

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. SHAKE THE BOTTLE WELL BEFORE USE



Fungicide

**METANIL 480 SL**

Reg. No. L 11664 Act No. 36 of 1947

1: 30/09/2024 - Feb2025

A systemic soluble concentrate fungicide for the control of diseases on the crops listed.

**ACTIVE INGREDIENT**

mefenoxam (phenylamide) 480 g/l

**GROUP**

**4**

**FUNGICIDE**



**DANGER**



**Hazard Statements:**

Harmful if swallowed.  
May be harmful in contact with skin.  
Causes mild skin irritation.  
Causes serious eye irritation.  
May be harmful in inhaled.

**Precautionary Statements:**

Wash hands thoroughly after handling. Do not touch eyes.  
Do not eat, drink or smoke when using this product.  
Wear chemical safety goggles.

DIRECTIONS FOR USE ENCLOSED  
Batch Number: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_  
Date of Manufacture: \_\_\_\_\_



**villa**

**UN Number: Not Regulated**

Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

65 Botes Road, Glen Marais, Kempton Park, 1619

Tel. (011) 396 2233

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

**IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:**

Griffon Poison Information Centre (National): +27 82 446 8946

Poison Information Helpline (National): +27 861 555 777

24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

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FRAC FUNGICIDE GROUP CODE: 4

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**WARNINGS****Withholding periods:**

Minimum time between the last application and harvest or feeding:	
Avocados	30 days
Citrus	30 days
Macadamia	30 days

**NOTE**

ABOVE-MENTIONED WITHHOLDING PERIODS REFER TO COMPLIANCE WITH LOCAL MAXIMUM RESIDUE LIMITS (MRL'S). HOWEVER, IT IS IMPORTANT TO NOTE THAT IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE TREATED CROP WILL BE EXPORTED, FIRST CONSULT THE RELEVANT IMPORTER OR EXPORTING BODY REGARDING THE USE OF THIS PRODUCT, MRL'S AND RECOMMENDED WITHHOLDING PERIODS.

**Hazard statements:**

Harmful if swallowed
May be harmful in contact with skin
Causes mild skin irritation
Causes serious eye irritation
May be harmful if inhaled

- Handle with care.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Store in a cool, dry, well-ventilated area in the original container, tightly closed and secured.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within one (1) day after treatment unless wearing protective clothing.

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. 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 disease against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation and the environment, or harm to man or animal, or for a 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 the event of any uncertainty.

**PRECAUTIONS****Precautionary statements:**

Wash hands thoroughly after handling. Do not touch eyes.
Do not eat, drink or smoke when using this product.
Wear chemical safety goggles.
IF SWALLOWED: Get medical help.
IF ON SKIN: Get medical help.
IF INHALED: 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.
If skin irritation occurs: get medical help.
Dispose of contents/container in accordance with local regulations.

- Avoid inhalation of fumes or the spray mist.
- Avoid contact with skin and eyes.
- Wear a face shield and rubber gloves when handling the concentrate and during mixing.
- Wash with soap and water after use or accidental skin contact.
- Wash contaminated clothes daily after use.
- Do not eat, drink or smoke whilst applying or mixing, or before washing hands and face or change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three 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](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.
- Prevent contamination of food, feeds, drinking water and eating utensils.

<b>Relevant hazardous components</b>	
Metalaxyl-M TC	480 g/l
Fatty alcohol-polyoxyethylene ether	< 50 g/l
Tristyrylphenol ethoxylates	<100 g/l
Calcium Dodecylbenzene Sulfonate	< 50 g/l
Cocoamidopropyl Betaine	< 50 g/l
Organo-siloxane	< 150 g/l

**NOTE:** The ingredients listed above contribute to the overall GHS classification, the remaining ingredients do not have to be listed according to the South African Regulations for Hazardous Chemical Agents 2021, Regulation 14(b).

**In case of poisoning, call the following number:** +27 82 446 8946 (Griffon Poison Information Centre) or +27 861 555 777 (Poison Information Helpline).

