

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Insecticide



MARGIN 300 WDG

Reg. No. L 9009 Act/Wet No. 36 of/van 1947
N-AR 1755 / W 1301114

4:30/7/2018-Mar2019

A water dispersible granule insecticide with contact and stomach action for the control of pests mentioned on the crops as listed.

'n Water disperseerbare korrel insekdoder met kontak- en maagaksie vir die beheer van die plae vermeld op gewasse soos aangedui.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

indoxacarb (oxadiazine) **300 g/kg** indoksakarb (oksadiazien)

IRAC INSECTICIDE GROUP CODE **22** IRAC INSEKODDER GROEPKODE



villa

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box / Posbus 10413, Aston Manor, 1630

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UN Number: 3077

Willow Set & Print 011 394-4486



CAUTION
VERSIGTIG



GERBUIKSAANWYSYNGS INGESLUIT

VERWYS NA BESONDERHEDE
GEDRUK OP HOUER/SAK

Date formulated:

Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED

ON CONTAINER/BAG

Batch number:

Lotnommer:

MARGIN 300 WDG

Reg. No. L 9009 / N-AR 1755 / W 1301114 Act/Wet No. 36 of/van 1947
 IRAC INSECTICIDE GROUP CODE / IRAC INSEKODER GROEPKODE: 22

ACTIVE INGREDIENT/ AKTIEWE BESTANDDEEL:

indoxacarb (oxadiazine / indoksakarb (oksadiasien)..... 300 g/kg

Registration holder / Registrasiehouer:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box / Posbus 10413

ASTON MANOR, 1630

Tel. (011) 396 2233

CAUTION / VERSIGTIG**WARNINGS****Withholding periods:**

Minimum time between the last application and harvest or feeding:	
Apples and Pears	28 days
Potatoes	0 days
Cruciferae	3 days
Cotton	14 days
Grain sorghum	42 days
Grapes (Wine)	28 days
Grapes (Table)	14 Days
Maize and Sweetcorn (grazing)	28 days
Maize and Sweetcorn	3 days
Nectarines, Peaches & Plums	28 days
Tomatoes	1 day
Tobacco	42 days
Citrus	42 days

IMPORTANT NOTES ON MRL'S:

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

- Do not use treated crops for fodder and/or grazing purposes.
- Handle with care.
- Harmful if ingested, inhaled or by contact.
- May irritate skin and eyes.
- Toxic to fish and other aquatic organisms.
- Store in a cool, dry place away from food, feeds, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Aerial application:

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

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 pest 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

- Avoid inhalation of the spray mist.
- Avoid eye and skin contact.
- Wear a face mask and rubber gloves when handling, preparing and applying the spray mixture.
- Wash with soap and water after use or in the event of accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing and applying the product, before washing hands and face and change of clothing.
- 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.
- Containers and packages must be completely emptied before being disposed of. Bury in an approved, designated landfill.
- Destroy the container/bag by perforation and dispose of it in a safe way.
- **Never** re-use the empty container/bag for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

RESISTANCE WARNING

MARGIN 300 WDG is a group code 22 insecticide. Any insect population may contain individuals naturally resistant to **MARGIN 300 WDG** and other group code 22 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **MARGIN 300 WDG** or any other group code 22 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.

DIRECTIONS FOR USE: Use only as directed.**General information:**

- **MARGIN 300 WDG** acts by means of contact action (absorption through insect's cuticle) or stomach action due to ingestion. Although death of the pest may take 1 to 2 days to occur, feeding is inhibited within 2 to 8 hours after application.
- **MARGIN 300 WDG** can be used against all larval instar (development) stages.
- **MARGIN 300 WDG** do not control adult moths or butterflies.
- **MARGIN 300 WDG** has no adverse effects on most advantageous predatory insects and/or predatory mite species.
- **Climatic conditions:** **MARGIN 300 WDG** is effective under hot climatic conditions.
- **Bees:** If **MARGIN 300 WDG** is applied according to the dosage rates as instructed on this label, no serious adverse effects are expected in Honey bees. **However, do not apply MARGIN 300 WDG directly onto foraging Bees. The spray deposit should be allowed to dry before Bees are taken to the sprayed area.**

Compatibility:

- **MARGIN 300 WDG** is compatible with the surfactant **Villa 51**.
- The compatibility of **MARGIN 300 WDG** with other products may be influenced by several factors. As changing factors may vary, a physical compatibility test must always be performed before such a tank mixture is sprayed.
- When **MARGIN 300 WDG** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on the relevant labels.

