

SAFETY DATA SHEET

According to

HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identifica	ation of the material and the supplier
Product: Product Use: Restriction of Use:	Trian Fungicide Refer to Section 15
New Zealand Supplier: Address:	Adria Crop Protection Solutions 407 State Highway 16 Kumeu 0841, Auckland
Telephone: Website:	+64 9 412 9817 www.adria.nz
Emergency No:	0800 734 607 (24hr) 0800 764 766 (National Poison Centre)
Date of SDS Preparation:	5 April 2023 v2
Section 2. Hazards	Identification

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

EPA Approval No: HSR101230 Pictograms



Signal Word: DANGER

GHS Classification and Category	Hazard Code	Hazard Statement
Flammable Liquids Cat. 4	H227	Combustible liquid.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin irritation Cat. 2	H315	Causes skin 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.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.
Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe fumes, mist, 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.

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.
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 +	IF IN EYES: Rinse cautiously with water for several minutes. Remove
P351+P338	contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use dry chemical extinguisher, foam, carbon dioxide or
	water spray for extinction.

Storage Code	Storage Statement
P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/v)	CAS NUMBER.
Metalaxyl-M	48	70630-17-0
Benzenesulfonic acid, C10-13-(linear) alkyl derivs., calcium salt.	Proprietary	Proprietary
Rhodocal 70/B Solvay	Proprietary	Proprietary

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	Take off contaminated clothing and wash before re-use. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
If Swallowed	Do NOT induce vomiting. Wash mouth with water. Call a POISON CENTER or doctor/physician if you feel unwell.
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 sy	mptoms and effects, both acute and delayed
Symptoms:	
Ingestion:	Harmful if swallowed.
Inhalation:	Not applicable.
Skin:	Causes skin irritation. Causes an allergic skin reaction.
Eye:	Causes serious eye damage.
Chronic:	May cause damage to organs through repeated exposure.

Treatment: No known antidote available. Treat symptomatically. Seek medical attention immediately if poisoning is suspected.

Section 5. Fire Fighting Measures

Hazard Type	This product is combustible
Hazards from combustion products	High temperature may liberate toxic gases. Nitrogen oxides. Halogens. Carbon monoxide. Carbon dioxide.
Suitable Extinguishing media	Dry chemical extinguisher, foam, carbon dioxide or water spray (do not use direct jet of water).
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing.
HAZCHEM CODE	12

Section 6.	Accidental	Release Measure	5

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 carefully and follow all instructions.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Ventilation required.
- Do not breathe fumes, vapours 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.
- 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 away from heat and protect from sunlight.
- Protect against freezing.

Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA	STEL
Substance	ppm mg/m³	ppm mg/m³

No ingredients have exposure limits

Section 8

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. Separate shower and eating facilities should be provided.

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	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

Appearance	Liquid SL
Colour	Clear yellowish/tan liquid
Odour	Characteristic odour
Odour Threshold	Not available
pH	6-9
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	75°C
Flammability	Not flammable.
Upper and Lower	Not available
Explosive Limits	
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.05 g/L
Water Solubility	Not available
Partition Coefficient:	Not available
Ignition Temperature	Not available
Decomposition	Not available
Temperature	
Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions. Combustible.
Possibility of hazardous reactions	May form salts with inorganic and organic bases. Reacts with metals rapidly releasing hydrogen gas which may generate heat. Can hydrolyse to form organic by-products.
Conditions to Avoid	Temperature extremes.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	High temperature may liberate toxic gases. Nitrogen oxides. Halogens. Carbon monoxide. Carbon dioxide.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye damage.
Skin	Causes skin burns. May cause an allergic skin reaction.

Chronic Effects:

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

Acute Toxicity -

Chemical Name	LD50 (Oral)	LD50 (Dermal)	LC50 (inhalation)
Metalaxyl-M): (70630-17-0)	953mg/kg (male rat) 375mg/kg (Female rat)	>2000mg/kg (rat)	>2.29mg/l (4h)

Section 12. Ecotoxicological Information

Ecological effects information	Harmful 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
	(Based on the active ingredient Metalaxyl-M):
Acute fish toxicity:	Rainbow trout >100mg/kg (96h)
Toxicity for daphnia:	EC50 (48 h) >100 mg/L
Toxicity to algae:	Scenedesmus subspicatus (Algae) EC50 (72 h) = 103 mg/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 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: HSR101230

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L
Fire Extinguisher Quantities (Schedule 4)	500L – 2x required
Emergency Response Plan (Schedule 5)	1000L
Secondary Containment (Schedule 5)	1000L
Tracking (Schedule 26)	Not required
HSNO Additional Controls (Restrictions of u	ıse)
77A	The following limits are set for toxicologically relevant impurities in the active ingredient metalaxyl-m (technical grade) used to manufacture this substance:- 2, 6- dimethylaniline: 0.5 g/kg maximum- S- enantiomer: 4% maximum
ACVM Act and Regulations	
ACVM Approval No	P9355
See <u>www.foodsafety.govt.nz</u> for registration controls	

Section	16	Other	Information
Section	TO		THIOHIGUN

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 product to ensure any existing laws and legislation are observed.

Glossary	
EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms
	inhaling or ingesting it.
LD50	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

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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Review Date:

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5 April 2023

5 April 2028