

## SAFETY DATA SHEET

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

### Section 1. Identification of the material and the supplier

Product: **Avia**  
 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  
 Fax: +64 9 412 9807  
 Website: www.adria.nz

**Emergency No: 0800 734 607 (24hr)3**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 14 March 2023 v2

### Section 2. Hazards Identification

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

**EPA Approval No: HSR100508**  
**Pictograms**



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin irritation Cat. 2	H315	Causes skin irritation.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H423	Hazardous to soil organisms
Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates
Hazardous to terrestrial invertebrates	H441	Hazardous to terrestrial invertebrates

<b>Prevention Code</b>	<b>Prevention Statement</b>
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
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.

<b>Response code</b>	<b>Response Statement</b>
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P362	Take off contaminated clothing and wash before re-use.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

<b>Storage Code</b>	<b>Storage Statement</b>
None allocated	

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Refer to Section 13.

### **Section 3. Composition / Information on Hazardous Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Bifenthrin	8.16	82657-04-3

### **Section 4. First Aid Measures**

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
If on Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Gently wash affected areas with soap and water. If a large area is affected or if irritation persists, seek medical assistance.
If Swallowed	If swallowed, rinse mouth with water (only if the person is conscious). DO NOT INDUCE VOMITING. 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**

Product Name: Avia  
Date of SDS: 14 March 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 www.techcomp.co.nz

Symptoms:  
**Ingestion:** Harmful if swallowed.  
**Inhalation:** Not applicable.  
**Skin:** Causes skin irritation. May cause an allergic skin irritation.  
**Eye:** Causes serious eye irritation.  
**Chronic:** May cause damage to organs through prolonged or repeated exposure.

**Treatment:** No known specific antidote. Treat symptomatically (decontamination, vital functions). Stomach lavage or saline laxative may be considered.

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	This product is not flammable.
<b>Hazards from combustion products</b>	Toxic fumes that may be released during fire: Carbon oxides, hydrogen chloride and -fluoride may be released during fire.
<b>Suitable Extinguishing media</b>	Make use of water, foam, dry chemical, or carbon dioxide to extinguish fires.
<b>Recommended protective clothing &amp; Precautions for firefighters</b>	Wear SCBA and chemical-protective clothing.
<b>HAZCHEM CODE</b>	<b>3Z</b>

## Section 6. Accidental Release Measures

### Personal precautions:

Use protective clothing as per Section 8. Avoid contact with skin, eyes and clothing.

### Environmental precautions:

Cover or dyke spill and prevent spreading. Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### Spill and Disposal procedures:

Absorb spills with inert material, vacuum, shovel or pump spilled material and place in waste containers. Prevent material from entering waterways. 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.
- Do not breathe fumes, vapours or spray.
- Ensure adequate ventilation.
- Cleaning water should be disposed of in appropriate manner.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds and sunlight.
- Keep out of reach of children and away from uninformed persons.
- Protect from extreme temperatures above 40°C.

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA	STEL
	ppm mg/m <sup>3</sup>	ppm mg/m <sup>3</sup>

No ingredients have exposure limits

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 adequate ventilation. Emergency eye wash stations and safety showers should be available in the immediate vicinity of any potential exposure.

**Personal Protection Equipment**

<b>Eyes</b>	Wear safety goggles with side-shields or full-face shield.
<b>Hands</b>	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
<b>Skin</b>	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
<b>Respiratory</b>	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles.
<b>General</b>	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work.

**Section 9****Physical and Chemical Properties**

<b>Appearance</b>	Liquid
<b>Colour</b>	Beige
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	Not available
<b>pH</b>	7 - 8
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	> 100°C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not explosive
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Density</b>	± 984 g/L
<b>Water Solubility</b>	Not available
<b>Partition Coefficient:</b>	Not available
<b>Ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to Avoid</b>	Avoid excessive temperatures.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	None known.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Harmful if swallowed. LD50 > 500 mg/kg, rat.
<b>Dermal</b>	Not applicable. LD50 >2000 mg/kg, rabbit
<b>Inhalation</b>	Not applicable. LD50 >10 mg/L/hr
<b>Eye</b>	Causes serious eye irritation.
<b>Skin</b>	Causes skin irritation. May cause an allergic skin reaction.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

### Acute Toxicity -

Chemical Name	LD50 (Oral)	LD50 (Dermal)	LC50 (inhalation)
<b>Product</b>			
Bifenthrin (82657-04-3)	43 mg/kg (Mouse)	-	10-20mg/l

## Section 12. Ecotoxicological Information

<b>Ecological effects information</b>	Very toxic to aquatic life with long lasting effects Hazardous to soil organisms Hazardous to terrestrial vertebrates Hazardous to terrestrial invertebrates
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available
<b>Acute fish toxicity:</b>	LC50 (96 h) >0.15 ug/L
<b>Toxicity for daphnia:</b>	LC50 (48 h) >0.16 ug/L
<b>Toxicity to algae:</b>	EC50 > 5 mg/L
<b>Precautions:</b>	Do not allow to enter waterways.

## Section 13. Disposal Considerations

### Disposal Method:

When emptying container, triple rinse and add remaining material to spray tank. Return the empty container to an AgRecovery collection point for disposal.



**Empty container precautions:**

Avoid contamination of any water supply with chemical or empty container.

**Precautions or methods to avoid:** Avoid release to the environment.

<b>Section 14</b>	<b>Transport Information</b>
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**This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020**



**Road, Rail, Sea and Air Transport**

<b>UN No</b>	3082
<b>Class - Primary</b>	9
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	<b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Bifenthrin)</b>
<b>Marine Pollutant</b>	Yes
<b>Special Provisions-Limited Quantities</b>	If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

<b>Section 15</b>	<b>Regulatory Information</b>
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This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR100508

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Certified Handlers	Not required
Signage Trigger Quantities (Schedule 3)	100Kg
Emergency Response Plan (Schedule 5)	100Kg
Secondary Containment (Schedule 5)	100Kg
Tracking (Schedule 26)	Not required
<b>For all further controls</b>	Refer to EPA website ( <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> ) for controls document - HSR100508
<b>HSNO Additional Controls (Restrictions of use)</b>	
A maximum application rate is set for this substance	Avia shall be applied at a maximum rate of 62.5 mLs per 100M2 of surface area.
77A	Avia is restricted to indoor use only.
77A	This substance must not be applied onto or into water.
77A	The method of application of the substance shall be limited to ground-based application only.
77A	This substance shall not be used on structures where food for human consumption is being produced.
<b>ACVM Act and Regulations</b>	
ACVM Approval No	Not applicable.

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 <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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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