Mixing instructions:

- Half fill the spray tank with water and add the required amount of **MARGIN 300 WDG** to the water, while agitating.
- Maintain agitation during mixing and application.
- The prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

General application directions:

At all times, use suitable, correctly calibrated equipment, in good working order, to ensure thorough wetting of all parts of the plant.

Aerial application:

Aerial application of **MARGIN 300 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 to 35 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 aurally at a lower volume rate than recommended above.
- Droplet coverage: 35 to 45 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 250 to 280 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 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomizing 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 atomizers 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.

Tuber moth control in potatoes:

- Apply a maximum of five (5) **MARGIN 300 WDG** treatments per season. Apply as a “Block spray programme” (i.e. apply a registered product with a different mode of action after 2 to 3 consecutive **MARGIN 300 WDG** applications).
- Ridge at least two (2) times during the season.
- Insufficient control of Tuber moth larvae will be obtained when **MARGIN 300 WDG** is applied late in the season, when the crop’s foliage is dying.
- African bollworm (*Helicoverpa armigera*) will also be controlled by **MARGIN 300 WDG**.

APPLICATION RATES**IMPORTANT**

Refer to “General information” above, especially with regard to Honey Bees.

Crop / Pest	Dosage rate	Remarks
Apples and Pears Larvae of Codling moth (<i>Cydia pomonella</i>)	25 g / 100 ℓ water	Apply as a full cover spray against the first generation of the pest. Ensure thorough coverage of the target area. Start with treatment at 75 % petal fall at the beginning of the first moth generation. Apply as part of a control programme at intervals that does not exceed 2-week intervals. DO NOT exceed four (4) treatments per season. In order to minimise the risk of development of resistance, apply products with a different mode of action (thus not IRAC Group code 22) against the other two (2) Codling moth generations.
Banded Fruit Weevil (Snout beetle) (<i>Phlyctinus callosus</i>)		Apply as a full cover spray and ensure thorough coverage through the entire tree. Start with treatment at 75 % petal fall onwards, or when the pest is observed in cardboard traps, or when feeding damage becomes visible on lower shoots. A second treatment may be required after 2 to 3 weeks, if infestation pressure persists. DO NOT apply more than two (2) MARGIN 300 WDG treatments per season against this pest. If a third application is deemed necessary, use a registered insecticide with a different mode of action (thus not IRAC Group code 22).
Cruciferae Larvae of Diamond-back moth (<i>Plutella xylostella</i>) Larvae of Cabbage web worm (<i>Hellula undalis</i>) African bollworm (<i>Helicoverpa armigera</i>) Larvae of Cabbage white butterfly (<i>Pieris brassicae</i>)	Ground application: 125 to 150 g/ha PLUS Villa 51 18 ml/100 ℓ water House garden / small scale application: 2.5 to 3.0 g / 10 ℓ water	Apply the higher dosage rate where corrective treatments have to be applied. Apply the lower dosage rate in follow-up applications as part of a spray programme. Apply in 300 to 600 litres water per hectare (300 to 600 ml per 10 m ²). Use hollow or full cone nozzles, to ensure complete coverage of the head where feeding takes place. It is important to add Villa 51 to obtain improved coverage on the target area. <ul style="list-style-type: none"> • Diamond-back moth & Web worm: Start with application soon after transplant just before, or when first eggs are deposited, or the first larvae are observed. These 2 pests cause serious damage during the early crop stages. Where re-infestation occurs continually, apply in a 7 to 10-day programme. Use the shorter interval in the early growing season while the crop is growing actively. Do not apply MARGIN 300 WDG more than 5 times per season. • African bollworm & Cabbage white butterfly: Apply when necessary as corrective application. Although alternation of MARGIN 300 WDG with products with other modes of action is recommended, a “block application” of 2 to 3 consecutive MARGIN 300 WDG applications must be applied before other products are used. DO NOT apply MARGIN 300 WDG more than five (5) times per season.

