



SAFETY DATA SHEET

GroVentive®

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **GroVentive®**
Other Name(s): Suspension concentrate containing 100 g/L spirotetramat

1.2 Recommended use of the chemical and restrictions on use

Product Use: Insecticide for use on certain fruit and vegetable crops

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
Address: 20 Jean Batten Drive Mt Maunganui, 3116
Telephone: 0800 220 002
Email: info@grosafe.co.nz

Emergency telephone number (24 hours) 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance

Skin sensitisation Category 1; Reproductive toxicity Category 2; Hazardous to the aquatic environment chronic Category 3

2.2 Label elements:

Pictograms:



Signal Word: **WARNING**

Hazard statements:

H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Additional labelling statements required under Hazardous Substances (Labelling) Notice 2017

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Do not apply directly into or onto water.

Do not apply substance to plants if-

- (i) Bees are foraging; or
- (ii) The plants are in flower or part flower, and are likely to be visited by non-target invertebrate pollinators (including bees).

Precautionary statements:

Prevention

- P103 Read label before use.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing mist/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/clothing.

Response

- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage

- P405 Store locked up.

Disposal

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion % w/w
Spirotetramat	203313-25-1	9.0 -9.5*
Glycerine	56-81-5	>1 <10
1,2-benzisothiazol-3(2H)-one	2634-33-5	<0.5
Other ingredients	Trade secret	balance

*equivalent to 100 g/L

This is a commercial product whose exact ratio of components may vary slightly.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Information:

For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766]. Have label or Safety Data Sheet at hand.

Ingestion: If swallowed, rinse mouth with water. Call the NATIONAL POISONS CENTRE or doctor for advice if you feel unwell.

Skin Contact: Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if irritation or rash occurs.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice if irritation persists.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor for advice if you feel unwell.

4.2 Symptoms caused by exposure

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Medical attention and special treatment

Treat symptomatically. No specific antidote.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog, foam, CO₂ or dry chemical as appropriate for surrounding materials, Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products may be toxic/harmful and/or irritating if inhaled. The following compounds may be released; hydrogen cyanide, carbon oxides, nitrogen oxides.

Evacuate people to safe area upwind of fire.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Have this SDS available. In the event of a spill, wear appropriate protective clothing and hand protection. Wash contaminated personal protective equipment and clothing and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, alert the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material. For small liquid spills, use absorbent material such as sand, soil, vermiculite and recover into labelled drums that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use.

Do not apply into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

When applying product avoid inhalation of spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection.

Wash hands and exposed skin with soap and water after handling and before rest or meal breaks.

Do not eat, drink or smoke when using.

Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store locked up in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area and out of direct sunlight. Keep away from sources of heat, food, drink and animal feedstuffs.

Storage of 1000L or more of this product requires an emergency response plan, secondary containment and signage.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m ³)	STEL (mg/m ³)
Glycerine (mist)	10	

8.2 Engineering controls

Use in well-ventilated area or outdoors.

8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Eye/Face Protection: Wear chemical splash goggles if eye contact is possible.

Skin Protection: Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

Respirator: Use outdoors in well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off-white to beige liquid
Odour	Characteristic
Odour threshold	Not known
pH	4.0 – 5.5 (neat)
Melting/Freezing Point	No data available
Boiling Point /Range	No data available
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity/bulk density	~ 1.08 g/cc
Solubility	Forms suspension in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

10.3 Conditions to Avoid

Avoid storage in direct sunlight or exposure to heat or freezing.

10.4 Incompatible materials and possible hazardous reactions

Acids, alkalis.

10.5 Hazardous decomposition products

Fire Decomposition: Smoke, carbon and nitrogen oxides, hydrogen cyanide, and other unspecified compounds.

10.6 Polymerisation

Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	Not classified as being harmful if ingested, in contact with skin or inhaled.
Aspiration hazard:	Product contains no components with aspiration hazard.
Respiratory irritation:	Not expected to be irritating.
Skin corrosion/irritation	Not classified as a skin irritant.
Serious eye damage/irritation	Not classified as an eye irritant.
Respiratory or skin sensitisation	Spirotetramat is identified as a contact sensitiser.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity	No ingredients in product identified as presumed or suspected carcinogens.
Reproductive toxicity	Spirotetramat is identified as suspected of damaging fertility at high (toxic) doses or the unborn child (delayed foetal growth
Specific target organ toxicity – single/repeated exposure	Not classified for adverse effects to organs or systems.
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

11.3 Toxicological data:

Spirotetramat	Oral, LD ₅₀ (rat) >2000 mg/kg bw Dermal, LD ₅₀ (rat) >2000 mg/kg bw Inhalation, LC ₅₀ 4 hr (rat) >2.8 mg/L air
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SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being harmful to aquatic life with long lasting effects.

12.2 Environmental Fate

Breakdown in soil and groundwater: DT₅₀ >0.9 day (typical)

Bioaccumulation: Low bioaccumulation potential.

Partition coefficient (octanol/water): Spirotetramat K_{OC} 289

Soil mobility: Low

12.3 Ecotoxicity data:

Spirotetramat	Fish: <i>Cyprindon variegatus</i> LC ₅₀ (96 hr) 1.96 mg/L Rainbow trout LC ₅₀ (96 hr) 22.3 mg/L Crustacea: <i>Daphnia magna</i> EC ₅₀ (48 h) > 42.7 mg/L Alga: <i>Pseudokirchneriella subcapitata</i> LC ₅₀ 72hr growth 0.96 mg/L
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Aquatic plant: *Lemna gibba* EC₅₀ 7 d biomass 4.47 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label. Otherwise dispose of to an approved landfill in accordance with local regulations.

13.2 Container Disposal

Refer to product label. Do not use packaging for storage of other products. Empty packaging should be disposed of to an approved recycler or crushed and sent to approved landfill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 9 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number:	3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS SPIROTETRAMAT 10%)
Transport hazard class(es)	9
Packing Group:	III
HAZCHEM:	2Z
Special Precautions for User:	-
IMDG Marine pollutant:	YES
Transport in Bulk:	-

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Classification) Notice 2022.

HSNO approval number: HSR100545. Refer to controls on www.epa.govt.nz for complete wording for variation Controls.

Tolerable exposure limits: No TEL set

Environmental exposure limits: No EEL set

International agreements: Not applicable

HSW (HS) Regulations 2017 Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

Certified Handler certificate: Not applicable

Location Certificate: Not applicable

Signage trigger quantity (Schedule 3): 1000 L

Emergency Response Plan trigger quantity (Schedule 5): 1000 L

Secondary Containment trigger quantity (Schedule 16):	1000 L
Tracking (Schedule 26):	Not applicable
Record Keeping:	A record of application records is required in certain circumstances. Refer to section 48 of Hazardous Substances (Hazardous Property Controls) Notice 2017
Workplace exposure limits:	Glycerine (mist) 10 TWA (mg/m3)
<u>ACVM Act 1997</u>	Registration number: P9524 GroVentive®. Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	9 th July 2023
SDS supersedes	December 2020
Reason issued	Update of SDS to GHS format.

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average (WES-TWA). The average airborne concentration of a substance calculated over an eight-hour working day.
UN Number	United Nations Number

16.3 REFERENCES

EPA CCID and Approved Substance databases
 PPDB- Pesticides Properties DataBase

16.4 OTHER

GroVentive® is a trademark of Grosafe Chemicals Ltd

09 July 2023

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End of Safety Data Sheet