



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **PREDICT FUNGICIDE**
Chemical Name of Active Ing: Pyrimethanil is an anilinopyrimidine derivative
Product Use: Fungicide
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd
Address: Level 1/93 Bolt Road
Tahunanui, Nelson
Telephone: +64 3 543 8275
Email: nzorders@adama.com

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 31 July 2019

Section 2. Hazards Identification

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

EPA Approval No: HSR100877

Pictograms



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P103	Read label before use.
P273	Avoid release to the environment.

Response Code	Response Statement
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as

	hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.
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Section 3. Composition / Information on Ingredients

Ingredients	Wt %	CAS NUMBER.
Pyrimethanil	600g/l	53112-28-0
Polyarylphenyl ether sulphate, ammonium salt	<100g/l	1194732-41-6
Other non-hazardous ingredients	To bal	-

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. If eye irritation persists: Get medical advice.
If on Skin	Remove contaminated clothing and wash before reuse. Wash away remainder with water and soap followed by a warm water rinse. If skin irritation occurs: Get medical advice/ attention.
If Swallowed	If swallowed, do NOT induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if needed.
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: Not applicable.

Eye: Not applicable.

Chronic: Not applicable.

Notes to doctor: No specific antidote known. Treat symptomatically and give supportive therapy.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from products	The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both) fire gases. There is little risk of any explosion from this product if commercial quantities are involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product are likely to be harmful if inhaled. Take suitable protective measures.
Suitable Extinguishing	Not combustible. Use extinguishing media suited to burning materials. Alcohol resistant foam is the preferred firefighting medium, but if it is

media	not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses.
Precautions for firefighters and special protective clothing	If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.
HAZCHEM CODE	22

Section 6. Accidental Release Measures

Wear appropriate protective clothing. (see section 8). Evacuate all unnecessary personnel.

Environmental precautions

In the event of a major spill, prevent spillage from entering into drains and water courses.

Methods and material for containment and cleaning up

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or entering drains and waterways. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways and drains. Sweep up and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material.

Container Disposal: Ensure container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush or puncture and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Product disposal: Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Equipment: Apply using accurately calibrated and maintained ground based equipment in accordance with The New Zealand Standard for the Management of Agrichemicals (NZS8409).
- Avoid release to the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.
- As a Class 9 Substance with Ecotoxicity Classifications, storage of PREDICT FUNGICIDE must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3

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

Product Name: PREDICT FUNGICIDE
Date of SDS: 31 July 2019

Prepared by: Technical Compliance Consultants (NZ) Ltd
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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

This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Personal Protection Equipment



Eyes	Safety goggles or Chemical goggles.
Hands and Skin	Wear suitable protective clothing, impervious elbow-length gloves (rubber,PVC) and chemical resistant boots.
Respiratory	During spraying wear suitable respiratory equipment.
General	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash hands thoroughly after handling. When using do not eat, drink, or smoke. Wash clothing separately before re-use.

Section 9 Physical and Chemical Properties

Appearance	Beige Liquid
Odour	Mild odour
Odour Threshold	Not applicable
pH	6.0-8.0 (neutral)
Boiling Point	Approximately 100°C at 100kPa.
Melting Point	-0°C
Flash Point	Not applicable
Flammability	Not flammable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	2.37kPa at 20°C (water vapour pressure)
Vapour Density	As for water
Specific Gravity	1.06-1.12
Solubilities	Completely soluble in water
Log P Octanol/water 20 oC	Not applicable
Auto-ignition Temperature	Not applicable
Kinematic viscosity mm²/s 40 °C	Not applicable
Particle Characteristics	Not applicable
Volatiles	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Reactivity	This product is unlikely to react or decompose under normal storage conditions. However, if you have doubts, contact ADAMA NZ for advice on shelf life properties.
Conditions to Avoid	Protect this product from light. Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible Materials	Strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products	This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms

	carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally, hydrogen cyanide gas in reducing atmospheres. Carbon monoxide poisoning produces headaches, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment and unconsciousness followed by coma and death. Polymerisation: this product will not undergo polymerisation reactions.
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Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Skin	Not applicable.
Eye	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Pyrimethanil:

LD50 Oral, Rat = >5000mg/kg

LD50 Dermal, Rat = >4000mg/kg

Section 12. Ecotoxicological Information

HSNO Classes: 9.1B = Toxic to aquatic life with long lasting effects.

Ecological effects information:

Birds: LD50 birds: >5000mg/kg

Fish: LC50 Rainbow trout (*Oncorhynchus mykiss*): 10.6mg/L

Bees: LD50 >100µg/bee

Daphnia: EC50 2.9mg/L

Persistence and degradability	This product is biodegradable, rapidly degradable
Bioaccumulation	Low bioaccumulation potential.
Mobility in Soil	It will not accumulate in the soil or water or cause long term. Low risk of underground water contamination.
Other adverse effects	No data available on product
Precautions	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Ensure container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush or puncture and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Precautions and methods to avoid:

Dispose of this product only by using according to the label, or at an approved landfill or other approved facility. Containers and bury in a suitable landfill, away from watercourses or if appropriate, recycle. Do not contaminate ponds, waterways and ditches with product or used container.

Section 14 Transport Information

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



Road and Rail Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (600g/l Pyrimethanil)

Air Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (600g/l Pyrimethanil)

Marine Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (600g/l Pyrimethanil)
 Marine Pollutant Yes

Special Provisions:

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 hazardous according to the Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR100877
 HSNO Classification: 9.1B

Refer to EPA website www.epa.govt.nz for controls document - HSR100877

HSW (HS) Regulations 2017	Trigger Quantity/Regulation
HSW(Hazardous substance) Regulations Part 4 Certified Handlers and supervision and training of workers	HSW Reg 4.5 – 4.6 Information, instruction, training and supervision.
Location Certificate	Not required

Signage Trigger Quantities	1000L (9.1B)
Fire Extinguishers	Not required
Emergency Response Plan	1000L (9.1B)
Secondary Containment	1000L (9.1B)
Tracking	Not required
HSNO Additional Controls (Restrictions of use)	
77A	Predict Fungicide must not be applied onto, over, or into water* * where 'water' means water in all its physical forms, whether flowing or not, and whether over or under ground, but does not include water in any form while in a pipe, tank or cistern or water used in the dilution of the substance prior to application.
Hazardous Property Controls Notice 2017	
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 3	Hazardous substances in a place other than a workplace
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P8812

Section 16 Other Information

Glossary

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
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
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

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Please contact the ADAMA, if further information is required.

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