

## APEX 500 WDG

## SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** APEX 500 WDG  
**Other identifier:** Pirimicarb 500 WDG  
**Recommended use:** Insecticide  
**Restrictions on use:** Agriculture

**Supplier:** Villa Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1992/002474/07  
PO Box 10413, Aston Manor, 1630,  
South Africa

**Telephone:** (011) 396 2233

**Fax:** (011) 396 4666

**Website:** [www.villacrop.co.za](http://www.villacrop.co.za)

#### Emergency telephone numbers:

#### 24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

Griffon Poison Information Centre +27 82 446 8946

(Client: Villa Crop Protection)

#### Poisoning Emergency telephone numbers:

Griffon Poison Information Centre +27 82 446 8946

Poisons Information Centre +27 861 555 777

### 2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
<b>Health</b>		
Oral	Acute Toxicity 3	H301
Dermal	Acute Toxicity 3	H311
	Skin Irritation 3	H316
	Skin Sensitisation 1	H317
Eye	Eye Damage 1	H318
Inhalation	Acute Toxicity 4	H332
Carcinogenicity	Carcinogenicity 2	H351
<b>Environment</b>		
Aquatic Acute	Aquatic Acute 1	H400
Aquatic Chronic	Aquatic Chronic 1	H410

#### The most important adverse effects:

**Physiochemical effects:** None known.

#### Human health effects:

Toxic if swallowed or in contact with skin.

Causes serious eye damage.

Harmful if inhaled.

Causes mild skin irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

### Label elements:



**Signal word:** Danger.

#### Hazard statements:

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H316: Causes mild skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H332: Harmful if inhaled.

H351: Suspected of causing cancer.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

#### Precautionary statements:

P203: Obtain, read and follow all safety instructions before use.

P261: Avoid breathing dust or spray.

P264+P265: Wash hands thoroughly after handling. Do not touch eyes.

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 release into the environment.

P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER.

P302+P352+P316: IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get emergency medical help immediately.

P304+P340+P317: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.

P305+P354+P338+P317: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.

P318: IF exposed or concerned, get medical advice.

P330: Rinse mouth.

P361+P364: Take off immediately all contaminated clothing and wash before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of content/container to suitable landfill in accordance with local regulations.

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### Other hazards:

None known.

### Toxicity:

Classification according to GHS: Category 3

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture.

#### Composition:

Chemical Name	CAS	Conc. (m/m %)	Classification EC 1272/2008
Pirimicarb	23103-98-2	50%	Acute Toxicity 3 (H301) Skin Sensitisation 1 (H317) Acute Toxicity 3 (H331) Carcinogenicity 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Sodium dodecyl benzene sulfonate	25155-30-0	<5%	Acute Toxicity 4 (H302) Skin Irritation 2 (H315) Eye Damage 1 (H318)
Styrene phenol polyethoxony ether	99734-09-5	<5%	Aquatic Chronic 3 (H412)
Calcium dodecyl benzene sulfonate	26264-06-2	<5%	Acute Toxicity 4 (H302) Skin Irritation 2 (H315) Eye Damage 1 (H318) Aquatic Chronic 4 (H413)

### 4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. IF exposed or concerned, get medical advice.

#### Inhalation:

Remove person from contaminated area to fresh air immediately. If breathing has stopped, perform artificial respiration or administer oxygen. Keep person warm and at rest. **Seek medical attention.**

**Skin:** Remove contaminated clothing and shoes immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap.

**Get emergency medical help immediately.**

**Eyes:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Obtain medical attention.**

**Ingestion:** If swallowed, rinse mouth thoroughly with water and immediately get medical attention or **call a poison control centre** for treatment advice. If person is alert and respiration is not depressed, give syrup of Ipecac followed by water or activated charcoal if instructed. If vomiting occurs, keep head below hips to prevent aspiration. **Never** give anything by mouth to an unconsciousness person.

#### Anticipated acute effects:

Toxic if swallowed or in contact with skin.

Causes serious eye damage.

Harmful if inhaled.

Causes mild skin irritation.

May cause an allergic skin reaction.

**Anticipated delayed effects:** Suspected of causing cancer.

**Most important symptoms/effects:** Initial symptoms can be nasal hyperaemia, watery discharge, chest discomfort and wheezing. Other symptoms may include nausea, vomiting, diarrhoea, abdominal cramps, headache, vertigo, tightness of the chest, anxiety, ocular pain, ciliary muscle spasm, blurred vision, small pupils, or mydriasis, lacrimation, salivation, sweating, and confusion.

In severe cases, there may be involuntary defaecation, bradycardia, hypotension, pulmonary oedema, convulsions, coma and death from respiratory failure or cardiac arrest.

**Advice to physician:** If consciousness level declines or vomiting has not occurred in 15 minutes empty stomach by gastric lavage. Avoid aminoglycosides and succinylcholine. Phenothiazines, reserpine, theophylline, morphine, Pralidoxime (2-PAM, Protopam) and other oximes are contra-indicated.

