| <b>Form:</b>                                    | Liquid                    |
| <b>Colour:</b>                                  | No information available  |
| <b>Odour:</b>                                   | No information available  |
| <b>Odour Threshold:</b>                         | No information available  |
| <b>pH-Value:</b>                                | Approximately neutral     |
| <b>Melting point/freezing point:</b>            | No information available  |
| <b>Initial Boiling Point/Boiling Range:</b>     | No information available  |
| <b>Flash Point:</b>                             | Not applicable            |
| <b>Flammability:</b>                            | Product is not flammable. |
| <b>Auto-ignition Temperature:</b>               | Not applicable            |
| <b>Decomposition Temperature:</b>               | No information available  |
| <b>Explosion Limits:</b>                        |                           |
| <b>Lower:</b>                                   | No information available  |
| <b>Upper:</b>                                   | No information available  |
| <b>Vapour Pressure:</b>                         | No information available  |
| <b>Relative Density:</b>                        | ~1                        |
| <b>Vapour Density:</b>                          | No information available  |
| <b>Evaporation Rate:</b>                        | No information available  |
| <b>Solubility in Water:</b>                     | Soluble                   |
| <b>Partition Coefficient (n-octanol/water):</b> | No information available  |
| <b>Viscosity:</b>                               | 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:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****CAS: 136426-54-5 Fluquinconazole (ISO)**

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

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

|        |                  |                       |
|--------|------------------|-----------------------|
| Oral   | LD <sub>50</sub> | 2,000 mg/kg (rat)     |
| Dermal | LD <sub>50</sub> | 20,800 mg/kg (rabbit) |

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|---|-----------------------|------------------|
| <b>CAS: 4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol</b> |                       |                  |
| Oral  | LD <sub>50</sub>      | ~100 mg/kg (rat) |
| Inhalation  | LC <sub>50</sub> /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 &gt;2000 mg/kg (bobwhite quail and mallard ducks)

LC50 (14 d) &gt;1000 mg/kg soil (eisenia foetida earthworms)

**Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

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

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**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 Ltd[www.msds.com.au](http://www.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)

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: 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

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**Disclaimer**

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