# Insecticide



# **BUPROFEZIN 500 WDG**

Reg. No. L 8254 Act No. 36 of 1947

4:7/7/2022 - Feb2025

A contact and stomach insecticide with insect growth regulant activity formulated as a water dispersible granule, for the control of various insect pests at the larval/nymph stages on crops as indicated.

#### **ACTIVE INGREDIENT**

buprofezin (thiadiazin)

500 g/kg

GROUP

16

**INSECTICIDE** 



<u>Hazard Statements:</u> May be harmful if swallowed.

Causes skin irritation.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.

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.



UN Number: 3077

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
65 Botes Road, Glen Marais, Kempton Park, 1619
Tel. (011) 396 2233
Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS: Griffon Poison Information Centre (National): +27 82 448 8946 Poison Information Helpline (National): +27 861 555 777 24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

#### **BUROFEZIN 500 WDG**

Reg. Nr. L 8254 Act No. 36 of 1947 IRAC INSECTICIDE GROUP CODE: 16

**ACTIVE INGREDIENT:** 

buprofezin (thiadiazin) ......500 g/kg

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD. Co. Reg. No. 1983/008184/07 P.O. Box 801, KEMPTON PARK, 1620 Tel. (011) 396 2233

## **WARNINGS**

Withholding periods:

Allow the following number of days between last application and harvest of the crops listed below:		
Avocados	160 days	
Citrus	45 days	

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORTING ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, THE LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, UNIVERSAL CROP PROTECTION (PTY) LTD CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

#### **Hazard statements:**

1142414 01410111011
May be harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Store in a cool, dry place, away from food and feeds and seed.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- Although BUPROFEZIN 500 WDG is generally regarded as safe for use on most important cultivars, this
  does not imply that a cultivar, sensitive to BUPROFEZIN 500 WDG might not be commercialized in the
  future. Where a new cultivar is to be treated, large areas should not be sprayed without prior small-scale
  testing of BUPROFEZIN 500 WDG on that cultivar.

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 soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for 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 any uncertainty.

### **PRECAUTIONS**

## Precautionary statements:

Do not breathe dust and spray mist.

Wash hands thoroughly after handling. Do not touch eyes.

Avoid release into the environment.

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

IF SWALLOWED, IN EYES or skin irritation occurs: Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy

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to do. Continue rinsing.	
Get medical help if you feel unwell.	
Take off contaminated clothing and wash it before reuse.	
Collect spillage.	
Dispose of contents/container to suitable landfill in accordance with local regulations.	

- Avoid inhalation of spray mist.
- Avoid contact with eyes, skin or clothing.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams or other areas not under treatment.
- Clean applicator thoroughly after use and do not pollute the environment with the wash water. Containers and packaging must be emptied completely before being destroyed.
- Rinse the container/bag **THREE TIMES** with a volume of water equal to a third of that of the container/bag. Add the rinsing to the contents of the mixing tank before destroying the container/bag in the described manner.
- Destroy the empty container/bag by perforating and flattening and dispose of according to local legislation.
- Never re-use the empty container/bag for any other purpose.
- Do not burn the empty container/bag.
- Prevent contamination of food, eating utensils, feed and drinking water.

Relevant hazardous components		
Buprofezin	50 %	
Dispersant	<10 %	
Dispersant	<5 %	

### **FIRST AID TREATMENT**

- <u>In case poisoning is suspected:</u> 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 and consult a doctor.
- <u>Skin contact:</u> Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation occurs.**
- **Eye contact:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Seek medical attention.**
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- <u>Ingestion:</u> Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

### **RESISTANCE WARNING**

**BUPROFEZIN 500 WDG** is a Group Code 16 insecticide. Any insect population may contain individuals naturally resistant to **BUPROFEZIN 500 WDG** and any other Group Code 16 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. **BUPROFEZIN 500 WDG** or any other Group Code 16 insecticide may not control these resistant insects. 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:

**Buprofezin** is a type 1 (homopteran) chitin synthesis inhibitor, with subsequent effects on cuticle deposition. It also has effects on the hormone levels of nymphs associated with moulting and on prostaglandin synthesis. It is a persistent insecticide and acaricide with contact and stomach action and inhibits moulting of nymphs and larvae, leading to death. The chemical also suppresses oviposition by adults and treated

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insects lay sterile eggs. The compound is not translocated in plants and belongs to IRAC's mode of action group 16.

