

# BENOMYL

Reg. No.: L 7291 Act /Wet No. 36 of/van 1947

A wettable powder systemic fungicide for the control of diseases on crops as listed.

'n Benatbare poeier sistemiese swamdoder vir die beheer van siektes op gewasse soos aangedui.

FRAC FUNGICIDE GROUP CODE:	B1	FRAC SWAMDODERGROEP KODE:
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**ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:**

Benomyl (benzimidazole) / Benomil (bensimidasool) ..... 500 g/kg

**Registration holder / Registrasiehouer:**

**ARYSTA LifeScience South Africa (Pty) Ltd**

Co. Reg. No./Mpy. Reg. Nr: 2009/019713/07

7 Sunbury Office Park,

Off Douglas Saunders Drive, La Lucia Ridge,

South Africa, 4019

Tel: 031 514 5600

Contents/Inhoud

**kg**

Batch No. / Lot Nr.:	
Date of manufacture: / Datum van vervaardiging:	

**U.N. No. 3077**



**READ THE LABEL IN DETAIL BEFORE OPENING THE CONTAINER. / LEES DIE ETIKET VOLLEDIG VOORDAT DIE HOUER OOPGEMAAK WORD.**

**For full particulars, see enclosed leaflet. / Vir volledige besonderhede, sien ingeslote pamflet.**

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## CAUTION / VERSIGTIG

## WARNINGS

Allow the following withholding periods between last application and harvest:

Apples and pears (pre-harvest application)	14 days
Avocado's and citrus	14 days
Cucurbits and Brussel Sprouts	3 days
Table grapes (pea size)	4-6 weeks
Tomatoes and greenpeppers	3 days
Wine grapes	14 days

- **DO NOT USE TREATED SEED AS FOOD OR FEED.**
- **DO NOT USE ON GOLDEN DELICIOUS APPLES AND KEIFFER PEARS DURING THE BLOOM AND POST BLOOM STAGES AS IT MAY RESULT IN RUSETTING.**
- **BENOMYL MAY NOT BE USED AS A POST HARVEST TREATMENT FOR APPLES AND PEARS WHICH ARE TO BE EXPORTED.**
- May irritate eyes, nose, throat and skin.
- Harmful if inhaled or swallowed.
- Keep out of reach of children.
- Never allow **BENOMYL** to become wet or damp during storage because this may lead to certain chemical changes which will reduce the effectiveness of **BENOMYL** as a fungicide.
- Do not store the product outside the original container. Always keep the original container tightly closed.
- Toxic to fish.
- Do not contaminate water supplies, dams or rivers.

## WARNINGS – PREVENTION OF RESISTANCE

To avoid or delay the emergence of resistant fungal strains it is recommended that **BENOMYL** be mixed at recommended rates with a fungicide having a different mode of action from that of the Benzimidazoles.

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 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 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:**

- Avoid excessive inhalation of dust or spray mist.
- Avoid contact with skin, eyes and clothing.
- Wash with soap and water after use.
- Rinse empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the contents of the spray tank.
- Destroy empty container and do not re-use for any other purpose.

**DIRECTIONS FOR USE: use only as directed.****MIXING INSTRUCTIONS:**

1. Fill the spray tank  $\frac{1}{4}$  -  $\frac{1}{2}$  full with water and agitate.
2. To ensure fast and even distribution of the product in the spray tank, the required amount of **BENOMYL** must first be pre-mixed with 10-12 l of water before adding to the spray tank.
3. Fill the spray tank with water whilst agitating continuously.

Agitate the spray mixture constantly during mixing and spray operation.

CROP & DISEASE	QUANTITY g/100 l WATER (High Volume Spraying)	DETAILS OF SPRAY PROGRAMME
<b>APPLES AND PEARS</b> Scab and Powdery Mildew	35 g or 50 g	First spray at green tip. Repeat at intervals of 7-10 days. Increase dosage to 50 g for control of Mildew on very susceptible cultivars and under conditions favouring mildew development.
Overwintering stage of scab fungus	100 g	Spray once in autumn after harvest but before leaf drop.
Post harvest decay (e.g. <i>Penicillium spp</i> ) (not for export fruit)	200 g	Dip fruit in suspension or spray fruit with suspension. Agitate suspension during application.
<b>APRICOTS, PEACHES &amp; PLUMS</b> Blossom Blight	25 g	Commence spraying when first blossoms have reached 5 % balloon stage. Repeat every 4-7 days until after flowering.

