

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product: **Rivera**
 Product Use: Fungicide
 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)
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: HSR101053

Pictograms



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the unborn child
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 terrestrial vertebrates	H433	Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
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.
P260	Do not breathe fumes, mist 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.
P281	Use personal protective equipment as required.

Response code	Response Statement
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.
P363	Wash contaminated clothing before reuse.
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.
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	Wt%	CAS NUMBER.
Cyproconazole	16.00	94361-06-5
Trifloxystrobin	37.50	141517-21-7

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Check for and remove any contact lenses. In case of eye contact, immediately rinse with clean water for 10-15 minutes. Obtain medical attention if pain, blinking or redness persist.
If on Skin	Wash all exposed skin area with mild soap and water, if available use polyethylene glycol 400, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
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

Symptoms:

Ingestion: Harmful if swallowed.

Inhalation: Not applicable.

Skin: May cause an allergic skin reaction.

Eye: Not applicable.

Chronic: Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	This product is not flammable.
Hazards from combustion products	In the event of a fire, the following may be released: Hydrogen chloride, Hydrogen cyanide, Hydrogen fluoride, Carbon monoxide, Nitrogen oxides.
Suitable Extinguishing media	Small fire: Dry chemical, foam, sand. Large fire: Foam. Water spray. Water fog, foam, sand. Do not use a heavy water stream. Surrounding fires: Use water spray or fog for cooling exposed containers.
Recommended protective clothing	Do not enter fire area without proper protective equipment, including respiratory protection.
Precautions for firefighters	Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. Do not breathe fumes.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Personal precautions:

Use protective clothing as per Section 8. Do not eat, drink or smoke while using this product. Keep public away from danger area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Avoid contact with spilled product or contaminated surfaces.

Environmental precautions:

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Spill and Disposal procedures:

Wear protective clothing as per Section 8. Clean up any spills as soon as possible, using an absorbent material to collect it such as sand, silica gel, acid binder, universal binder, sawdust etc. 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.
- Do not breathe fumes, mist or spray.
- 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.
- Keep away from temperature extremes.
- Do not ingest.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Use personal protective equipment as required.

- **Suspected teratogen.** Females of child-bearing age should avoid contact: Obtain special instructions before use.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store locked up in tightly closed, properly ventilated, original containers away from heat, sparks, open flame.
- Store in a location accessible only to authorised personnel.

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 APRIL 2022 13TH EDITION.

Engineering Controls / Industrial Hygiene

Provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protection Equipment



Eyes	Chemical goggles or face shield with safety glasses.
Hands	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
Skin	If skin contact or contamination of clothing is likely, protective clothing should be worn
Respiratory	Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended.
General	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Suspected teratogen. Females of child-bearing age should avoid contact: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Section 9 Physical and Chemical Properties

Appearance	Suspension Concentrate (Liquid)
Colour	White to beige liquid
Odour	Characteristic
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available

Flash Point	> 105 °C
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.14 g/L
Water Solubility	Disperses in water
Partition Coefficient:	Not available
Ignition Temperature	355°C
Decomposition Temperature	Not available
Kinematic 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	No hazardous reactions when stored and handled according to prescribed instructions
Conditions to Avoid	Strong acids. Strong oxidizers.
Incompatible Materials	Overheating, extremes of temperature and direct sunlight.
Hazardous Decomposition Products	No decomposition products expected under normal conditions of use. Thermal decomposition generates: Hydrogen chloride, Hydrogen cyanide, Hydrogen fluoride, Carbon monoxide, Nitrogen oxides.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed.
Dermal	Not applicable. LD50 (rat) > 4,000 mg/kg.
Inhalation	LC50 (rat) > 1.962 mg/L. Exposure time: 4h. Determined in the form of a respirable aerosol. Highest attainable concentration.
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	May cause damage to organs through prolonged or repeated exposure.

Section 12. Ecotoxicological Information

Ecological effects information	Very toxic to aquatic life with long lasting effects. Hazardous to terrestrial vertebrates.
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 (Oncorhynchus mykiss (rainbow trout)) 0.0523 mg/L. Exposure time: 96 h
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 5433:2020



Road, Rail, Sea and Air Transport

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S (Trifloxystrobin, Cyproconazole)
Marine Pollutant	Yes
Special Provisions-Limited Quantities	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.

Section 15 Regulatory Information

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

EPA Approval Code: HSR101053

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA website (www.epa.govt.nz) for controls document - HSR101053
HSNO Additional Controls (Restrictions of use)	
A maximum application rate is set for this substance	The person in charge of the application of this substance, and any person applying the substance, must ensure that the application is carried out in accordance with the following restrictions:

	the substance must not be applied at rates exceeding 400 mL of formulated product/ha per application (equivalent to 150 g trifloxystrobin/ha and 64 g cyproconazole/ha); and the substance must not be applied to the same area more than 2 times in any 365-day period; and an interval of at least 21 full days must be observed before the substance is reapplied to the same area.
77A	This substance must not be applied onto or into water.
ACVM Act and Regulations	
ACVM Approval No	P9390. See www.foodsafety.govt.nz for registration conditions.

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

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Please contact Adria, if further information is required.

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