DIRECTIONS FOR USE ENCLOSED Batch Number:

Insecticide



MAINTAIN 200 SP

Reg. No. L 9225 Act No. 36 of 1947 N-AR 1857 5: 30/8/2022 - Feb2023

A water-soluble powder systemic, contact and stomach insecticide for the control of insect pests in crops as indicated.

ACTIVE INGREDIENT

acetamiprid (acetamidine)

200 g/kg

GROUP

4Δ

INSECTICIDE



Hazard Statements:

Harmful if swallowed. Causes mild skin irritation. Causes serious eye damage.

DANGER

Precautionary Statements:

Wash hands thoroughly after handling. Do not touch eyes.

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



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)

MAINTAIN 200 SP

Reg. No. L9225 / N-AR 1857 Act No. 36 of 1947 IRAC INSECTICIDE GROUP CODE: 4A

ACTIVE INGREDIENT:

acetamiprid (acetamidine)200 g/kg

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ASTON MANOR, 1630, Tel. (011) 396 2233

WARNINGS

Withholding periods:

Minimum time between the last application and harvest and/or grazing:	
Apples and Pears	50 days
Barley	60 days
Citrus	150 days
Canola, Wheat & Sugarcane	56 days
Cucurbits	3 days
Stone fruit (Peaches, Plums, Prunes, Nectarines, Apricots, Cherries)	28 days
Oats	70 days
Potatoes	21 days
Table grapes	45 days
Tobacco	21 days
Tomatoes	3 days
Rooibos tea	90 days

NOTE

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 CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

Hazard statements:

Harmful if swallowed.	
Causes mild skin irritation.	
Causes serious eye damage.	

- Handle with care.
- Toxic to Bees and wildlife.
- 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 in the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas, e.g. crops, rivers, dams and wetlands.

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.

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PRECAUTIONS

Precautionary statements:

Wash hands thoroughly after handling. Do not touch eyes.

Do not eat, drink or smoke when using this product.

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

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

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

Rinse mouth.

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

- · Avoid contact with eyes and prolonged or repeated skin contact.
- · Wash contaminated clothing after use.
- Wash with soap and water after use or accidental skin contact.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- Containers and packages must be completely emptied before being disposed of. Shake out thoroughly into the applicator and destroy the empty container thereafter in the described manner.
- Destroy the empty container by perforation and flattening.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Acetamiprid 20 %		
Wetting agent	<5 %	

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.
- <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: Immediately flush eyes with a stream of clean gently flowing water for 15 to 20 minutes, holding the eyelid(s) open. Remove contact lenses, if present, after the first five (5) minutes. **Obtain 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.

Advice to physician:

There is no specific antidote available. Treat symptomatically and supportively.

RESISTANCE WARNING

MAINTAIN 200 SP is a group code 4A insecticide. Any insect population may contain individuals naturally resistant to **MAINTAIN 200 SP** and other group code 4A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **MAINTAIN 200 SP** or any other group code 4A 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:

MAINTAIN 200 SP contains **Acetamiprid. Acetamiprid** belongs to IRAC's mode of action group 4A. It is a broad-spectrum insecticide with ovicidal activity and is especially active against the larvae / nymphs of insect

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species but is also effective in controlling adult stages. **Acetamiprid** is a neonicotinoid compound used as a contact, stomach and systemic insecticide and acts as a nicotinic acetylcholine receptor agonist with nerve action, affecting the pest's central nervous system.

USE RESTRICTIONS

<u>HONEYBEES</u>: Do not apply onto crops as a foliar spray when Honeybees are present. Prevent drift onto surrounding crops/areas where Honeybees may visit flowering plants.

