

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



Fungicide

BENOMYL 500 WP

Reg. No. L 6909 Act No. 36 of 1947
N-AR 1089 / W 130951

5:20/1/2023 – Jan2023

A wettable powder fungicide with systemic action, for the control of diseases on crops and orchards as listed.

ACTIVE INGREDIENT

benomyl (benzimidazole) 500 g/kg

GROUP

1

FUNGICIDE



DANGER

Hazard Statements:

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause genetic defects.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Wash hands and face thoroughly after handling.
Avoid release into the environment.
Wear impervious rubber gloves and boots,
protective clothing, and chemical safety goggles.
Use only outdoors or in a well-ventilated area.

kg

villa

UN Number: 3077

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:

BENOMYL 500 WP

Reg. No. L 6909 / N-AR 1089 / W 130951 Act No. 36 of 1947

FRAC FUNGICIDE GROUP CODE: 1

ACTIVE INGREDIENT:

benomyl (benzimidazole)500 g/kg

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

P.O. Box 10413, ASTON MANOR, 1630

Tel. (011) 396 2233

WARNINGS**Hazard Statements:**

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause genetic defects.
May damage fertility or the unborn child.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Withholding period:

Allow the following number of days between the last application and harvest or grazing of the following crops:	
Apples, Pears, Citrus & Wine grapes	14 days
Avocados	120 days
Cucurbits, Green peppers & Tomatoes	3 days
Peaches	7 days
Peas	21 days
Table Grapes (pea size)	4 to 6 weeks
Groundnuts	42 days

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.

- Do not use **Benomyl** treated seed as food or feed.
- Do not use **Benomyl** on Golden Delicious apples and Kieffer pears during the bloom and post bloom stages as it may result in russetting.
- **BENOMYL MAY NOT BE USED AS A POST HARVEST TREATMENT FOR APPLES AND PEARS, WHICH ARE DESTINED FOR EXPORT.**
- Do not handle until all safety precautions have been read and understood.
- Do not allow **BENOMYL 500 WP** to become wet or damp during storage, because chemical changes, which will reduce the effectiveness of **BENOMYL 500 WP** as a fungicide, will take place.
- Store the product inside the original container and always keep the original container tightly closed.
- Store in a cool, dry, well-ventilated place, away from food, seed and feeds.
- 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 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 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, 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:

Avoid breathing dust, fumes, mists, gas, vapours, or spray. (Respiratory sensitization).
Wash hands thoroughly after handling. Do not touch eyes
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously 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.
Get medical help if you feel unwell.
Collect spillage.
Store in a well-ventilated place.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Avoid contact with the skin and eyes.
- Wash contaminated clothes after use.
- Do not eat, drink or smoke whilst applying or mixing or before washing hands and face or change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean applicator after use and dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- Containers and packages must be completely emptied before being disposed of. Shake out thoroughly into the mixing tank and destroy the empty container/bag thereafter and dispose of through an approved waste dump site, incineration plant or recycling company.
- **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. 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.

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 and consult a doctor.
- **Inhalation:** If dust has been inhaled and person feels unwell, move to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. Obtain medical attention if irritation persists.
- **Skin:** Remove contaminated clothing. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

- **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. **Seek medical attention if irritation persists.**
- **Ingestion: Do not induce vomiting.** Product is not likely to be hazardous. No specific intervention is indicated. Wash mouth with water and give a glass of water to drink if the patient is conscious. Seek medical attention if patient feels unwell.

Relevant hazardous components	
Benomyl	50 %
Aerosal OT-B	< 5 %

RESISTANCE WARNING

BENOMYL 500 WP is a group code 1 fungicide. Any fungus population may contain individuals naturally resistant to **BENOMYL 500 WP** and other group code 1 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **BENOMYL 500 WP** or any other group code 1 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,
- for tank mixing or alternation with products in fungicide group code M, refer to applicable individual product labels,
- integrate other control methods (chemical, cultural, biological) into disease control programmes.