**Antidote:** Administer atropine sulphate intravenously or intramuscularly. In moderately severe poisoning administer atropine sulphate, 0.4 to 2.0 mg repeated every 15 minutes, until atropinization is achieved (dry, flushed skin, dry mouth and tachycardia). Maintain atropinization by repeated doses for 2 to 12 hours, or longer, depending on the severity of poisoning.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Extinguish fires with water spray, carbon dioxide, dry powder, or alcohol-resistant foam.

**Unsuitable Extinguishing Media:** High volume water jet. Use a water jet only to cool heated containers.

**Specific hazards:** Heating can release vapours that can be ignited. Hazardous decomposition products: carbon oxides, nitrogen oxides. Vapours may form explosive mixture with air.

**Special Fire Fighting Procedures:** Remove spectators from surrounding area. Isolate the fire area and evacuate

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all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours/fumes/dust from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

**Personal protective equipment:** Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with eyes and skin. Do not breathe in spray mist or dust. Ventilate area of spill or leak, especially in contained areas.

**Protective equipment:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Emergency procedures:** Alert firefighting personnel, evacuate unprotected personnel and animals.

**Environmental Precautions:** Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be very toxic to aquatic organisms and will cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.

**Methods and Materials for Containment:** Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air.

Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

### 7. HANDLING AND STORAGE

#### Handling:

**Precautions for safe handling:** Toxic if swallowed. Avoid contact with eyes and skin. Do not breathe in spray mist or dust. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly closed when not in use. In the case of contact with the product, refer to First Aid Measures – Section 4.

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

#### Storage:

**Conditions for safe storage:** Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container tightly closed, in an isolated, dry, cool and well-ventilated area. Avoid excessive heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** 3-ply paper or plastic bags or polyprop woven bags.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Permissible concentration:

Components	Exposure limits	Type of exposure limit	Source
Diatomite	3 mg/m <sup>3</sup> (respirable fraction)	8-hour TWA	"www.osha.gov"

#### Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

#### Personal Protective Equipment:

**Respiratory Protection:** For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapours.

**Hand Protection:** Employees must wear chemically protective gloves to prevent the substance against skin contact.

**Eye Protection:** Employees must wear chemical safety goggles/face-shield to prevent against eye contact. Contact lenses are not protective eye devices.

**Skin and Body Protection:** Employees must wear appropriate protective clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

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**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this substance; the employer should provide an eyewash fountain or appropriate alternative within the immediate work area for emergency use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Green colour.  
**Odour:** Special odour.  
**pH (1% aqueous dilution):** 6.8  
**Melting point:** Not available.  
**Freezing Point:** Not available.  
**Boiling Point:** Not available.  
**Flash Point:** Not available.  
**Flammability:** Non-flammable.  
**Upper/lower explosion limits:** Not available.  
**Vapour Pressure (mm Hg):** Not available.  
**Relative Vapour Density:** Not available.  
**Density/Relative density:** 1.3 g/kg.  
**Solubility:** Disperses in water.  
**n-octanol/water partition coefficient:** Not available.  
**Auto-ignition temperature:** Not available.  
**Decomposition temperature:** Not available.  
**Viscosity:** Not available.

### 10. STABILITY AND REACTIVITY

**Chemical Stability:** The product is stable for 2 years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.  
**Reactivity:** None known.  
**Possibility of Hazardous Reactions:** None known.  
**Conditions to Avoid:** Extreme heat or exposure to flames.  
**Incompatible Materials:** Strong oxidizers, strong bases, strong reducing agents.  
**Hazardous Decomposition Products:** Vapours may form explosive mixture with air.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY:

**Calculated according to GHS.**

**Oral LD<sub>50</sub> (24 h)** >250 mg/kg (rat).

**Dermal LD<sub>50</sub> (24 h)** >950 mg/kg (rat).

**Inhalation LC<sub>50</sub> (4 h)** >1.6 mg/l (rat).

**Skin Irritation/Corrosion:** Causes mild skin irritation.

**Eye Irritation/Corrosion:** Causes serious eye damage.

**Skin Sensitization:** May cause an allergic skin reaction.

**Respiratory Sensitization:** Not classified.

**Reproductive cell mutagenicity:** Not classified.

**Carcinogenicity:** Suspected of causing cancer.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity – single exposure:** Not classified.

**Specific target organ toxicity – repeated exposure:** Not classified.

**Aspiration hazard:** Not classified.

**Chronic Effects:** Not available.

#### POTENTIAL ADVERSE EFFECTS:

**Inhalation:** Harmful if inhaled.

**Skin contact:** Toxic in contact with skin.

**Eye contact:** Causes serious eye damage.

**Ingestion:** Toxic if swallowed.

### 12. ECOLOGICAL INFORMATION

This product is classified as very toxic to aquatic life with long lasting effects.

