

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

Insecticide



APEX 500 WDG

Reg. No. L 8475 Act No. 36 of 1947
N-AR 1295 / W1301427

3: 11/8/2022 – Nov2022

A water dispersible contact granular insecticide for the control of aphids in crops as indicated.

ACTIVE INGREDIENT

pirimicarb (carbamate)

500 g/kg

GROUP

1A

INSECTICIDE



DANGER

Hazard Statements:

Toxic if swallowed or in contact with skin.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Harmful if inhaled.
Suspected of causing cancer.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
Avoid release into the environment.

kg

villa



UN Number: 2757

Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

PO Box 10413, Aston Manor, 1630

Tel. (011) 396 2233

Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946

24 HR Transport / Spill Emergency no: (Hazcall24): +27 86 044 4411

(Client: Villa Crop Protection)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

APEX 500 WDG

Reg. No. L 8475 Act No. 36 of 1947

N-AR 1295 / W1301427

IRAC INSECTICIDE GROUP CODE: 1A

ACTIVE INGREDIENT:

pirimicarb (carbamate)..... 500 g/kg

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

PO Box 10413, ASTON MANOR, 1630

Tel. (011) 396 2233

WARNINGS**Withholding periods:**

Minimum number of days between the last application and harvest:	
Grain sorghum	30 days
Peaches and Groundnuts (hay)	21 days
Pecan nuts	56 days
Potatoes, Citrus, Apples and Cotton	14 days
Wheat, Oats and Cruciferae	7 days

NOTE

COMPLIANCE WITH THESE WITHHOLDING PERIODS WILL ENSURE THAT RESIDUES DO NOT EXCEED LOCAL MAXIMUM RESIDUE LIMITS, BUT THE IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE CROP TO BE TREATED IS INTENDED FOR EXPORT, CONSULT THE RELEVANT EXPORTING ORGANISATION REGARDING WITHHOLDING PERIODS.

Hazard statements:

Toxic if swallowed or in contact with skin.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Harmful if inhaled.
Suspected of causing cancer.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Toxic to animals and birds.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed.
- Store away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Keep livestock and domestic animals out of treated areas for at least 24 hours.
- Re-entry: Do not enter treated field within 1 day after application unless wearing protective clothing.
- **In case of poisoning call a physician immediately and make this label available to him/her.**

Aerial application:

Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

Do not use aerial application in apples or pears.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pests to the remedy concerned, as well as by the method, time and accuracy of the application. The registration holder, furthermore, does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for the lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of uncertainty.

PRECAUTIONS

Precautionary statements:

Obtain, read and follow all safety instructions before use.
Avoid breathing dust or spray.
Wash hands thoroughly after handling. Do not touch eyes.
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 release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED: Immediately call a POISON CENTER.
IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get emergency medical help immediately.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
IF exposed or concerned, get medical advice.
Rinse mouth.
Take off immediately all contaminated clothing and wash before reuse.
Collect spillage.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Avoid eye and skin contact.
- Prevent drift onto other crops, grazing, rivers, dams or any other area not under treatment.
- Clean the applicator thoroughly after use and dispose of the wash water where it will not contaminate food, grazing, rivers or dams.
- **TRIPLE RINSE EMPTY PLASTIC BAG AS FOLLOWS:** Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the bag to any other parties that may use it as container for foodstuffs.
- **TRIPLE RINSE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (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.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Pirimicarb	50 %
Sodium dodecyl benzene sulfonate	<5 %
Styrene phenol polyethoxoxy ether	<5 %
Calcium dodecyl benzene sulfonate	<5 %

SYMPTOMS OF HUMAN POISONING

Pirimicarb is a carbamate compound, which inhibits cholinesterase. Systemic effects may begin within a few minutes or several hours of exposure. 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.

FIRST AID TREATMENT

- 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.
- **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 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Obtain medical attention.**
- **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.**
- **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 unconscious person.

NOTE 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 atropinisation is achieved (dry, flushed skin, dry mouth and tachycardia). Maintain atropinisation by repeated doses for 2 to 12 hours, or longer, depending on the severity of poisoning.

RESISTANCE WARNING

APEX 500 WDG is a group code 1A insecticide. Any insect population may contain individuals naturally resistant to **APEX 500 WDG** and other group code 1A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **APEX 500 WDG** or any other group code 1A insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank-mix with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product.