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

NOTE

If field resistance to **Benzimidazole** has already occurred, it is recommended not to use **BENOMYL 500 WP**.

Mode of action:

Inhibits mitosis by binding to beta-tubulin. **BENOMYL 500 WP** is a systemic fungicide which is absorbed through leaves or fruit surfaces. The active inhibits cellular mitosis by binding to beta-tubulin in target fungi. With acropetal translocation, **Benomyl** has protective and curative action.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- **BENOMYL 500 WP** is compatible with **Copper oxychloride 850 WP**, **Villa Unizeb 800 WP** and **Fungaway® 250 SC**.
- The compatibility of **BENOMYL 500 WP** with other products may vary. A physical compatibility test must always be performed before such tank mixture is sprayed.
- When **BENOMYL 500 WP** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to. The registration holder cannot be held responsible for damage to crops, resulting from tank mixtures with products or formulations not tested.

Mixing instructions:

- Fill the spray tank a quarter to half with clean water and start agitating (use mechanical or hydraulic agitation).
- Premix the required amount of **BENOMYL 500 WP** with a small quantity of water to a slurry.
- Add the slurry to the spray tank while agitating.
- Fill the spray tank with water to the required volume.
- Ensure thorough mixing of the mixture before and while applying.

Application instructions:

All spray applications must be performed with suitable equipment that is in good working order and correctly calibrated to give the desired coverage for that particular method of application.

APPLICATION RATES

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
Avocados Fruit spot	50 g / 100 ℓ water (5 g / 10 ℓ water) PLUS 0.5 ℓ narrow range distillation oil / 100 ℓ water (50 ml / 10 ℓ water)	Apply the first spray at the end of November and the second follow-up spray towards the end of January. Apply as a full cover spray.
Apples and Pears Powdery mildew & Scab	35 g OR 50 g / 100 ℓ water (0.53 to 1.75 kg / ha) (3.5 OR 5 g / 10 ℓ water)	Apply the first spray at greentip. Apply follow-up sprays at intervals of 7 to 10 days. For the control of Powdery mildew on very susceptible cultivars and under conditions, which favour Mildew development, increase dosage to 50 g per 100 litres water. Apply 1500 to 3500 litres spray mixture per hectare, depending on the growth stage of the crop. Do not apply more than four (4) sprays per season. Refer “RESISTANCE WARNING”.
Over wintering stage of Scab fungus	100 g / 100 ℓ water (10 g / 10 ℓ water)	Spray trees once in autumn after harvest, but before leaf drop.
Apples Post-harvest decay (<i>Penicillium</i> spp.)	200 g / 100 ℓ water (20 g / 10 ℓ water)	WARNING Do not use on fruit, which is destined for export. Prepare a suspension to dip fruit in or to spray the suspension onto harvested fruit. Ensure thorough agitation of suspension while applying.
Apricots, Peaches and Plums Blossom blight	25 g / 100 ℓ water (2.5 g / 10 ℓ water) (0.3 to 0.5 kg / ha)	Apply the first spray when first blossoms have reached the 5 % balloon stage. Apply follow-up sprays every 4 to 7 days until after flowering. Apply 1200 to 2000 litres spray mixture per hectare, depending on the growth stage of the crop. Do not apply more than 3 sprays per season. Refer “RESISTANCE WARNING”.
Bananas Post-harvest decay (Collar rot)	50 g / 100 ℓ water (5 g / 10 ℓ water)	Prepare a suspension and ensure thorough agitation of suspension during treatment. Cut bunches and dip the fruit for 5 seconds in the suspension.