### **USE RESTRICTIONS**

- **BUPROFEZIN 500 WDG** is active only against juvenile / nymph stages of the target pests. Thus, adults may still be observed following sometime after application. Adult populations will decrease over time after application depending on the effect of environmental conditions on the lifecycle of target pests
- Ensure thorough spray coverage of the tree with **BUPROFEZIN 500 WDG**, as its biological effectivity depends on the contact of the crawlers with residues of the product wherever they may move or settle on the tree.
- Commence **BUPROFEZIN 500 WDG** programmes early in the season on harvested trees due to the following reasons:
  - the tree is easier to penetrate during spraying in the absence of fruit,
  - crawler emergence is most uniform after winter with the onset of warmer weather,
  - potential early crawler movement causing pockmarking on fruitlets is halted.
- The 0.25 to 0.5 % narrow range distillation oil additive may possibly impact variably detrimentally on yield when applied as indicated. In order to minimize this possibility, restrict application to healthy, well-irrigated orchards and do not spray when the temperature exceeds 30 °C. The amount of oil used will be determined by the situation. Consult the registration holder of this product.
- It is a definite requirement to use this treatment in conjunction with effective ant control.

## **DIRECTIONS FOR USE**: Use only as directed.

## Compatibility:

- The compatibility of **BUPROFEZIN 500 WDG** with other products may be influenced by various factors. A physical compatibility test must always be performed prior to application of such a tank mixture.
- BUPROFEZIN 500 WDG is compatible with light, narrow range mineral oils, Villa 51/Wen51 and LATRON B-1956 (L 2947) and Charge/Techniwet Super.
- When BUPROFEZIN 500 WDG is used in combination with any other agricultural remedy, all WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE mentioned on that label, must be adhered to.

## **Mixing instructions:**

- Pre-mix the required amount of BUPROFEZIN 500 WDG with a small volume of water to create a creamy slurry without lumps.
- Start agitation of the water in the mixing tank.
- Half fill the spray tank with clean water and add this pre-mixed slurry to the tank. Agitate until mixture is well suspended.
- Fill the spray tank to the final volume with water as well as the amount of <u>oil</u> required, or **Villa 51** in the case of avocados. Maintain agitation to ensure thorough mixing of the spray mixture before commencing application.
- The **Latron B-1956** must be mixed separately in a bucket of water and added to the spray tank when it is about 3/4 full.
- Always ensure thorough agitation of the spray mixture. Ensure that agitation is resumed for a few minutes **before** commencement of spraying after normal operational stops (e.g., lunch break).
- Prepared spray mixture must be sprayed immediately and not be left in the spray tank for any length of time, e.g., overnight.

### **Application instructions:**

- It is important to calibrate the spraying equipment before application, to ensure that application of the correct dosage.
- The sprayer must be in good working order, to ensure even distribution of the spray solution throughout the target area.