#### ECOTOXICITY DATA:

##### Pirimicarb.

##### Fish:

LC <sub>50</sub> (96 h)	Rainbow trout	79 mg/l.
	Bluegill sunfish	55 mg/l.
	Fathead minnows	>100 mg/l.

##### Daphnia:

EC <sub>50</sub> (48 h)		0.017 mg/l.
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##### Algae:

E <sub>b</sub> C <sub>50</sub> (96 h)	<i>Pseudokirchneriella subcapitata</i>	140 mg/l.
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##### Birds:

Acute oral LD <sub>50</sub>	Mallard ducks	28.5 mg/kg.
	Bobwhite quail	20.9 mg/kg.
Dietary LC <sub>50</sub>	Mallard ducks	5461 mg/kg diet.
	Bobwhite quail	180 mg/kg diet.

##### Bees:

LD <sub>50</sub> contact (24h)		53 µg/bee.
LD <sub>50</sub> oral (24 h)		4 µg/bee.

##### Worms:

LC <sub>50</sub> (14 d)	Earthworms	>60 mg/kg soil.
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#### ENVIRONMENTAL EFFECTS:

**Based on information for the active ingredient**

**Plants:** Not determined.

**Persistence and degradability:** Soil DT<sub>50</sub> 1-13 days (field, 5 sites). Photolysis accelerates degradation in soil. Stable in water under acid, neutral and alkaline conditions. DT<sub>50</sub> in surface water 36-55 days (lab., darkness, 2 water-sediment systems). Photolysis accelerates degradation in aquatic systems. Some volatilisation from soil and leaf. Efficiently degraded in air by photochemical oxidation.

**Bio-accumulative Potential:** Log K<sub>ow</sub> 1.7. In mammals, the major metabolites are 2-demethylamino-5,6-dimethyl -4-hydroxypyrimidine, 2-methylamino-5,6-dimethyl-4-hydroxypyrimidine, 2-



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amino-5,6-dimethyl-4-hydroxypyrimidine and 2-dimethylamino-6-hydroxymethyl-5-methyl-4-hydroxypyrimidine.

**Mobility in soil:**  $K_{oc}$  45-730 ml/g o.c. (4 soils, mean 290 ml/g o.c.).

**Other adverse effects:** Not determined.

### 13. DISPOSAL CONSIDERATIONS

**Waste:** Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Emptied containers retain dust and product residues. Do not re-use the empty container for any other purpose. Empty containers by inverting the empty container over the spray or mixing tank. Thereafter, rinse the container three times with a volume of water equal to a quarter of that of the container. Puncture the triple rinsed container and dispose of via an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Observe all labelled safeguards until container is destroyed.

### 14. TRANSPORT INFORMATION

**UN Number:** 2757

**Road Transport ADR/IRD:**

Class: 6.1

Packaging group: III

UN Proper Shipping Name: CARBAMATE PESTICIDE,  
SOLID, TOXIC.  
(pirimicarb 500 g/kg)

**Maritime Transport IMDG/IMO:**

Class: 6.1

Packaging group: III

UN Proper Shipping Name: CARBAMATE PESTICIDE,  
SOLID, TOXIC.  
(pirimicarb 500 g/kg)

**Marine Pollutant (Y/N):** Yes

**Air transport IATA/ICAO:**

Class: 6.1

Packaging group: III

UN Proper Shipping Name: CARBAMATE PESTICIDE,  
SOLID, TOXIC.  
(pirimicarb 500 g/kg)

**Special / Environmental Precautions:** Wedge drums tightly to avoid movement.

**Transport in bulk:** Refer to MARPOL 73/78, Annex II and the IBC code.

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### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation for the mixture:**

OHSA 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None.

**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)

**Other national regulations:** None.

**Chemical Safety Assessment carried out?** No

### 16. OTHER INFORMATION

**Packaging:** Packed in 10, 20, 25, 50, 100, 200, 250 & 500 gram and 1, 2, 5, 10, 15, 20, 25 & 50 kilogram 3-ply paper or plastic bags or polyprop woven bags, labelled according to South African regulations and guidelines.

**Other hazard statements, abbreviations and explanations:**

**H302:** Harmful if swallowed.

**H315:** Causes skin irritation.

**H331:** Toxic if inhaled.

**H412:** Harmful to aquatic life with long lasting effects.

**H413:** May cause long lasting harmful effects to aquatic life.

**IATA:** International Air Transport Association.

**IBC:** International Bulk Chemical.

**ICAO:** International Civil Aviation Organization.

**IMDG:** International Maritime Dangerous Goods

**IMO:** International Maritime Organization.

**LD<sub>50</sub> value:** The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

**OEL/RL:** Occupational exposure limit-recommended limit.

**PEL:** Permissible Exposure Limits.

**TWA:** Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

**ST/STEL:** Short-term exposure limits.

**Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

### END OF DOCUMENT

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For detailed information on revisions, contact the Registration holder.