SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product:	**Supremis 100SC**
Product Use:	Insecticide
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**Adria Crop Protection Solutions**
Address:	407 State Highway 16 Kumeu 0841, Auckland
Telephone:	+64 9 412 9817
Website:	www.adria.nz
Emergency No:	**0800 734 607 (24hr)** **0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	28 March 2023 v2

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR101330

Pictograms

Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the unborn child.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing fumes, vapours or spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.
P281	Use personal protective equipment as required.

Response code	Response Statement
P363	Wash contaminated clothing before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/v)	CAS NUMBER.
Spirotetramat	<10	203313-24-1
Propane-1,2-diol	<5%	57-55-6
Glycerol	<5%	56-81-5
Xanthan gum	<1%	11138-66-2
Not hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — If product or spray enters eyes, wash out immediately and continue rinsing with clean water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Obtain medical attention.

If on Skin — Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Seek medical attention.

If Swallowed — If swallowed do NOT induce vomiting. Never give anything to an unconscious person. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or a doctor immediately.

If Inhaled — Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Not applicable.
Inhalation: Not applicable.
Skin: May cause an allergic skin reaction.
Eye: Not applicable.
Chronic: Suspected of damaging fertility or the unborn child.

Treatment: Treat according to symptoms (decontamination, vital functions). In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

Section 5. Fire Fighting Measures

Hazard Type	This product is not flammable.
Hazards from products	In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx).
Suitable Extinguishing media	Extinguish warehouse and factory fires using dry chemical extinguisher, alcohol-resistant foam, carbon dioxide.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing. Self-contained breathing apparatus is required in the event of a fire. Do not allow the runoff from firefighting media to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Addition of water may cause excessive foaming. Vapours may be toxic.
HAZCHEM CODE	**None allocated**

Section 6. Accidental Release Measures

Personal precautions:
Use protective clothing as per Section 8. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Spill and Disposal procedures:
Absorb spills with inert material i.e. sand, silica gel, acid binder, sawdust and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely, according to Local Council regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing fumes, vapours or spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid contact with skin and eyes.
- Ventilation required.
- Keep away from: sparks, open flame and direct sunlight.
- Chemical resistant gloves and eye protection should be worn when handling this product.
- Other personal protective equipment appropriate to the situation when handling product, e.g. Full body cover [ankle to wrist clothing and boots] should also be worn.
- Wash protective clothing daily after work.
- Avoid release to the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Keep away from heat and protect from sunlight.
- Protect against freezing.
- Store in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer.
- Refer to the current standard NZS8409 Management of Agrichemicals.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Glycerin (mist)	[56-81-5]	-	10	-	-
Propane-1,2-diol, Particulates only	[57-55-6]	-	10	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls / Industrial Hygiene

Ensure there is sufficient ventilation of the area.

Personal Protection Equipment

Eyes	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent) with side-shields.
Hands	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)). Contaminated gloves should be washed. Gloves should be disposed of when contaminated on the inside, perforated or contamination on the outside cannot be removed.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure. Wear 2 layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. Decontaminate contaminated clothing, remove and dispose of in accordance with the manufacturer's instructions.
Respiratory	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles. Respiratory protection is not normally required under anticipated circumstances of exposure.
General	Avoid contact with skin and eyes and inhalation of dust from concentrate or spray mist. When mixing or applying, wear protective clothing, including face shield, impervious gloves and footwear. If clothing becomes contaminated with product, remove clothing immediately. DO NOT eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work.

Section 9 Physical and Chemical Properties

Appearance	Liquid, SC
Colour	Not available
Odour	Characteristic
Odour Threshold	Not available
pH	4-6
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available

Flammability	Non Flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	1.06 g/L
Water Solubility	Suspends in water
Partition Coefficient:	Spirotetramat: log Pow: 2.5 at pH 7
Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available
Surface tension	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Temperature extremes and direct sunlight
Incompatible Materials	Store only in original containers.
Hazardous Decomposition Products	In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx).

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable. Spirotetramat - Acute oral LD50 for rats >2000 mg/kg
Dermal	Not applicable. Spirotetramat LD50 for rats >2000 mg/kg
Inhalation	Not applicable. Spirotetramat LC50 for rats >4.18 mg/l
Eye	Not applicable.
Skin	May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

Ecological effects information	Harmful to aquatic life with long lasting effects.
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Ecological Information (Based on the active ingredient Spirotetramat):	
Acute fish toxicity:	LC50 (96 h) for rainbow trout 2.54, bluegill sunfish 2.20, sheepshead minnows 1.96 mg/l.
Toxicity for daphnia:	EC50 (48 h) >42.7 mg/l.
Toxicity to algae:	ErC50 (72 h) for Pseudokirchneriella subcapitata 8.15, Skeletonema costatum 0.96 mg/l.
Toxicity for birds [LD50 mg/kg]	Acute oral LD50 for bobwhite quail >2000 mg/kg. Dietary LC50 (5 d) for mallard ducks >6050 mg/kg diet.

Toxicity for worms [LC50 mg/kg] (14 d)	LC50 (14 d) for Eisenia fetida >1000 mg/kg soil.
Toxicity bees [LD50 µg/bee] (48 h)	>100 (contact) (48 h), 107.3 (oral) (48 h)
Bioaccumulative potential:	In soil, DT50 <1 d (parent); 5 to 23 d (metabolites). No concern with regard to groundwater contamination for parent or metabolites. No negative effect on microbial mineralisation. Aquatic DT50 (aerobic) <1 d, (anaerobic) c. 3 d. DT50 for aqueous photolysis c. 3 d. Soil Kd 4.39 ml/g; mean Koc 289 ml/g; moderately mobile.
Mobility in soil	No specific data available
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.

Empty container precautions:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance//product.

Precautions or methods to avoid: Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2020

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR101330

HSW (HS) Regulations 2017	**Trigger Quantity**
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L
Emergency Response Plan (Schedule 5)	1000L
Secondary Containment (Schedule 5)	1000L
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA www.epa.govt.nz for controls document - HSR101330
HSNO Additional Controls (Restrictions of use)	
77A - A restriction has been placed on the application method for this substance.	This substance must be applied using ground-based methods only.
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Subpart B - Use of ecotoxic substances in any place	The maximum application rate of this substance is 960 mL/ha (equivalent to 96 g

	spirotetramat/ha) per application, with a maximum application frequency of 3 per season.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P9687

Section 16 Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

Glossary

EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact Adria, if further information is required.

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