

Safety Data Sheet

according to WHS Regulations

Print date: 12.09.2023

Revision date: 12.09.2023

1 Identification

Product Name: TITAN Spirando 240SC Insecticide

Other Means of Identification: Mixture

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

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:

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). Classified as Dangerous Goods when transported by Air or Sea. See section 14 of this document for more details.



Health hazard

Toxic To Reproduction 2 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.



Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Eye Irritation 2A H319 Causes serious eye irritation.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

Aquatic Acute 2 H401 Toxic to aquatic life.

Signal Word Warning

Hazard Statements

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H335 May cause respiratory irritation.

H411 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.

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

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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







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.
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.
P305+P351+P338	IF 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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
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 Components:

CAS: 203313-25-1	Spirotetramat	20-25%
	 Toxic To Reproduction 2, H361fd;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410;  Acute Toxicity (Inhalation) 4, H332; Eye Irritation 2A, H319; Skin Sensitisation 1A, H317; STOT SE 3, H335	
CAS: 56-81-5	Glycerol	1-10%
CAS: 2634-33-5	1,2-Benzisothiazol-3(2H)-one	0.005-0.050%
	 Eye Damage 1, H318;  Aquatic Acute 1, H400;  Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; Skin Sensitisation 1A, H317	
CAS: 55965-84-9	Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.0002-<0.0015%
	 Acute Toxicity (Oral) 3, H301; Acute Toxicity (Dermal) 3, H311; Acute Toxicity (Inhalation) 3, H331;  Skin Corrosion/Irritation 1B, H314;  Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100);  Skin Sensitisation 1, H317	

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 irritation develops and persists.

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 immediate medical attention.

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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: May cause respiratory irritation.

Skin Contact: May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water spray, carbon dioxide (CO₂), foam, sand.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, oxides of nitrogen and hydrogen cyanide.

Product is not flammable.

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: •3Z

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.

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.

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, away from direct sunlight. Keep in original container, tightly closed when not in use. Protect from frost. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, strong bases and strong acids.

8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 56-81-5 Glycerol

WES	TWA: 10 mg/m ³ inhalable dust
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Engineering Controls:

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

Respiratory Protection:

Use an approved mixed type organic vapour / particulate respirator (types A and P) 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:

Protective gloves. Recommended materials: nitrile rubber. 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:

Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

9 Physical and Chemical Properties

Appearance:
Form:

Suspension

Colour:

White to light beige

Odour:

Weak, characteristic

Odour Threshold:

No information available

pH-Value:

4 - 5

Melting point/freezing point:

No information available

Initial Boiling Point/Boiling Range:

No information available

Flash Point:

Does not flash up to boiling

Flammability (solid, gas):

Not applicable

Auto-ignition Temperature:

approx. 415 °C

Decomposition Temperature:

No information available

Explosion Limits:
Lower:

No information available

Upper:

No information available

Vapour Pressure:

No information available

Density at 20 °C:

approx. 1.07 g/cm³
Vapour Density:

No information available

Evaporation Rate:

No information available

Solubility in Water:

Miscible

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

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

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

Conditions to Avoid: Freezing. Direct sunlight.

Incompatible Materials: Strong oxidizing agents, strong acids and strong alkalis.

Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen and hydrogen cyanide.

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11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 203313-25-1 Spirotetramat**

Oral LD50 >2,000 mg/kg (Rattus norvegicus (rat))

Dermal LD50 >2,000 mg/kg (Rattus norvegicus (rat))

Inhalation LC50/4 h >4.18 mg/l (Rattus norvegicus (rat))

CAS: 56-81-5 Glycerol

Oral LD50 12,600 mg/kg (Rattus norvegicus (rat))

Inhalation LC50/6 h 4 mg/l (Rattus norvegicus (rat))

CAS: 2634-33-5 1,2-Benzisothiazol-3(2H)-one

Oral LD50 1,020 mg/kg (Rattus norvegicus (rat))

CAS: 55965-84-9 Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2Hisothiazol-3-one (3:1)

Oral LD50 67 mg/kg (Rattus norvegicus (rat))

Inhalation LC50/4 h 0.17 mg/l (Rattus norvegicus (rat))

Acute Health Effects**Inhalation:** May cause respiratory irritation.**Skin:** May cause skin irritation. May cause an allergic skin reaction.**Eye:** Causes serious eye irritation.**Ingestion:** 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:** Causes serious eye irritation.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**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:** Suspected of damaging fertility. Suspected of damaging 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 information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for spirotetramat for a human is 0.05 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 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', 2023).

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12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

CAS: 203313-25-1 Spirotetramat

EC50/48 h >42.7 mg/l (Daphnia magna (water flea))

LC50/96 h 0.96 mg/l (Pseudokirchneriella subcapitata (algae))

CAS: 2634-33-5 1,2-Benzisothiazol-3(2H)-one

EC50/48 h 2.94 mg/l (Daphnia magna (water flea)) (OECD Test Guideline 202)

EC50/72 h 0.37 mg/l (Algae)

LC50/96 h 2.15 mg/l (Oncorhynchus mykiss (rainbow trout)) (OECD Test Guideline 203)

CAS: 55965-84-9 Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

EC50/48 h 0.12 mg/l (Daphnia magna (water flea))

EC50/72 h 0.048 mg/l (Chlorophyta (green algae))

EC50/3 h 7.92 mg/l (Activated sludge)

LC50/96 h 0.32 mg/l (Lepomis macrochirus (bluegill))

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

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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**

Not regulated (see SP AU01)

UN3082

Proper Shipping Name**ADG****IMDG, IATA**

Not regulated (see SP AU01)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Spirotetramat)**Dangerous Goods Class****ADG Class:****IMDG Class:**

-

9

Packing Group:**ADG****IMDG, IATA**

-

III

Marine pollutant:

Yes

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EMS Number: F-A,S-F**Hazchem Code:** •3Z**Transport/Additional information:** Not subject to the ADG Code when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg(L) or IBCs. (refer to SP AU01)**Excepted quantities (EQ):** E1**Limited Quantities:** 5L

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

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

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 12.09.2023**Prepared by:** MSDS.COM.AU Pty Ltdwww.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)

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

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

Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B

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

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Skin Sensitisation 1A: Skin sensitisation, Hazard Category 1A

Toxic To Reproduction 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

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”.

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 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.