<b>AVOCADOS</b> Fruit spot	50 g + 0,5 l oil of narrow distillation range.	Apply two sprays – First towards the end of November followed by another towards the end of January.
<b>BANANAS</b> Post harvest decay (Collar rot)	50 g	Dip fruit for a short time in the suspension after bunches have been cut. Agitate suspension during treatment.
<b>BRUSSEL SPROUTS</b> Ring spot	25 g	Spray preventively at intervals of 10-14 days.
<b>CITRUS</b> Black spot		Only apply <b>BENOMYL</b> in orchards where benzimidazole resistance is absent, and then only in combination- or alternating- with MANCOZEB. It is recommended that all <b>BENOMYL</b> applications must be preceded by an application of MANCOZEB at 200 g/100 l water during the last week in October up to the 10 <sup>th</sup> of November.
<b>EARLY CULTIVARS</b>	25 g + 200 g MANCOZEB + 0,5 l oil of narrow distillation range.	Apply one full cover spray between 1 <sup>st</sup> & 20 <sup>th</sup> of December.
<b>LATE CULTIVARS</b> Vigorously growing trees younger than 20 years	50 g + 200 g MANCOZEB + 0,5 l oil of narrow distillation range.	Apply one full cover spray between 1 <sup>st</sup> and 20 <sup>th</sup> of December.
<b>FRUIT FOR PROCESSING</b> Early cultivars and Valencias under 20 years	25 g + 200 g MANCOZEB + 0,5 l oil of narrow distillation range.	Apply one full cover spray during beginning of December.
Valencias over 20 years	50 g + 200 g MANCOZEB + 0,5 l oil of narrow distillation range.	Apply one full cover spray during beginning of December

**NOTE:** THE PURPOSE OF BLACK SPOT CONTROL ON THESE FRUIT IS ONLY TO PREVENT FRUIT DROP.

**IMPORTANT:** As **BENOMYL** it is expected to act as an eradicant (where application is made after infection) it is imperative that trees receive a full cover spray.

The addition of oil to the **BENOMYL** spray mixture is **ESSENTIAL** to improve the eradicant properties of **BENOMYL**. The purpose of including MANCOZEB is to slow down the development of resistance of the black spot fungus to **BENOMYL**.

When applying the **BENOMYL** + MANCOZEB mixture to citrus do not mix with any other remedy except the oil prescribed.

<b>CROP &amp; DISEASE</b>	<b>QUANTITY g/100 lt WATER (High Volume Spraying)</b>	<b>DETAILS OF SPRAY PROGRAMME</b>
<b>CUCURBITS</b> Powdery mildew	<b>Ground application</b> : 50 g  <b>Aerial application:</b> 500 g/ha	Commence spray programme when the first mildew spots are noticed on the undersides of older leaves. Repeat every 10 days. In the case of mild infection apply 500 l mixture /ha and for severe infection 1 000 l/ha. Apply in 25 l water
<b>GLADIOLI</b> <i>Fusarium</i> Corm rot	200 g	Dip corms for one minute in suspension. Agitate suspension during treatment.
<b>GREENPEPPER S</b> Powdery mildew	50 g	Preventive treatment: Commence spraying 4 weeks after emergence. Repeat application at weekly intervals. Apply 500-1500lt of spray mixture per ha depending on plant size. Ensure thorough coverage of especially the lower leaves. Any delay in the commencement of the spray program may result in inadequate control since this disease causes rapid defoliation when conditions favour it's development.
<b>MANGOES</b> Powdery mildew	15 g + 100 ml triforine	First application commences at first sign of disease usually at 50 % flowering stage followed by a second application 3-4 weeks later. A third application may be necessary where uneven flowering prevails or where a late infection occurs.
<b>PEACHES</b> Brown rot ( not Rhizopus rot)  Freckle	35 g  35 g	Apply two spays at an interval of 7 days, 14 days prior to expected harvest. Ensure thorough coverage of fruit. First application at 100 % petal fall followed by a second application 3 weeks later.
<b>ROSES</b> Black spot and Powdery mildew	100 g (10 g/10 l)	Spray weekly as a preventive treatment
<b>SUGARCANE</b> Pineapple disease of seedpieces	50 g	<b>BENOMYL</b> may be used in cold or hot (50 °C) dip. Immerse seedpieces to give thorough wetting. Agitate to keep material in suspension. Maintain volume by adding the same original concentration.
<b>TABLE AND WINE GRAPES</b> Powdery mildew <i>Botrytis</i> Rot	50 g 50 g	Commence application when shoots are 25 cm long and repeat at intervals of 10-14 days.  Apply two sprays. Commence during full flower and repeat at pea size. In the case of table grapes continue with a suitable dusting treatment. The <b>BENOMYL</b> treatment will suppress Botrytis-rot.

<b>TOBACCO SEEDLINGS</b> Black root rot	15 g per 20 ℓ water per standard seedbed of 8,4 sq metres.	Apply suspension evenly over seedbed area with watering can. Follow up with an immediate application of 20 ℓ clean water over the same area to leach the fungicide into the root zone. Repeat application a second and possibly a third time at 14 day intervals until healthy new roots develop.
<b>TOMATOES</b> ( <i>Botrytis cinerea</i> )	50 g	Start spraying with the onset of the first signs of disease on leaves, stems or fruit. Repeat application every 7-10 days as long as conditions are favourable for development of disease. Ensure good coverage of all above-ground parts. Depending on plant size apply 500-1500 ℓ of spray mixture/ha.
Powdery mildew ( <i>Oidiopsis taurica</i> )	50 g	Programmed spraying. Start spraying with the onset of the first signs of disease on the older leaves. Repeat every 7-10 days. Ensure good coverage of especially the lower leaves. Apply 500-1500 ℓ of spray mixture/ha depending on plant size.
<b>WHEAT</b> Loose smut ( <i>Ustilago</i> )	1,5 g/kg seed dry or mixed with 10 ml water for slurry treatment	DRY – AND SLURRY TREATMENT. Mix thoroughly with seed and ensure a complete coverage.