**In case of a chemical spill call the following 24 Hr Transport / Spill emergency number:** +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

#### **First Aid Treatment:**

- Skin contact: 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 persists.
- Eye contact: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately; this product causes serious eye damage.
- Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists or if breathing is irregular.
- Ingestion: 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.
- Symptoms of human poisoning: No specific symptoms are known for this product.
- Note to physician: No specific antidote available. Treat symptomatically.

#### **RESISTANCE WARNING**

**METANIL 480 SL** is a group code 4 fungicide. Any fungus population may contain individuals naturally resistant to **METANIL 480 SL** and other group code 4 fungicides. The resistant individuals can eventually

dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **METANIL 480 SL** or any other group code 4 fungicide.

To delay fungicide resistance:

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

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

#### **Mode of Action:**

**METANIL 480 SL** contains the active **Mefenoxam**, a phenylamide, which is a protein synthesis inhibitor as it interferes with ribosomal RNA synthesis. The active is systemic and can be taken up by roots, stems and leaves. Uptake into foliage occurs very rapidly. Applications with **METANIL 480 SL** will provide protective as well as curative control of target pathogens.

#### **USE RESTRICTIONS**

##### **General:**

**METANIL 480 SL** is highly systemic and for effective disease control, should be applied during periods of active growth **before disease symptoms are observed**.

Ensure that good agricultural practise is followed alongside applications of **METANIL 480 SL** including the use of resistant varieties/rootstocks, optimal irrigation and fertilisation.

Prolonged use of **METANIL 480 SL** may lead to accelerated biodegradation of the active ingredient in certain soils therefore leading to a reduction in efficacy. Alternate use of **METANIL 480 SL** with registered fungicides with a different mode of action.

#### **AVOCADOS**

- The best results are achieved with treatments of **METANIL 480 SL** with good orchard management including factors directly related to root health: optimal irrigation (not over or under irrigation), maintenance of soil and correct planting depth.
- Apply a maximum of two (2) treatments of **METANIL 480 SL** per growing season.
- Apply **METANIL 480 SL** for a maximum of two (2) consecutive growing seasons. Alternate with registered fungicides with a different mode of action for continued control of *Phytophthora*.
- New plantings and interplants should be treated with **METANIL 480 SL** at the time of planting.
- For specific application directions, see “**DIRECTIONS FOR USE**” and “**APPLICATION RATES**” below.

#### **CITRUS**

- The best results are achieved with treatments of **METANIL 480 SL** if all other components of the root rot complex are managed effectively including optimal irrigation (not over or under irrigation), maintenance of soil, minimized trunk injuries, correct planting depth and use of tolerant rootstocks or plants certified as *Phytophthora*-free.
- Soil samples should be taken from orchards annually and tested for the presence of *Phytophthora*, even in the absence of symptomatic trees.
- Apply a maximum of two (2) treatments of **METANIL 480 SL** per growing season.
- **DO NOT** apply **METANIL 480 SL** in consecutive growing seasons.
- New plantings and interplants should be treated with **METANIL 480 SL** at the time of planting.
- For specific application directions, see “**DIRECTIONS FOR USE**” and “**APPLICATION RATES**” below.

#### **MACADAMIA**

- The best results are achieved with treatments of **METANIL 480 SL** with good orchard management including factors directly related to root health: optimal irrigation (not over or under irrigation), maintenance of soil, minimized trunk injuries and correct planting depth.
- When replacing citrus trees with Macadamia trees in an orchard, soil samples should be taken to a laboratory to test for the presence of *Phytophthora*, even in the absence of symptomatic trees.
- Apply a maximum of two (2) treatments of **METANIL 480 SL** per growing season.
- Apply **METANIL 480 SL** for a maximum of two (2) consecutive growing seasons. Alternate with registered fungicides with a different mode of action for continued control of *Phytophthora*.
- New plantings and interplants should be treated with **METANIL 480 SL** at the time of planting.
- For specific application directions, see “**DIRECTIONS FOR USE**” and “**APPLICATION RATES**” below.

**DIRECTIONS FOR USE: Only use as directed.****NOTICE TO USER:**

Read the entire label before application. This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under the Act to use this agricultural remedy for any purpose in a manner contrary with the directions on the label.