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### **APPLICATION RATES**

Crop / Pests	Dosage rate per 100 ∕water	Remarks
Avocados Heart-shaped scale	30 g PLUS 50 mℓ Villa 51 (0.05 %)	Apply when heavy infestations of the pest occur on the underside of the leaves.  Apply as a high volume, full cover spray just before movement of active 1st generation crawlers commence. This usually occurs at the end of October, when 80 % females show distinctive yolk-sacks (80 % producing females).  NOTE  Thereuse accurage of the incide of the tree capacities.
		Thorough coverage of the inside of the tree canopy is essential.  Early preventative treatment: Two treatments spray programme*:
		Apply as a high volume, full cover spray (6 $\ell$ / m tree height above skirt) as soon as an infestation is
	30 g <b>PLUS</b>	present. Make sure that the underside of the leaves is well covered. Two (2) applications for each active ingredient at 14-day intervals as a spray programme.
	5 mℓ Charge	Start with <b>BUPROFEZIN 500 WDG</b> during the flowering period and end with <b>Luton 240 SC</b> .
		Refer to the respective product labels for USE RESTRICTIONS, DIRECTIONS FOR USE, APPLICATION RATES as well as the recommended minimum time between the last application and harvest.

## NOTE

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<sup>\*</sup>The "Two treatments program" is recommended under conditions of extended or sequential periods of crawler movement, or during uneven flowering.

Refer "RESISTANCE WARNING".

Crop / Pests	Dosage rate per 100 ∕water	Remarks
Citrus Red scale "Green & Orange Situation"	30 g PLUS 250 to 500 mℓ light narrow range distillation oil (0.25 to 0.5 %) PLUS 10 mℓ Latron B-1956	When Red scale is under commercial control and situations where a single application of summer oil on its own, in the period 9 to 11 weeks after 100 % petal fall, will not bring the insect under control.  Apply two sprays but it is important to time the first application at the start of specific crawler movement. Repeat four (4) weeks after the first treatment.
Mealybugs	30 g PLUS 250 to 500 mℓ light narrow range distillation oil (0.25 to 0.5 %) PLUS 10 mℓ Latron B-1956	Apply at first crawler movement when Mealybug infestation occurs.  Apply at onset of first crawler movement and before the calyx-end closure.  Repeat application four (4) weeks later in cases of heavy infestation.  NOTE  If only Mealybug is present (no Red scale), may the oil be omitted.
Woolly Whitefly (Aleurothrixus floccosus)	30 g / 100 ℓ water  PLUS  20 mℓ / 100 ℓ  Charge	Single treatment per season ONLY:  Apply as a medium cover spray when adults are active on leaves and/or nymphs are noticed on the underside of leaves.  Ensure thorough wetting of the ventral leaf surfaces.
Ornamentals (Chrysanthemums) Whiteflies	4 g / 10 $\ell$ water  PLUS  2 m $\ell$ / 10 $\ell$ water  Charge	Apply as a full cover spray and ensure thorough coverage of the leaves. Commence application as soon as infestation is noticed.  Repeat seven (7) days later.

#### NOTE

- Movement of crawlers may occur during mild winters, under which circumstances immediate
  application of BUPROFEZIN 500 WDG is needed and to be repeated four (4) weeks later. Also,
  crawler movement may occur again late in the season which can then be controlled by addition of oil to
  the spray mixture.
- Use pheromone traps to monitor male flight peaks and do physical inspection for crawler movement to facilitate the determination of the onset of crawler movement.
- Monitor crawler movement constantly. The infestation pressure will determine the number of applications required.

The following products mentioned in this label may be replaced with equivalent products listed below:

- LUTON 240 SC (L 9386) = TIVOLI 240 SC (L 9385 / N-AR 1928 / W1301409) = SPITRUS 240 SC (L 9700),
- CHARGE (L 9100 / W 130953) = TECHNIWET SUPER (L9239) and
- VILLA 51 (L 8050 / W 130454 / N-AR 1090) = WEN 51 (L 8315).

**LATRON B-1956** is a registered product of **DETEKTO INTERNATIONAL CC**.

VILLA 51, WEN 51 and LUTON 240 SC are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

CHARGE, TIVOLI 240 SC and TECHNIWET SUPER are registered products of VILLA CROP PROTECTION (PTY) LTD.

SPITRUS 240 SC is a registered product of CROP ASURE (PTY) LTD.

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