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
Citrus Black spot	IMPORTANT As it is expected from BENOMYL 500 WP to act as an eradicant (where application is performed after infection), it is imperative that trees be covered completely during the spray operation. The addition of oil to the spray mixture is essential, to improve the eradicant properties of BENOMYL 500 WP . The addition of Villa Unizeb 800 WP or Fungaway® 250 SC is to slow down the development of resistance of the Black spot fungus to BENOMYL 500 WP . Only use BENOMYL 500 WP in tank mix with products mentioned below. BENOMYL 500 WP may only be applied in orchards where Benzimidazole resistance is absent. DO NOT apply BENOMYL 500 WP to neglected trees or trees older than 20 years which have a history of susceptibility to Black spot. The recommendation is that the <u>first</u> application with BENOMYL 500 WP be preceded with an application of 200 g per 100 litres of water Villa Unizeb 800 WP 2 to 3 weeks before applications with BENOMYL 500 WP .	
All cultivars	50 g / 100 ℓ water (5 g / 10 ℓ water) PLUS 20 ml / 100 ℓ water (2 ml / 10 ℓ water) Fungaway® 250 SC PLUS 250 ml / 100 ℓ water (25 ml / 10 ℓ water) Citrole oil OR 50 g / 100 ℓ water (5 g / 10 ℓ water) PLUS 200 g / 100 ℓ water (20 g / 10 ℓ water) Villa Unizeb 800 WP PLUS 0.5 ℓ / 100 ℓ water (50 ml / 100 ℓ water) narrow range distillation oil	Apply as a medium cover spray around middle November and repeat eight (8) weeks later.

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
Citrus Post-harvest decay (<i>Penicillium</i> , <i>Diplodia</i> , <i>Alternaria</i> & <i>Fusarium</i> spp.)	75 g / 25 ℓ water (7.5 / 2.5 ℓ water) (1500 ppm) 125 g / 25 ℓ water (12.5 g / 2.5 ℓ water) (2500 ppm)	Brush on in water or wax. WARNING Do not use on fruit, which is destined for export. Prepare a suspension to treat the fruit with. Ensure thorough agitation of suspension during treatment.
Cucurbits Powdery mildew	50 g / 100 ℓ water (5 g / 10 ℓ water)	Apply BENOMYL 500 WP in a spray programme. Apply the first spray as soon as the first Mildew spots are noticed on the undersides of the older leaves. Apply follow-up sprays at 10-day intervals. Apply 500 to 1000 litres spray mixture per hectare, to ensure thorough wetting. Do not apply more than three (3) sprays per season. Refer “RESISTANCE WARNING”.
Green peppers Powdery mildew	50 g / 100 ℓ water (5 g / 10 ℓ water)	Preventive programme: Apply the first spray 4 weeks after emergence. Apply follow-up sprays weekly. Apply at 500 to 1500 litres spray mixture per hectare, depending on plant size. Ensure thorough coverage of especially the lower leaves. Any delay in the commencement of the spray programme may lead to poor disease control since this disease causes rapid defoliation under favourable disease conditions. Do not apply more than 4 sprays per season. Refer “RESISTANCE WARNING”.
Groundnuts <i>Cercospera</i> & <i>Phoma</i> leaf blotch	30 g / 100 ℓ water (3 g / 10 ℓ water)	Spray programme: Apply the first spray at the first sign of the disease on the older leaves, or not later than the first week of January in the case of groundnuts grown under dryland conditions or flood irrigation. For groundnuts under overhead irrigation, spraying must commence not later than middle December. Apply follow-up sprays at 10-to-14-day intervals. For groundnuts under dryland conditions, 4 to 5 sprays are recommended and for under overhead irrigation 6 to 7 sprays. If groundnut foliage is needed for hay, maintain sprays until 14 days prior to the harvest date.
Gladioli <i>Fusarium</i> corm rot	200 g / 100 ℓ water (2 g / 10 ℓ water)	Prepare a suspension and ensure thorough agitation of the suspension during treatment. Dip the corms for one minute in suspension.