- **DO NOT** mix with triazole fungicides bee toxicity is dramatically synergized.
- **DO NOT** apply the product to flowering crops or weeds if bees are visiting the treatment area.
- Minimize spray drift to reduce harmful effects on bees in habitats close to application sites.
- Do not exceed two (2) applications per season to minimize development of resistance to **MAINTAIN 200 SP**. Do not alternate with insecticides with a similar mode of action (e.g., **Imidacloprid**).
- Do not apply to trees under stress conditions (e.g., caused drought, waterlogged soils, root- and stem rot, nematodes etc.) as systemic uptake, translocation and insecticidal activity will be affected adversely.
- Do not apply to plants covered with a layer of dust as systemic uptake of the product and contact with insects will be sub-optimal.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

MAINTAIN 200 SP is compatible with **Technibuff Super**, **Villa 51**, **Link**, **Charge** or any other Villa approved adjuvant and most commonly used fungicides and insecticides. However, the compatibility with other products may be influenced by the formulation of the products involved, as well as the quality of the spray water. Since the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application. Refer to all warnings, precautions and directions for use on labels of complimentary products. **MAINTAIN 200 SP** should be tested on a small scale when mixed with other pesticides, to ensure that it is safe to the crop.

MAINTAIN 200 SP is not compatible with alkaline spray water or products that will create an alkaline spray mixture. Use **Technibuff Super** to buffer alkaline spray liquids at pH 4.2 to 5.5.

Mixing instructions:

- Half fill the spray tank with water and add the required amount of MAINTAIN 200 SP to the water, while agitating.
- Ensure that all the lumps have dissolved before adding the rest of the water.
- Agitate MAINTAIN 200 SP during mixing and application.
- If used in mixtures with EC, EW or oil containing adjuvants, these products must be added last to the spray tank, when the tank is nearly filled with water to the final mixture volume.

General directions:

It is recommended that **MAINTAIN 200 SP** be used in a tank mix with **Technibuff Super**, **Charge** or **Villa 51** to improve wetting and contact between spray mixture and waxy surfaces. This will also improve wetting of difficult to wet young flush and fruit, as well as enhancing penetration and translocation of the product. Only use suitable and correctly calibrated and spray equipment that is in good working order, to ensure good, even wetting of all plant parts.

Aerial application:

Aerial application of **MAINTAIN 200 SP** 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:

- <u>Volume</u>: A spray mixture volume of 30 to 40 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.
- <u>Droplet coverage</u>: 30 to 35 droplets per cm² must be recovered at the target area.
- <u>Droplet size</u>: 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.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when the aircraft dives, is in a climb or when banking.

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- Use suitable <u>atomising equipment</u> 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 <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the <u>wind speed</u> exceeds 15 km per hour.
- Stop spraying under <u>turbulent</u>, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high</u> humidity conditions (relative humidity 80 % and above) may lead to the following:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - 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.

Directions for use in citrus:

- Regular scouting is extremely important to establish pest status on which control measures can be based.
- Apply to the point of run-off (wet film), whether applied as full cover or "outside" cover. Improved uptake and residual control of the pest is obtained the longer the trees remain wet

APPLICATION RATES

NOTE: Always refer to, and observe the withholding periods listed under "WARNINGS" above.

Crop / Pest	Dosage Rate	Remarks
Apples and Pears Codling moth (Cydia pomonella)	50 g / 100 ℓ water	Please note the withholding period. Apply mid-November to mid-December (during the first or early second-generation Codling
	PLUS	moth) at 10 to 14-day intervals. DO NOT exceed two (2) applications per season.
	Technibuff Super	Apply MAINTAIN 200 SP as part of a Codling moth spray programme and incorporating other registered, non-related insecticides.
Apples Woolly aphid (<i>Eriosoma</i>	50 g / 100 <i>ℓ</i> water	Suppression of Woolly Aphid. Apply as a full cover spray when the pest starts
lanigerum)	PLUS	to migrate upwards into the trees, or when first noticed. Apply a second treatment 2 weeks
	Technibuff Super	later. Effective complete coverage is essential.
Pears Mealy bug (Pseudococcus	50 g / 100 ℓ water	Apply when crawlers start moving, but before they enter the calyx end of the fruit. Repeat the
obscurus)	PLUS	application if necessary 10 to 14 days later. DO NOT exceed two (2) applications per season.
	Technibuff Super	These sprays will also control Codling moth, but should not exceed a spray interval of 14 days.
Cotton Cotton Aphid (Aphis gossypii)	50 g to 75 g / ha	Dosage rate depends on insect pressure. Apply two (2) applications approximately one
	PLUS	week apart in 200 litres water per hectare, when economical threshold levels are exceeded.
Leaf hopper (Jassid) (Jacobiella fascialis)	Technibuff Super	The crop must be actively growing and not be subjected to any type of stress.

