

Section 1 - Identification of Chemical Product and Company

Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of NOHSC Australia.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

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Substance: Active ingredient is a carbamate insecticide.
Trade Name: Farmoz Aphidex 500 Wettable Powder Aphicide
Product Use: Agricultural insecticide for use as described on the product label.
Creation Date: July, 2002
Revision Date: July, 2002

Section 2 – Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Pirimicarb	23103-98-2	50	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 3 - Hazards Identification

Risk Phrases: R20/21/22. Toxic if swallowed. Harmful by inhalation, in contact with skin, and if swallowed.

Safety Phrases: S20, S24, S38. When using, do not eat or drink. Avoid contact with skin. In case of insufficient ventilation, wear suitable respiratory equipment.

SUSDP Classification: S6

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Off-white powdered solid.

Odour: Mild odour.

Major Health Hazards: Signs and symptoms associated with mild exposures to organophosphate and carbamate pesticides include: headache, fatigue, dizziness, loss of appetite with nausea, stomach cramps and diarrhoea; blurred vision associated with excessive tearing; contracted pupils of the eye; excessive sweating and salivation; slowed heartbeat, often fewer than 50 per minute; rippling of surface muscles just under the skin. These symptoms may be mistaken for those of flu, heat stroke or heat exhaustion, or upset stomach. Moderately severe organophosphate and carbamate insecticide poisoning cases exhibit all the signs and symptoms found in mild poisonings, but in addition, the victim: is unable to walk; often complains of chest discomfort and tightness; exhibits marked constriction of the pupils (pinpoint pupils); exhibits muscle twitching; has involuntary urination and bowel movement. Severe poisonings are indicated by incontinence, unconsciousness and seizures. This product is a cumulative poison. Minor exposures over a period of time may lead to serious health problems.

Potential Health Effects

Inhalation

Short term exposure: Symptoms are described fully above.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Symptoms are described fully above.

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Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: Available data shows that this product is not harmful.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Symptoms are described fully above.

Long Term exposure: Long term minor exposures to this product may cause serious health effects.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

Atropine tablets 0.6mg and activated charcoal should be available in the area where this product is used, or in a nearby unlocked medicine cabinet. If swallowed, splashed on skin or inhaled, contact a Poisons Information Centre or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, use of activated charcoal may be advised. Give atropine if instructed. The usual instruction is to give one atropine tablet every 5 minutes until dryness of the mouth occurs.

Inhalation: If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure. See instructions above about treatment with atropine.

Skin Contact: No specific health data is available for this product. If any unusual symptoms become evident, or if in doubt, contact a Poisons Information Centre or a doctor. See instructions above about treatment with atropine.

Eye Contact: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor. See instructions above about treatment with atropine.

Section 5 – Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product, if scattered, may form flammable or explosive dust clouds in air.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus. Do not scatter spilled material with high pressure water jets.

Flash point: Not flammable.

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: No data.

Section 6 – Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include cotton, rubber, PVC. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by

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consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 – Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this class of poison. Make sure that containers of this product are kept tightly closed. Keep away from sources of ignition such as sparks and open flames. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Check packaging - there may be further storage instructions on the label.

Section 8 Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure Limits	TWA (mg/m³)	STEL (mg/m³)
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Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

The ADI for Pirimicarb is set at 0.002mg/kg/day. The corresponding NOEL is set at 0.4mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, January 2001.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Eye Protection: Eye protection is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: cotton, rubber, PVC.

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask. Use a P3 mask, designed for use against all particulates including highly toxic materials.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Off-white powdered solid.
Odour:	Mild odour.
Boiling Point:	Not available.
Freezing/Melting Point:	No specific data. Solid at normal temperatures. Pirimicarb melts at 90°C
Volatiles:	No specific data. Expected to be low at 100°C.
Vapour Pressure:	No data. Expected to be negligible at normal room temperatures.
Vapour Density:	No data.
Specific Gravity:	No data.
Water Solubility:	Wettable.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water distribution:	No data
Autoignition temp:	No data.

Section 10 – Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep away from heat, flames and sparks.

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Incompatibilities: strong oxidising agents.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

Polymerisation: This product is unlikely to undergo polymerisation processes.

Section 11 – Toxicological Information

The following data is for Pirimicarb

ACUTE TOXICITY DERMAL: LD₅₀ = >500mg/kg (rat); nonirritant.

ORAL: LD₅₀ = 147mg/kg (rat) LD₅₀ = 107mg/kg (mouse); 25-50mg/kg (poultry); 100-200mg/kg (dog).

EYES: Pirimicarb caused no irritation when introduced as a 5% solution of technical material into the eyes of rabbits.

SUBACUTE AND CHRONIC TOXICITY: Rat: No ill effects were detected when rats were fed 750 ppm for 90 days.

Dog: In feeding tests for a period of 90 days, a no-effect level of 1.8 mg/kg was demonstrated. Daily application of 500mg/kg to rabbits (dermally) for 24 hours over a 14 day period produced no toxic signs during the experiment or during the next 14 days. Rats exposed for 6 hr/d (5 d/week) for 21 d, to air which had been passed over technical Pirimicarb at room temperature developed no toxic sign, nor was there inhibition of cholinesterase.

Daily applications of 500 mg/kg (for 24-hr) to rabbit skin over a 14-day period produced no toxic symptom. In 2-yr feeding trials NEL was: for dogs 1.8mg/kg daily; for rats 250 mg/kg diet (12.5mg/kg daily).

Section 12 – Ecological Information

Some hazard to fish, birds, and beneficial insects. Some hazard to honey bees. Biological magnification unlikely. Nonphytotoxic. Does not harm lady bugs or lacewings. Low bee toxicity. LC₅₀ (96-hr) is: for bluegill 55mg/l; for rainbow trout 29 mg/l. Acute oral LD₅₀ for mallard duck 17.2mg/kg; for bobwhite quail 8.2mg/kg.

Approximate Residual Period: Relatively short in plants; broken down rapidly by ultraviolet light.

Section 13 – Disposal Considerations

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

Section 14 – Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 – Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 – Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOHSC	National Occupational Health and Safety Commission
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

Contact Points:

Call Farnoz on (02)9363 3611

Fax: (02)9363 5977 and ask for the technical manager.

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Police and Fire Brigade:

Dial 000

Emergency contact:

1800 024 973 (24 hours)

If ineffective:

**Dial Poisons Information Centre
(13 1126 from anywhere in Australia)**

The information contained in this Material Safety Data Sheet is provided in good faith and is believed to be correct at the date hereof. However, it is expected that individuals receiving the information will exercise their independent judgement in determining its appropriateness for a particular purpose. Farnoz Pty Ltd makes no representation as to the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability whatsoever, whether with respect to negligence or otherwise, for any loss or damage arising from or connection with the supply or use of the information in this Material Safety Data Sheet.

Please read all labels carefully before using product.

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