Crop / Pest	Dosage rate	Remarks
<u>Grapes</u> (Wine grapes only) Banded Fruit Weevil / Snoutbeetle <i>Phlyctinus callosus</i>	20 g / 100 ℓ water	Apply as a full cover spray at 1000 to 1500 litres spray mixture per hectare, ensuring complete coverage. Start with treatments from 25 cm shoot length onwards, or when the pest is first observed in cardboard traps, or first feeding damage is visible on lower shoots. The first occurrence of the pest varies between areas but can normally be expected from mid-October to mid-November. A second application may be necessary 14 days later if infestation persists. Do not apply later than full bloom. Do not exceed two (2) MARGIN 300 WDG treatments per season against this pest. If a third treatment is required, use a registered insecticide from another mode of action group.
<u>Table grapes</u> False Tiger Moth <i>Agoma trimenii</i>	20 g / 100 ℓ water	Apply as a full cover preventative spray when larvae are present (usually in December). Apply in 500 to 750 litres water per hectare. Ensure thorough coverage of the foliage. The treatment can be repeated 10 days later if necessary.
<u>Wine and Table grapes</u> Leafhoppers <i>Acia & Mgenia</i> spp.	20 g / 100 ℓ water	Apply as a full cover spray ensuring complete coverage. Apply 1000 to 1500 litres spray mixture per hectare. Scout for Leafhoppers at the beginning of January. Apply MARGIN 300 WDG preventatively as soon as Leafhoppers are present. Should there be a re-infestation, apply a second application 10 to 14 days later. To control the leafhopper numbers after harvest and prevent the transfer of Aster-Yellows disease, apply a third application post-harvest. Do not exceed two (2) MARGIN 300 WDG applications in total on wine and table grapes. Use a registered insecticide with a different mode of action for the third spray to prevent resistance build-up.
<u>Nectarines</u> Banded Fruit Weevil / Snoutbeetle (<i>Phlyctinus callosus</i>)	20 g / 100 ℓ water	Apply as a full cover spray at 500 to 2000 litres spray mixture per hectare, ensuring complete coverage. Apply first treatment from 75 % petal fall onwards, or when the pest is first observed in cardboard traps, or first feeding damage is visible on lower shoots. If necessary, apply a follow-up treatment 14 to 21 days later if infestation pressure persists. Do not exceed two (2) MARGIN 300 WDG treatments per season against this pest. If a third treatment is required, use a registered insecticide from another mode of action group.
<u>Stone Fruit</u> (Peaches, Nectarines and Plums) African bollworm (larvae) <i>Helicoverpa armigera</i>	15 g / 100 ℓ water	Apply as a full cover spray at 500 to 2000 litres spray mixture per hectare, ensuring complete coverage. MARGIN 300 WDG can either be applied preventatively or when eggs or larvae are present. Do not apply after larvae has entered the fruit. Apply a second application 10 to 14 days later if re-infestation of the pest warrants it. Do not exceed two (2) MARGIN 300 WDG applications in total. Use a registered insecticide with a different mode of action for the third spray to prevent resistance build-up.

Crop / Pest	Dosage rate	Remarks
<p>Potatoes Potato tuber moth (larvae) <i>(Phthorimaea operculella)</i></p>	<p><u>Ground application:</u> 125 g/ha</p> <p><u>Aerial application:</u> 150 g/ha</p> <p>PLUS</p> <p>Villa 51 18 ml / 100 l water</p> <p><u>House garden / small scale application:</u> 2.5 g / 10 l water</p>	<p>IMPORTANT Refer to “Tuber moth control in potatoes” above. Apply as a preventative or early corrective treatment. Always ensure good coverage of all leaves.</p> <p><u>Ground application:</u> Apply in 500 to 1000 litres water per hectare (500 to 1000 ml per 10 m²).</p> <p><u>Aerial application:</u> Apply in at least 30 litres water per hectare.</p> <p>Apply when moths or first “mine tunnels” are observed on the leaves. Observations of moths that are active in the foliage indicate that an infestation may occur. Continue with regular scouting to determine when follow-up treatments must be applied. Refer to “Tuber moth control in potatoes” above, regarding the number of MARGIN 300 WDG applications per season.</p> <p>When infestations recur continuously, it is recommended to apply MARGIN 300 WDG at 8 to 14-day intervals. Apply at shorter intervals when plants are growing actively early in the season.</p>
<p>Tomatoes Larvae of African bollworm <i>(Helicoverpa armigera)</i></p> <p>Larvae of Tomato semi-looper <i>(Chrysodeixis acuta)</i></p>	<p>150 g/ha (15 g / 100 l water if application volume exceeds 1000 l spray mixture / ha)</p> <p><u>House garden / small scale application:</u> 3.0 g / 10 l water</p>	<p><u>Corrective ground application:</u> Regular scouting of tomato fields is essential to establish the timing of the first and follow-up treatments (if necessary). Apply in 500 to 1500 litres of water per hectare (500 to 1500 ml per 10 m²) and ensure complete coverage throughout the plants. It is recommended to add a surfactant (e.g. Villa 51) to improve coverage. Start with treatments as soon as the first larvae are observed (around time of fruit set). MARGIN 300 WDG will control larvae at all larval instars. Apply in a programme with 8 to 14-day intervals when under continuous re-infestation occurs. Apply at the shorter interval early in the growth season when plants are growing actively. Apply a maximum of 5 MARGIN 300 WDG treatments per growing season. It is recommended to alternate MARGIN 300 WDG with registered products with a different type mode of action. Apply a “block application” of two to three consecutive MARGIN 300 WDG treatments before switching over to a product with another mode of action. Most beneficial insects will not be affected adversely by application of MARGIN 300 WDG. Tomatoes can be harvested 1 day after application.</p>

