

Safety Data Sheet

according to WHS Regulations

Date of issue: 16.01.2025

Revision date: 08.01.2025

1 Identification

Product Name: TITAN BIFENTHRIN 250 EC INSECTICIDE**Other Means of Identification:** Mixture**APVMA Approval Number:** 88918**Recommended Use of the Chemical and Restriction on Use:** Agricultural insecticide**Details of Manufacturer or Importer:**Titan Ag Pty Ltd
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.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



GHS06 Skull and crossbones

Acute toxicity - oral – Category 3

H301 Toxic if swallowed.



GHS08 Health hazard

Carcinogenicity – Category 2

H351 Suspected of causing cancer.

Specific target organ toxicity (repeated exposure) – Category 1

H372 Causes damage to the nervous system through prolonged or repeated exposure.

Aspiration hazard – Category 1

H304 May be fatal if swallowed and enters airways.



GHS09 Environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 1

H410 Very toxic to aquatic life with long lasting effects.



GHS07

Acute toxicity - inhalation – Category 4

H332 Harmful if inhaled.

Skin sensitisation – Category 1

H317 May cause an allergic skin reaction.

Flammable liquids – Category 4

H227 Combustible liquid.

Signal Word Danger**Hazard Statements**

H227 Combustible liquid.

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- H301 Toxic if swallowed.
 H332 Harmful if inhaled.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H372 Causes damage to the nervous system through prolonged or repeated exposure.
 H304 May be fatal if swallowed and enters airways.
 H410 Very toxic 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.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P321 Specific treatment (see on this label).
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 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 breathing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
 P391 Collect spillage.
 P403 Store in well-ventilated place.
 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 Components:**

CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom. ⚠️ Aspiration hazard – Category 1, H304	65-70%
CAS: 82657-04-3	Bifenthrin ⚠️ Acute toxicity - oral – Category 2, H300; Acute toxicity - inhalation – Category 3, H331; ⚠️ Carcinogenicity – Category 2, H351; Specific target organ toxicity (repeated exposure) – Category 1, H372; ⚠️ Aquatic Acute 1, H400 (M=10000); Aquatic Chronic 1, H410 (M=100000); ⚠️ Skin sensitisation – Category 1B, H317	25-30%

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.**Skin Contact:**

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

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Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with 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: May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Toxic if swallowed. May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog, foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include hazardous smoke and fumes.

Combustible product.

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

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: 2X

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 or mists. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

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 or mists.

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, tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents.

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8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Natural ventilation should be adequate under normal use conditions.

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

Skin Protection:

Elbow-length PVC 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 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:	Clear brown
Odour:	Characteristic
Odour Threshold:	No information available
pH-Value:	5 - 6 (1% solution)
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	66 °C
Flammability	Not applicable
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:	0.969
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Forms an emulsion in water
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 storage and use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Hazardous smoke and fumes.

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11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.**

Oral	LD50	5,000 mg/kg (Rattus norvegicus (rat))
	LD50	2,000 mg/kg (Oryctolagus cuniculus (rabbit))

CAS: 82657-04-3 Bifenthrin

Oral	LD50	54.5 mg/kg (Rattus norvegicus (rat))
	LD50	>2,000 mg/kg (Rattus norvegicus (rat))
Dermal	LD50	>2,000 mg/kg (Rattus norvegicus (rat))
Inhalation	LC50/4 h	1.01 mg/l (Rattus norvegicus (rat))
	LC50/96 h	>2,000 mg/l (Rattus norvegicus (rat))

Acute Health Effects**Inhalation:** Harmful if inhaled. May cause respiratory irritation.**Skin:** May cause skin irritation. May cause an allergic skin reaction.**Eye:** May cause eye irritation.**Ingestion:**

Toxic if swallowed. May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** Suspected of causing cancer.**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 the nervous system through prolonged or repeated exposure.

Aspiration Hazard: May be fatal if swallowed and enters airways.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for bifenthrin 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

Ecotoxicity:**CAS: 82657-04-3 Bifenthrin**

LD50	1,800 mg/kg (Colinus virginianus (bobwhite quail))
LD50	>0.01 µg/bee (Apis mellifera (honey bee))

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Aquatic toxicity:	
CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.	
EC50/48 h	12 mg/l (Daphnia magna (water flea))
EC50/72 h	2.5 mg/l (Skeletonema costatum (diatom))
LC50/96 h	45 mg/l (Pimephales promelas (fathead minnow))
CAS: 82657-04-3 Bifenthrin	
EC50/48 h	0.00011 mg/l (Daphnia magna (water flea))
LC50/96 h	0.00026 mg/l (Oncorhynchus mykiss (rainbow trout))

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 ADG, IMDG, IATA	UN3352
Proper Shipping Name ADG, IMDG, IATA	PYRETHROID PESTICIDE, LIQUID, TOXIC (Bifenthrin), ENVIRONMENTALLY HAZARDOUS, MARINE POLLUTANT
Dangerous Goods Class ADG Class:	6.1
Packing Group: ADG, IMDG, IATA	III
Marine pollutant:	Symbol (fish and tree)
EMS Number:	F-A,S-A
Hazchem Code:	2X
Special Provisions:	61, 223, 274
Excepted quantities (EQ):	E1
Limited Quantities:	5 L
Packagings & IBCs - Packing Instruction:	P001, IBC03, LP01
Portable Tanks & Bulk Containers - Instructions:	T7
Portable Tanks & Bulk Containers - Special Provisions:	TP2, TP28

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

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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 88918.

16 Other Information

Date of Preparation or Last Revision: 08.01.2025**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 2: Acute toxicity – Category 2

Acute toxicity - inhalation – Category 3: Acute toxicity – Category 3

Acute toxicity - inhalation – Category 4: Acute toxicity – Category 4

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

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

Carcinogenicity – Category 2: Carcinogenicity – Category 2

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

Aspiration hazard – Category 1: Aspiration hazard – Category 1

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

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

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 - July 2020”.

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