



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **APHIDEX® WG INSECTICIDE**
Chemical name of active: 2-(dimethylamine)5,6-pyrimidinyl dimethylcarbamate
Common Name: Pirimicarb
Product Use: Insecticide
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd
Address: Level 1/93 Bolt Road
Tahunanui, 7011, Nelson
Telephone: +64 3 543 8275
Email: nzorders@adama.com

**Emergency Telephone: 0800 764 766 (National Poison Centre)
0800 734 607 (24hr Emergency Response)**

Date of SDS Preparation: 17 July 2023

Section 2. Hazards Identification

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

HSNO Approval No: HSR000703

Pictograms



Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement
Acute oral toxicity Category 3	H301	Toxic if swallowed.
Acute inhalation toxicity Category 4	H332	Harmful if inhaled.
Eye irritation Category 2	H319	Causes serious eye irritation.
Skin sensitisation Category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment acute Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Category 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to terrestrial vertebrates	H431	Very toxic to terrestrial vertebrates.
Hazardous to terrestrial invertebrates	H442	Toxic to terrestrial invertebrates.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust.
P264	Wash hands and exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid unintended release into 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.
P301 + P310 + P330	IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER or doctor/physician.
P302 + P313 + P333 + P352	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention.
P304 + P312 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P313 + P337 + P338 + P351	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.
P362 + P364	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.

Storage Code	Storage Statement
P405	Store locked up.
	Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from sources of ignition, stockfeed, seeds or foodstuffs and under lock and key. As a substance with Aquatic Ecotoxicity Classifications, storage of Aphidex WG Insecticide 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 (NZS 8409) is followed.

Disposal Code	Disposal Statement
P501	Refer to Section 13

Section 3. Composition / Information on Ingredients

Ingredients	Conc%	CAS NUMBER.
Pirimicarb	500g/kg	23103-98-2
Calcium carbonate	320g/kg	471-34-1
Other ingredients not contributing to the overall classification of the substance or non-hazardous	To balance	NA

Section 4. First Aid Measures**Necessary First-aid measures:**

Routes of Exposure:

If Swallowed	IMMEDIATELY call a POISON CENTER or doctor/physician. Wash out mouth with plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person.
If in Eyes	Rinse cautiously with water for 15 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 off immediately with soap and plenty of water. DO NOT scrub the skin. If skin irritation or rash occurs: Get medical advice/attention.
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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed**Symptoms:****Ingestion:** Toxic if swallowed.**Skin:** May cause an allergic skin reaction**Inhalation:** Harmful if inhaled.**Eyes:** Causes serious eye irritation.**Chronic:** May cause damage to organs through prolonged or repeated exposure.**Notes to physician:** There is no specific antidote. If poisoning is suspected apply symptomatic therapy.**Section 5. Fire Fighting Measures**

Hazard Type	Not Flammable.
Hazardous thermal (de)composition products	During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
Suitable Extinguishing media	Dry chemical extinguisher, foam, carbon dioxide or fine water spray. DO NOT use direct jet of water.
Precautions for firefighters and special protective clothing	When fighting a major fire wear an air-supplied respirator. Wear protective equipment.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Sweep up spilt material and place in waste containers. Absorb liquid spills with an inert (such as vermiculite, earth, sand or synthetic absorbent substance) material and place in waste containers. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. Dispose of container in a suitable landfill or take to an Agrecovery collection site.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe dust.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid unintended release into 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 children.
- Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from sources of ignition, stockfeed, seeds or foodstuffs and under lock and key.
- As a substance with Aquatic Ecotoxicity Classifications, storage of Aphidex WG Insecticide 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.
- Signage and secondary containment will be required at sites holding 100kg or more of Aphidex WG Insecticide.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Calcium carbonate (Limestone, Marble) [471-34-1]		10		

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

No special requirements. Product is used outdoors. Containment and or segregation are the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any measures to keep airborne levels below any relevant exposure limit.

Personal Protection Equipment

Eyes	Safety goggles or face shield. Avoid wearing contact lenses.
Hands and Skin	Wear chemical resistant gloves, wear heavy duty cotton overalls and chemical resistant boots.
Respiratory	In case of heavy exposure wear half face-piece respirator with combined dust and vapour cartridge.
General	Change work clothes daily. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not intake dust or spray mist. If product gets on skin immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Section 9 Physical and Chemical Properties

Appearance	Beige - granulated solid
Odour	Odourless
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	Not applicable
Melting Point	Pirimicarb melts at approx 92°C
Flash Point	Not applicable
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	Pirimicarb 0.97mPa @ 25°C
Density	Not applicable
Bulk Density	0.61
Relative Density	Not applicable
Solubilities	Soluble
Auto-ignition Temperature	Not applicable
Coeff Oil/water distribution	1.7 (unionized) (log P octanol/water)
Volatiles	Expected to be low at 100°C

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry. Keep isolated from combustible materials.
Incompatible Materials	Oxidizing agents.
Hazardous Decomposition Products	Can decompose at high temperatures forming toxic gases.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Toxic if swallowed.
Dermal	Not triggered
Inhalation	Harmful if inhaled.
Eye	Causes severe eye irritation.
Skin	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 prolonged or repeated exposure.