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
Mangoes Powdery mildew	15 g / 100 ℓ water PLUS 100 ml Triforine	Apply the first spray at the first sign of the disease, usually at 50 % flowering stage. Apply a follow-up spray 3 to 4 weeks later at 100 % flowering. A third spray may be necessary where uneven flowering prevails or where a late infection occurs. Ensure thorough coverage of the blossoms.
Post-harvest decay, Anthracnose & Brown rot	25 g / 100 ℓ water (2.5 / 10 ℓ water) PLUS 300 g / 100 ℓ water (30 g / 10 ℓ water) Copper Oxychloride WP	Programme spraying: Follow a spray programme for the reduction of post-harvest decay. Apply the first spray when the fruits are marble size. Apply follow-up sprays at 3-week intervals starting, up to 14 days prior to harvest. Apply as a full cover spray, to ensure thorough coverage of the fruit.
	200 g / 100 ℓ water (20 g / 10 ℓ water)	Warm bath treatment: WARNING Do not use on fruit, which is destined for export. Prepare a warm suspension and ensure thorough agitation of suspension during treatment. For enhanced control of Post-harvest decay, fruit can after harvest, be dipped for 5 minutes in a heated suspension (55 to 57 °C) of BENOMYL 500 WP , prior to cold storage.
Peas <i>Sclerotinia</i> rot (<i>Sclerotinia sclerotiorum</i>)	1 kg / ha (20 g / 10 ℓ water)	Apply the first spray at 1 % flowering. Apply a follow-up spray 10 to 14 days later. Apply 500 to 1000 litres spray mixture per hectare, to ensure thorough wetting of the plants. BENOMYL 500 WP may also be applied through a centre pivot irrigation system, in 5 to 7 mm water per hectare.
Peaches Brown rot - <i>Monilinia</i> not (<i>Rhizopus</i> rot)	35 g / 100 ℓ water (3.5 / 10 ℓ water) (0.88 to 1.23 kg / ha)	Apply two sprays at a 7-day interval between the two sprays. Apply the second and last spray 7 days prior to expected harvest. Ensure thorough coverage of all fruit while applying.
Freckle	35 g / 100 ℓ water (3.5 g / 10 ℓ water) (0.53 to 0.9 kg / ha)	Apply the first application at 100 % petal fall. Apply a second spray 3 weeks later. Apply 1500 to 3500 litres spray mixture per hectare, depending on the growth stage of the crop.
Pears Blossom end rot (<i>Botrytis</i> spp.)	50 g / 100 ℓ water (5 g / 10 ℓ water) (0.75 to 1.75 kg / ha)	Apply the first spray at full bloom. Apply a second spray 7 days later. A third spray 7 days after the second may be necessary if conditions favour infection. Apply 1500 to 3500 litres spray mixture per hectare, depending on the growth stage of the crop.
Roses Black spot & Powdery mildew	100 g / 100 ℓ water (10 g / 10 ℓ water)	Apply preventive sprays at intervals of 7 days.
Sugarcane Pineapple disease of seed pieces	50 g / 100 ℓ water (5 g / 10 ℓ water)	Prepare a suspension in a cold or warm (50 °C) bath. Ensure thorough agitation of the suspension during treatment, to keep the material in suspension. Dip seed pieces in the suspension and ensure thorough wetting. Maintain volume by adding the same original concentration.

