

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Lavron**
 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: 3 September 2018

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR100578

Pictograms



Toxic Irritant Chronic Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1B (inh)	H330	Fatal if inhaled.	Acute Tox. 2
6.1C (oral)	H301	Toxic if swallowed.	Acute Tox. 3
6.1E (dermal)	H313	May be harmful in contact with skin.	Acute Tox. 5
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.9A	H372	Causes damage to organs through prolonged or repeated exposure.	STOT RE 1
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1
9.3B	H432	Toxic to terrestrial vertebrates.	

9.4A	H441	Very toxic to terrestrial invertebrates.	
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Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
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.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.
P284	Wear respiratory protection.

Response code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304 + P340	IF INHALED: Remove 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.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/v)	CAS NUMBER.
Lambda-cyhalothrin	250g/L	91465-08-6
Not hazardous	To bal	

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. If eye irritation persists: Get medical advice/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. If skin irritation occurs: Get medical advice/ attention.
- If Swallowed Rinse mouth. If swallowed do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER (0800 764 766) or doctor/physician.
- 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: Toxic if swallowed.

Inhalation: Fatal if inhaled.

Skin: May be harmful in contact with skin. Causes mild skin irritation.

Eye: Causes serious eye irritation.

Chronic: May cause damage to organs through repeated or prolonged exposure.

Treatment: No specific antidote is available. If poisoning is suspected apply symptomatic therapy. Persons suffering a temporary allergic reaction may respond to treatment with anti-histamines or steroid creams and/or systemic steroids. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	This product is not flammable.
Hazards from combustion products	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
Suitable Extinguishing media	Extinguish warehouse and factory fires using dry chemical extinguisher, alcohol-resistant foam, carbon dioxide or fine-water spray. DO NOT use direct jet of water.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing.
HAZCHEM CODE	2X

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 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:

- Keep out of reach of children.
- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Cleaning water should be disposed of in appropriate manner.
- Wear protective clothing as detailed in Section 8.
- Wear respiratory protection.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.

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Prepared by: Technical Compliance Consultants (NZ) Ltd
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- Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds.
- Protect from extreme temperatures.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

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 NOV 2017 9TH EDITION.

Engineering Controls / Industrial Hygiene

Ensure there is sufficient ventilation of the area.

Personal Protection Equipment



Eyes	Safety goggles with side-shields.
Hands	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
Respiratory	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles.
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
Colour	Cream
Odour	Characteristic
Odour Threshold	Not available
pH	6.2
Boiling Point	100°C
Melting Point	Not available
Freezing Point	Not available
Flash Point	Does not flash
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available

Density	1,032 - 1,054g/L
Water Solubility	Not available
Partition Coefficient:	Not available
Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	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	Heat and light.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Toxic if swallowed.
Dermal	May be harmful in contact with skin.
Inhalation	Fatal if inhaled.
Eye	Causes serious eye irritation.
Skin	Causes mild skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Causes damage to organs through prolonged or repeated exposure.

Acute Toxicity -

Chemical Name	LD50 (Oral)	LD50 (Dermal)	LC50 (inhalation)
Lambda-cyhalothrin (91465-08-6)	>220mg/kg	2880mg/kg	0.06mg/L / 4hrs (Rat)

Section 12. Ecotoxicological Information

Ecological effects information	9.1A = Toxic to aquatic life. 9.3B = Toxic to terrestrial vertebrates. 9.4A = Very toxic to terrestrial invertebrates.
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Acute fish toxicity:	LC50 (96 hr) for rainbow trout, 0.00036 mg/L
Toxicity for daphnia:	EC50 (48 h) 0.36 µg/l
Toxicity to algae:	ErC50 (96 h) for Selenastrum capricornutum >1000 µg/l.
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:

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

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

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	3352
Class - Primary	6
Packing Group	III
Sub Class	9
Proper Shipping Name	PYRETHROID PESTICIDE LIQUID TOXIC
Marine Pollutant	Yes
Special Provisions-Limited Quantities	If the product's individual container is below 5L, 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.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR100578

HSNO Classification: 6.1B(inh), 6.1C(oral), 6.1E(dermal), 6.3B, 6.4A, 6.9A, 9.1A, 9.3B, 9.4A

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Yes, any quantity
Location Certificate	250L
Signage Trigger Quantities (Schedule 3)	100L (9.1A)
Emergency Response Plan (Schedule 5)	100L (9.1A)
Secondary Containment (Schedule 5)	100L (9.1A)
Tracking (Schedule 26)	Yes, any quantity
Record Keeping	In accordance with NZS 8409:2004 'Management of Agrichemicals'
For all further controls	Refer to EPA www.epa.govt.nz for controls document - HSR100578
HSNO Additional Controls (Restrictions of use)	

77A	a). This substance must not be applied onto or into water. b). The method of application of the substance shall be limited to ground-based application only.
Hazardous Property Controls Notice 2017	
HPC Notice Part 2	Certain substances restricted to workplaces only
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P8201

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 Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
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-

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Please contact Adria, if further information is required.

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