Crop / Pest	Dosage rate	Remarks
<p><u>Tomatoes (cont)</u> Larvae of Potato tuber moth (leaf miner) (<i>Phthorimaea operculella</i>)</p>	<p>150 g/ha (15 g / 100 ℓ water if application volume exceeds 1000 ℓ spray mixture / ha)</p> <p><u>House garden / small scale application:</u> 3.0 g / 10 ℓ water</p>	<p><u>Preventive / Early corrective ground application:</u> Apply in 500 to 1500 litres of water per hectare (500 to 1500 ml per 10 m²) and ensure complete throughout the plants. It is recommended to add a surfactant (e.g. Villa 51) to improve coverage. In the case of trellised tomatoes both sides of the tomato rows must be sprayed. Start with treatments as soon when first symptoms of infestation (mines on the leaves) are noticed or when the presence of moths is observed (presence of these moths in and around the foliage is normally a good indication that an infestation will follow. Regular scouting of tomato fields is essential to establish the timing of follow-up treatments. Apply in a programme with 8 to 14-day intervals when under continuous re-infestation occurs. Apply at the shorter interval early in the growth season when plants are growing actively. Apply a maximum of five (5) MARGIN 300 WDG treatments per growing season. It is recommended to alternate MARGIN 300 WDG with registered products with a different type mode of action. Apply a “block application” of two to three consecutive MARGIN 300 WDG treatments before switching over to a product with another mode of action. Most beneficial insects will not be affected adversely by application of MARGIN 300 WDG. Tomatoes can be harvested one (1) day after application.</p>
<p><u>Tobacco</u> Potato tuber moth (= Tobacco leaf miner) <i>Phthorimaea operculella</i></p>	<p>35 g / 100 ℓ water (87.5 to 105 g/ha)</p> <p>PLUS</p> <p>Villa 51 18 ml / 100 ℓ water</p>	<p>Follow a preventive spray programme at all times. Apply 250 to 300 litres spray mixture per hectare after transplanting into the field during the establishment phase of tobacco. The addition of Villa 51 (or a Villa approved surfactant), is recommended to improve droplet coverage on the foliage. Apply at 7 to 10-day intervals starting 2 to 3 days after transplanting. Under conditions of heavy infestation pressure, use the shorter interval. Apply the first and second treatments as directed band applications over the top of the plants. Ensure complete coverage of all foliage, especially the lower third of the plants (this is where Tobacco leaf miner infestation is most severe). Use a boom fitted with drop arms, with nozzles spraying inward towards each other, from the third to fourth treatments onwards in order to ensure effective coverage from both sides. Also increase the spray volume as the crop increases in height and leaf surface area. Apply a maximum of four (4) MARGIN 300 WDG treatments per season. It is recommended to alternate MARGIN 300 WDG with registered insecticides from a different IRAC Mode of Action Group (thus not IRAC group 22). Apply 2 to 3 consecutive MARGIN 300 WDG treatments (“block application”) before switching to a product from another group. Most beneficial insects and predatory Mites are unaffected by applications of MARGIN 300 WDG.</p>

Crop / Pest	Dosage rate	Remarks
<p>(Namibia ONLY) <u>Veld, Grazing,</u> <u>Cotton, Maize &</u> <u>Grain sorghum</u></p> <p>Fall Army worm (<i>Spodoptera frugiperda</i>)</p>	100 to 125 g/ha	<p><u>Ground application:</u> Apply in 200 to 400 litres water as soon as the pest is observed and repeat as necessary.</p> <p>Ensure thorough coverage of the target area.</p> <p>Do not exceed two (2) consecutive applications of MARGIN 300 WDG per season.</p>

The following product mentioned in this label may be replaced with an equivalent product:

- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315).

VILLA 51 and/en **WEN 51** are registered products of / is geregisteerde produkte van
VILLA CROP PROTECTION (PTY) LTD.