MODE OF ACTION

APEX 500 WDG contains **Pirimicarb**, a carbamate compound which belongs to the IRAC group code 1A. It is a systemic insecticide active by contact, ingestion and respiration. After it is absorbed by the roots, it is translocated acropetally in the xylem, and it also penetrates the leaves but is not extensively translocated from the leaves. It binds to the acetylcholine site, inhibiting the acetylcholinesterase enzyme, resulting in hyperexcitation.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

The full range of compatibility of **APEX 500 WDG** with other remedies is not known; therefore, do not use it in tank mixtures with products other than those mentioned on this label.

Add a suitable adjuvant at the recommended label rates if necessary.

Mixing instructions:

- Fill the spray tank with clean water to just below the total volume required.
- Make a slurry of the **APEX 500 WDG** to be added to the tank in a suitable container, ensuring that all the chemical has dispersed.
- Add the mixture to the water while stirring.

- Fill the spray tank with water to the required level while maintaining agitation, to ensure thorough mixing.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g., overnight.

NOTE

APEX 500 WDG does not affect most of the natural enemies which attack Aphids on crops.

Where the crop foliage is dense, ensure that the spray also penetrates to the lower parts of the plant.

Aerial application:

Aerial application of **APEX 500 WDG** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A spray mixture volume of 30 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 25 to 35 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 280 to 300 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 metre above the target. Do not spray when the aircraft dives, is in a climb or when banking.
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met, and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

Crop / Pest	Dosage Rate	Remarks
Apples Aphids	50 g / 100 ℓ water (5 g / 10 ℓ water)	Spray as soon as an infestation is noticed. Repeat when necessary.
Citrus Aphids	40 g / 100 ℓ water (4 g / 10 ℓ water)	Spray as and when necessary.
Cotton Aphids (except resistant strains of <i>Aphis gossypii</i>)	150 g / ha (7.5 g / 10 ℓ water)	Ground application: Apply in 200 litres water.
	175 g / ha	Aerial application: Apply in 30 litres water.
		Dryland cotton Spray when Aphids first appear. Irrigated cotton Apply when honeydew on plants is noticed. Ensure thorough coverage and repeat when necessary.
Cruciferae Cabbage aphid (<i>Brevicoryne brassicae</i>)	250 g / ha (5 g / 10 ℓ water)	Apply in 500 litres water per hectare. Spray when Aphids first appear and repeat every two (2) weeks. Direct sprays into the centre of the plants. Sprays will not control Aphids deep within the plants.
Groundnuts Aphids	250 g / ha (6 g / 10 ℓ water)	Apply in 400 litres water. Ensure thorough coverage.
Ornamentals Aphids	50 g / 100 ℓ water (5 g / 10 ℓ water)	Ensure thorough coverage of the plants to the point of run-off.
Peaches Peach aphid	50 g / 100 ℓ water (5 g / 10 ℓ water)	Ensure thorough coverage. Repeat application when re-infestation occurs.
Pecan nuts Aphids	100 g / 100 ℓ water (10 g / 10 ℓ water)	If Aphids are present, spray once in the middle of January.
Potatoes Aphids	500 g / ha (10 g / 10 ℓ water)	Apply in 500 litres water per hectare. Ensure thorough coverage.
Sorghum Honeydew aphid (<i>Melanaphis sacchari</i>) Funnel aphid (<i>Rhopalosiphum maydis</i>)	250 g / ha (17 g / 10 ℓ water)	Ground application: Apply in 150 litres water when the pest is increasing.
	250 g / ha	Aerial application: Apply in 30 litres water when the pest is increasing.
Wheat Green aphid (<i>Acythosiphon hordium</i>)	250 g / ha (17 g / 10 ℓ water)	Ground application: Apply in 150 litres water.
	250 g / ha	Aerial application: Apply in 30 litres water.
		NOTE Apply ONLY to wheat which is over 200 mm in height.
Wheat and Oats Brown aphid (<i>Macrosiphum avenae</i>)	250 g / ha (17 g / 10 ℓ water)	Ground application: Apply in 150 litres water. Spray when the infestation of Aphids reaches an average of five (5) Aphids per head.
	250 g / ha	Aerial application: Apply in 30 litres water. Spray when the infestation of Aphids reaches an average of five (5) Aphids per head.