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
<u>Sunflowers</u> <i>Sclerotinia</i> rot (<i>Sclerotinia sclerotiorum</i>)	200 g per 100 kg seed (2 g / 1 kg seed)	Seed treatment: Apply 1 litre clean water to the recommended quantity of seed. Apply the recommended quantity of BENOMYL 500 WP to the moistened seed. The volume of water may be slightly amended, to ensure adequate wetting of the seed. The treatment will only control seed borne <i>Sclerotinia</i> . Mix the seed and product thoroughly, to ensure thorough coverage of seed.
<u>Tobacco seedlings</u> Black root rot	15 g per 20 ℓ water per standard seedbed of 8.4 m ²	Prepare a suspension and ensure thorough agitation of the suspension. Apply the suspension evenly over seedbed area with a watering can. Directly hereafter, apply another 20 litres clean water over the same area, to soak the fungicide into the root zone. Apply a second and possibly a third follow-up treatment at 2-week intervals, until healthy new roots have developed.
<u>Table and Wine grapes</u> Powdery mildew	50 g / 100 ℓ water (5 g / 10 ℓ water) (0.13 to 0.75 kg / ha)	Apply the first spray when shoots are 25 cm long. Apply follow-up sprays every 10 to 14 days. Apply 250 to 1500 litres spray mixture per hectare, depending on the plant size. Ensure thorough wetting. Do not apply more than 4 sprays per season. Refer “RESISTANCE WARNING”.
<i>Botrytis</i> rot	50 g / 100 ℓ water (5 g / 10 ℓ water) (0.25 to 0.75 kg / ha)	Apply two sprays. Apply the first spray during full flower and the second at pea size. Apply at 500 to 1500 litres spray mixture per hectare, depending on the plant size. Ensure thorough wetting. In the case of table grapes, follow-up with a suitable dusting treatment. The BENOMYL 500 WP treatment will suppress <i>Botrytis</i> rot and it is therefore necessary to follow the Benomyl -treatment up with a registered and suitable dusting powder.
<u>Tomatoes</u> <i>Botrytis</i> rot (<i>Botrytis cinerea</i>)	50 g / 100 ℓ water (5 g / 10 ℓ water) (0.25 to 0.75 kg / ha)	Programme spraying: Apply the first spray with the onset of the first signs of disease on leaves, stems or fruit. Apply follow-up sprays every 7 to 10 days, as long as conditions are favourable for disease development. Apply 500 to 1500 litres spray mixture per hectare, depending on plant size. Ensure good coverage of all above-ground parts. Do not apply more than four (4) sprays per season. Refer “RESISTANCE WARNING”.
Powdery mildew (<i>Oidiopsis taurica</i>)	50 g / 100 ℓ water (5 g / 10 ℓ water) (0.25 to 0.75 kg / ha)	Programme spraying: Apply the first spray with the onset of the first signs of disease on the older leaves. Apply follow-up sprays every 7 to 10 days, as long as conditions are favourable for disease development. Apply 500 to 1500 litres spray mixture per hectare, depending on plant size. Ensure good coverage of all above-ground parts. Do not apply more than four (4) sprays per season. Refer “RESISTANCE WARNING”.

Crop / Disease	Dosage Rate (High Volume Spraying)	Remarks
Wheat Loose smut (<i>Ustilago</i>)	1.5 g per kg dry seed OR mix with 10 mℓ water for slurry treatment	Dry treatment: Mix the recommended quantity of BENOMYL 500 WP thoroughly with dry seed, until an even coverage has been obtained. Slurry treatment: Mix the recommended quantity of BENOMYL 500 WP and water thoroughly with the seed, until an even coverage has been obtained.

Consult all the listed labels for **USE RESTRICTIONS, WARNINGS** (including **RESISTANCE WARNINGS**), **PRECAUTIONS** and **DIRECTIONS FOR USE**.

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

- **COPPER OXYCHLORIDE 850 WP** (L 6231 / N-AR 1879 / W 130952) = **COPPER OXYCHLORIDE WP** (L 5809),
- **VILLA UNIZEB 800 WP** (L 8056 / N-AR 1091) = **COZEB 800 WP** (L 7098) = **NEWZEB 800 WP** (L 8167) (**Mancozeb**) and
- **FUNGAWAY® 250 SC** (L 8590 / N-AR 1225 / W 1301393) = **MYCOBLOCK 250 SC** (L 8591) = **STROBIN 250 SC** (L 8625).

COPPER OXYCHLORIDE WP and **VILLA UNIZEB 800 WP** are registered products of **VILLA CROP PROTECTION (PTY) LTD.**

FUNGAWAY® 250 SC is a registered trademark of **VILLA CROP PROTECTION (PTY) LTD.**

COPPER OXYCHLORIDE 850 WP, MYCOBLOCK 250 SC and **COZEB 800 WP** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**

NEWZEB 800 WP and **STROBIN 250 SC** are registered products of **CROPASURE (PTY) LTD.**