Primicarb Information:

Acute toxicity - Oral:	LD50 (rat)	= 147mg/kg
	LD50 (mouse)	= 107mg/kg
	LD50 (poultry)	= 25-50mg/kg
	LD50 (dog)	= 100-200mg/kg
Acute toxicity - Dermal:	LD50 (rat)	= > 500 mg/kg Non irritant
Acute toxicity - Inhalation:	LC50 (rat)	= 0.3mg/l/6h
Eye irritation:	Pirimicarb caused no irritation when introduced as a 5% solution of technical material into the eyes of rabbits.	
Sensitization:	Not a Sensitizer (Guinea-pig)	
Chronic/Long term Effects:	Pirimicarb technical has been extensively tested on laboratory mammals and in test-tube systems. The NOEL was 40mg/kg. In a 90 day study, reduced growth and food consumption was observed at 250 and 1000 ppm, but no neurological effects were noted. Not teratogenic in rats or rabbits. Not carcinogenic in chronic rat and mouse studies.	

Section 12. Ecotoxicological Information

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

The data below is for Pirimicarb

Toxicity to Birds:	LD50 = 25-50mg/kg (poultry)
	LD50 = 28.5mg/kg (mallard ducks)
	LD50 = 20.9mg/kg (bobwhite quail)
Acute toxicity to fish:	LC50 (96h) = 79mg/l (Rainbow trout)
	LC50 (96h) > 100mg/l (fathead minnow)
Growth inhibition, Algae:	EbC50 (96h) = 140mg/l (green algae)
Toxicity to aquatic invertebrates:	LC50 (48h) = 0.017mg/l (Daphnia magna (water flea))
Toxicity to soil dwelling organisms:	LC50 (14 days) = >60mg/kg (earthworms)
Toxicity to Bees:	LD50 (24h) oral = 4µ/bee (technical)
	LD50 (24h) oral = 53µ/bee (technical)

Environmental fate:

The information presented here is for the active ingredient pirimicarb. Solid with low volatility. This substance has low mobility in soil. Kow logP = 4.2 (20°C), 1.7 (unionized). There is evidence of rapid degradation in soil. DT50 7-234 days, according to soil type 9 range on 1.7-51.9%, pH 5.5-8.1). Hydrolytically stable at pH 4-9 (25°C) Aqueous solution sunstable to UV light DT50 <1d (pH 5,7,9).

Section 13. Disposal Considerations

Disposal Method: Dispose of this product only by using according to the label or at an approved landfill.

Container Disposal: Triple rinse container and add rinsate to spray tank. Empty containers and product should not be burnt. Dispose of container in a suitable landfill or take to an Agrecovery collection site. Do not use container for any other purpose.



Precautions: Do not allow product to enter waterways.

Disposal methods to avoid: Do not burn product or container.

Section 14 Transport Information

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



Road and Rail Transport

UN No: 2757
Class-primary 6.1
Packing Group III
Proper Shipping Name: CARBAMATE PESTICIDE, SOLID, TOXIC, N.O.S.
(PIRIMICARB 50%)

National transport regulations: Do not carry this product on a passenger service vehicle.

Air Transport

UN No: 2757
Class-primary 6.1
Packing Group III
Proper Shipping Name: CARBAMATE PESTICIDE, SOLID, TOXIC, N.O.S.
(PIRIMICARB 50%)

Marine Transport

UN No: 2757
Class-primary 6.1
Packing Group III
Proper Shipping Name: CARBAMATE PESTICIDE, SOLID, TOXIC, N.O.S.
(PIRIMICARB 50%)
Marine Pollutant: Yes

Special Provisions:

If the product's individual container is below 5kg, 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.

Segregation:

Check the Land Transport Rule Dangerous Goods 2005, Rule 45001/1 for additional information. Sea transport may require additional segregation. Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

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

HSNO Approval Code: HSR000703

HSNO Classification: Acute oral toxicity Category 3, Acute inhalation toxicity Category 4, Eye irritation Category 2, Skin sensitisation Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1, Hazardous to terrestrial Vertebrates, Hazardous to terrestrial invertebrates.

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handlers	Not Required
Location Certificate	1000 kg
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100 kg
Emergency Response Plan	100 kg
Secondary Containment	100 kg
Hazardous Property Controls Notice 2017	
HPC Notice Part 1	Hazardous Property Controls preliminary provisions
HPC Notice Part 2	Certain substances restricted to workplaces only.
HPC Notice Part 3	Hazardous substances in a place other than a workplace
HPC Notice Part 4 Subpart A	Substances that are hazardous to the environment: Site and storage controls
HPC Notice Part 4 Subpart B	Use of substances that are hazardous to the environment
HPC Notice Part 4 Clause 47	Equipment for environmentally hazardous substances must be appropriate
HPC Notice Part 4 Clause 48	Record of application of agrichemicals
HPC Notice Part 4 Clause 52	Agrichemicals that are hazardous to the aquatic environment must not be applied to water
HPC Notice Part 4 Subpart C	Qualifications required for the application of substances that are hazardous to the environment
ACVM Act and Regulations	
Registered pursuant to the ACVM Act 1997, See www.nzfsa.govt.nz/acvm for registration conditions	No. P7709
For all further controls	Refer to EPA website (www.epa.govt.nz) for controls document - HSR000703

Section 16

Other Information

Glossary

ACVM	Agricultural Compounds and Veterinary Medicines Act 1997.
EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority.
HSNO	Hazardous Substances and New Organisms Act 1996.
HSW	Health and Safety at Work Act 2015.
HSW (HS) Regulations	Health and Safety at Work (Hazardous Substances) Regulations 2017.
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.
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 issued by Adama New Zealand Ltd and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which is held by Adama New Zealand Ltd or has been 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. While Adama New Zealand Ltd 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, Adama New Zealand 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. The information herein is given in good faith, but no warranty, express or implied is made.

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