**Compatibility:**

- The compatibility of **METANIL 480 SL** in tank mixtures with other products has not been confirmed and can be influenced by the formulations involved, as well as the water quality.
- A physical compatibility test of all products involved is recommended, before application, as formulations can be altered, and water quality can vary from area to area.
- If the products are physically compatible, this does **NOT** imply that they will be biologically compatible (effective against the target pathogen), thus the registration holder will not take responsibility for ineffective control in these scenarios.

**Mixing instructions:**

- Fill the spray tank to half of the desired volume with clean water and ensure agitation.
- Add the required quantity of **METANIL 480 SL** to the mixing tank and ensure the formulation has fully dispersed through the spray tank.
- **METANIL 480 SL** is a concentrated aqueous solution that requires no constant agitation after mixing. However, in the case of a tank mixture with any other product, ensure the mixture is thoroughly agitated during mixing and application.
- **Replace cap directly after use.**
- The spray mixture must be sprayed immediately after mixing. Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

**Application:**

- Calibration: It is important to ensure that all application equipment is in good working order and correctly calibrated to apply the required spray volumes and dosage rate. Ensure good coverage by using the spray volumes as indicated.
- Ensure uniform distribution of the spray mixture over the target area.

**Avocados, Citrus and Macadamias:**

- Remove all weeds and debris under and around the trees before application with **METANIL 480 SL**.
- Apply a maximum of two (2) applications with **METANIL 480 SL** per season.
- Apply the first application when foliar flush is noticed. This is normally associated with the beginning of the rainy season. Apply the second application 16 – 20 weeks later, as this is when the activity of the pathogen is expected to increase again.
- Apply evenly as a soil drench with 2 mL of **METANIL 480 SL** diluted in 200 mL water per m<sup>2</sup> of the tree canopy or base the amount of **METANIL 480 SL** to be applied on the drip circle diameter in accordance with the table below. **IMPORTANT:** It may be necessary to treat an area larger than the drip circle as roots of certain trees may extend an extra meter outside of the drip circle e.g. avocado trees.
- Apply a light irrigation (5 – 10 mm) after each application.

**Dose rate of METANIL 480 SL based on drip circle diameter in meters per application:**

Diameter of the area to be treated (m)	Rate of METANIL 480 SL (mL / tree)
≤ 2	6.5
3	15.6
4	26
5	41.7
6	57.3
7	83.3
8	104.2
9	135.4
10	166.7

- **Nursery trees:** Apply as an even soil drench application when new growth is noticed at the beginning of spring. Apply at a rate of 0.1 mL of **METANIL 480 SL** per 4 L bag. A total of 250 mL of suspension should be applied per nursery tree. A second application should be made 16 weeks later.

Additional notes:

- Due to the nature of the pathogen and the tree, improvement in tree condition may only be observed in the second season after application for older trees. A root response should occur in the first season and further trunk lesion development in citrus should be halted, however, the foliar response is expected in the second season after application. Increases in citrus fruit yield may only be observed in the 2<sup>nd</sup> or 3<sup>rd</sup> season after a season's applications of **METANIL 480 SL**.
- The rate of recovery of symptomatic trees will depend on the extent of damage done to the root system by the pathogen prior to the application of **METANIL 480 SL**. The presence of other factors not optimal for root growth will also have an impact on recovery.
- It is recommended to replace trees showing severe decline symptoms.
- **METANIL 480 SL** will only control tree decline symptoms associated with the pathogen *Phytophthora* or *Pythium*. Other factors contributing to the root rot complex such as the presence of nematodes, other pathogenic fungi and viruses, poor soil condition and over irrigation should be managed concurrently.
- **METANIL 480 SL** will not eradicate *Phytophthora* from the soil. Regular monitoring is required, and further applications of **METANIL 480 SL** should be made when pathogen levels in the soil increase.