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Crop / Pest	Dosage Rate	Remarks
Cucurbits Green peach aphid (Myzus persicae) Whiteflies (Bemisia tabaci)	60 g / 100 ℓ water PLUS 20 mℓ / 100 ℓ water Charge	Apply the first application as soon as infestation is established. Apply as a full cover spray. The spray volume depends on the plant size and canopy density. Thorough coverage of the leaves is important. Apply according to infestation level with a maximum of three (3) applications per season at 10-day intervals.
Potatoes Green peach aphid (Myzus persicae) Whitefly (Bemisia tabaci)	50 g / ha PLUS (50 mℓ / 100 ℓ water) Villa 51	Ground foliar application: Apply in 500 litres water. Apply as a foliar spray when infestations reach a treatment (or economic) threshold. Even and thorough coverage is essential. If repeated applications are required, alternate with products from a different mode of action group. DO NOT exceed three (3) treatments per season.
American Leafminer (<i>Lyriomiyza trifolii</i>)	50 g / ha PLUS (50 mℓ / 100 ℓ water) Villa 51	Apply first treatment as soon as the puncture marks appear on the bottom leaves: Apply in 500 to 1000 litres water per hectare. Ensure good coverage of all foliage as it is important for optimal efficacy. Apply up to three (3) treatments at 7-day intervals.
Rooibos tea Leafhopper (Molopopterus theae)	50 g to 65 g / ha	Apply the higher rate under high Leafhopper infestation pressure. Apply the first application early in October. Follow with a second application after four (4) weeks later before the end of November.
Barley, Wheat & Oats (Summer & Winter rainfall areas – dry land) Brown ear aphid (Sitobion avenae) Common wheat aphid (Schizaphis graminum) Birdcherry-oat aphid (Rhapalosiphum padi)	50 g / ha PLUS (50 mℓ / 100 ℓ water) Villa 51 WARNING	Ground application: Apply in at least 120 litres water per hectare when pest is observed. Good coverage of all plant parts is essential. Repeat when necessary but do not apply later than the ear emergence stage of wheat and barley.
		SP is applied before a dense crop canopy is on: GS30) stage.
Canola (Winter rainfall areas – dry land) Cabbage aphid (Brevicoryne brassicae)	50 g / ha PLUS (50 mℓ / 100 ℓ water) Villa 51	Ground application: Apply in not less than 120 litres water per hectare when pest is observed. Good coverage of all plant parts is essential. Repeat when necessary but do not apply after flowering.

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Crop / Pest	Dosage Rate	Remarks
Table Grapes Mealy bug (Planococcus ficus)	50 g / 100 ℓ water PLUS a registered acidifier / buffer	Monitor for Mealybug males using pheromone traps. Once the threshold has been reached, wait for crawler movement and apply a single treatment when Mealybug crawlers are observed on the bases of shoots or leaves. Continue monitoring and follow-up with an alternative registered product, with a different mode of action, if required. The use of MAINTAIN 200 SP in summer must be preceded by a winter program against Mealybug with a registered contact insecticide.
Citrus Citrus thrips (Scirtothrips aurantii) Nurseries and non- bearing transplanted trees	40 g / 100 <i>ℓ</i> water	Outside cover application. Repeat when infestation level increases again.
Bearing trees (excluding lemons)	40 g / 100 <i>ℓ</i> water	Preventative outside cover treatment at or shortly after 100 % petal fall when 2 % of the fruit are infested. Repeat when threshold is exceeded again, but not later than six (6) weeks after first application.
Mealybugs (All species) Nurseries and non- bearing transplants	40 g / 100 <i>ℓ</i> water	Full cover spray when infestation is noticed. Repeat application when infestation level increases again.
Bearing trees (excluding lemons)	50 g / 100 ℓ water	Full cover spray when pest is noticed at 100 % petal fall. Repeat if necessary, within six (6) weeks.
Citrus red scale (Aonidiella aurantii) Nurseries and non- bearing transplants	50 g / 100 <i>ℓ</i> water	Full cover spray when infestation is noticed. Repeat application when infestation increases again.
Bearing trees (excluding lemons)	50 g / 100 <i>t</i> water	Apply as a full cover spray to branch framework and foliage when the pest is noticed at 100 % petal fall. If scouting indicates such, repeat within 6 weeks or apply another registered product.
Aphids (Aphis gossypii, Toxoptera citricida) Leaf miner (Phyllocnistis citrella) Psylla (Trioza erythreae	40 g / 100 <i>t</i> water	(i) Nursery and non-bearing trees. Outside cover application, repeat when the threshold is exceeded again. (ii) Bearing trees (excluding lemons). Outside cover application when control is required during the first six (6) weeks of petal fall.

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Crop / Pest	Dosage Rate	Remarks
Sugarcane (Fulmekiola serrata)	1.5 kg/ha PLUS (20 mℓ / 100 ℓ water) Charge	Suppression of Thrips. Ground application: Apply treatment when at least 6 to 8 green leaves are present. Apply in a minimum volume of 250 litres water per hectare as soon as pest is noticed. The use of a twin flat fan type nozzle is recommended. Direct the spray to the centre of the developing tillers. Aerial application: Apply in at least 30 litres water per hectare. The addition of a registered drift retardant adjuvant, to minimize spray drift to any area not under treatment, is strongly recommended.
Stone fruit (Peaches, Plums Prunes, Nectarines, Apricots, Cherries) Green peach aphid (Myzus persicae)	25 g / 100 ℓ water	Apply as soon as monitoring of orchards indicate the first signs of aphid infestation. A follow-up treatment may be required in the case of a heavy infestation, or if the leaves are already curled. Apply as a high-volume application based on the Tree-Row-Volume formula (generally, a water volume in the range of 1500 to 2000 litres per hectare will be required). NOTE The systemic activity of MAINTAIN 200 SP during or after application, will be reduced where trees are not growing vigorously or under stress conditions (drought, waterlogged, nematode infestations, etc).
Tomatoes Tobacco whitefly (Bemisia tabaci) American leafminer (Liriomyza trifolii) Aphids Green peach aphid (Myzus persicae) Potato aphid (Macrosiphum euphorbiae)	50 g / 100 ℓ water PLUS a registered acidifier / buffer	Please note the withholding period. Apply at first appearance of pest in a sufficient spray volume, to ensure good coverage of the target area. If necessary, apply a second treatment seven (7) days later. If the pest persists, apply another registered, non-related insecticide (not IRAC Group 4A) to prevent development of resistance.

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Crop / Pest	Dosage Rate	Remarks
Tobacco Whiteflies (Bemesia tabaci Biotype B)		Apply as a full cover spray, before whitefly populations build up to damaging levels. Thorough coverage of the foliage is important. A follow-up application can be made 7 to 14 days later.
	50 g / 100 ℓ water	Do not exceed two (2) applications of MAINTAIN 200 SP per season.
	PLUS	Please note that the claim on tobacco was added to the label of MAINTAIN 200 SP as
	a registered acidifier / buffer	part of an EMERGENCY REGISTRATION and is thus still under evaluation with regards to efficacy, selectivity and residue breakdown. This claim is however based on preliminary data and made to the best of the registration holder's knowledge and should pose minimal risk if applied according to label recommendations.

Consult the **Technibuff Super**, **Villa 51**, **Charge** and **Link** labels for **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE**.

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

- VILLA 51 (L 8050 / W 130454 / N-AR 1090) = WEN 51 (L 8315),
- TECHNIBUFF SUPER (L 9209) = AQUABUFF PLUS (L 9210),
- LINK (L 8675) = DIRECT (L 8680) and
- CHARGE (L 9100 / W 130953 / N-AR 2241) = TECHNIWET SUPER (L 9239).

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

LINK, VILLA 51, WEN 51, TECHNIBUFF SUPER and AQUABUFF PLUS are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

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