**Post Spray Equipment Cleaning**

It is essential to rinse the spray tank and all hoses with a 0.1 % solution of either calcium chloride or ammonium hydroxide or the recommended rate of **Protank® liquid cleaner** according to the product label. Allow this solution to stand in the spray equipment for 15 minutes; empty the spray equipment; repeat the rinsing with a 0.1 % solution of calcium chloride or ammonium hydroxide for 15 minutes; rinse all equipment with water. Nozzles and fitters must be cleaned individually. Rinse water and solution should be drained in a cesspool or drain where it will not contaminate any water source.

**APPLICATION RATES**

<b>Crop / Disease</b>	<b>Dosage rate</b>	<b>Remarks</b>
<b><u>Avocado</u></b>  Root rot ( <i>Phytophthora</i> spp)	Refer to <b>DIRECTIONS</b> for dose rates	<p>Refer to “<b>Resistance Management, Use restrictions and Directions for use</b>” for detailed application instructions.</p> <p><b>METANIL 480 SL</b> should be applied for a maximum of two (2) consecutive seasons. Switch to another registered fungicide with a different mode of action for continued control of the pathogen.</p> <p><b>Young trees:</b> When planting young trees, it is recommended that these are treated with <b>METANIL 480 SL</b> at plant. Treatments of <b>METANIL 480 SL</b> are also suitable for use on replacement trees.</p> <p><b>Bearing trees:</b> Apply <b>METANIL 480 SL</b> to trees showing symptoms of root rot (<i>Phytophthora</i> spp.) or when the presence of the pathogen has been confirmed in soil samples by laboratory analysis. Recovery in yield may only be observed in the second or third season after the commencement of treatment with <b>METANIL 480 SL</b>.</p>
<b><u>Citrus</u></b>  Root rot Collar rot ( <i>Phytophthora</i> spp.)	Refer to <b>DIRECTIONS</b> for dose rates	<p>Refer to “<b>Resistance Management, Use restrictions and Directions for use</b>” for detailed application instructions.</p> <p><b>DO NOT</b> apply <b>METANIL 480 SL</b> in consecutive seasons. Apply every alternate season.</p> <p><b>Nursery applications:</b> Initiate applications at the start of spring when new growth is noticed. Apply two applications as a soil drench at a 16-week interval.</p> <p><b>Young trees and interplants:</b> When planting young trees or performing interplants, it is recommended that these are treated with <b>METANIL 480 SL</b> at plant. A registered nematicide should also be used at the time of planting. If any symptoms of <i>Phytophthora</i>, gummosis or trunk lesions are observed on planted young trees, it is recommended that applications of <b>METANIL 480 SL</b> be made as soon as possible.</p> <p><b>Bearing trees:</b> Apply <b>METANIL 480 SL</b> to trees showing symptoms of root or collar rot (<i>Phytophthora</i> spp.) or when the presence of the pathogen has been confirmed in soil samples by laboratory analysis. Recovery in yield may only be observed in the second or third season after the commencement of treatment with <b>METANIL 480 SL</b>.</p>

<b>Crop / Disease</b>	<b>Dosage rate</b>	<b>Remarks</b>
<b><u>Macadamias</u></b>  Phytophthora Root and Crown Rot ( <i>Phytophthora</i> spp.)	Refer to <b>DIRECTIONS</b> for dose rates	<p>Refer to “<b>Resistance Management, Use restrictions and Directions for use</b>” for detailed application instructions.</p> <p><b>METANIL 480 SL</b> should be applied for a maximum of two (2) consecutive seasons. Switch to another registered fungicide with a different mode of action for continued control of the pathogen.</p> <p><b>Young trees:</b>  When planting young trees, it is recommended that these are treated with <b>METANIL 480 SL</b> at plant. A registered nematicide should also be used at the time of planting. If any symptoms of <i>Phytophthora</i> observed on planted young trees, it is recommended that applications of <b>METANIL 480 SL</b> be made as soon as possible.</p> <p><b>Bearing trees:</b>  Apply <b>METANIL 480 SL</b> to trees showing symptoms of root and crown rot (<i>Phytophthora</i> spp.) or when the presence of the pathogen has been confirmed in soil samples by laboratory analysis.  Recovery in yield may only be observed in the second or third season after the commencement of treatment with <b>METANIL 480 SL</b>.</p>

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