

Before using read the enclosed label in its entirety

Voor produk gebruik word lees die ingeslote etiket volledig

AQ-10 Biofungicide

Registration No. L 6118 Act No. 36 of 1947

A water dispersible granule formulation of a selective fungal hyperparasite for control of powdery mildew on wine grapes.

Registrasie Nr. L6118 Wet Nr. 36 van 1947

'n Waterdispergeerbare korrelformulasie van 'n selektiewe hiperparasitiese swam vir die beheer van poeieragtige skimmel op wyndruiwe

ACTIVE INGREDIENT:
Ampelomyces quisqualis isolate M-10

580 g / kg *

AKTIEWE BESTANDDEEL:
Ampelomyces quisqualis isolaat M-10

*Contains not less than $5,0 \times 10^9$ viable spores per gram

*Bevat nie minder as $5,0 \times 10^9$ lewensvatbare spore per gram

Content

60g

Inhoud

Registered by: Chempac (Pty) Ltd
Co.Reg.No. 2002/007885/07
P O Box 516, Suider Paarl, 7624
Tel.No. (021) 874 1055

Geregistreer deur: Chempac (Edms) Bpk
Mpy.Reg.Nr 2002/007885/07
Posbus 516, Suider Paarl, 7624
Tel.Nr. (021) 874 1055



Batch Number

Lotnommer

Expiry date



Vervaldatum



CAUTION
VERSIGTIG



WARNINGS :

- There is no withholding period as AQ-10 BIOFUNGICIDE can be applied up to and including the day of harvest.
- Handle with care.
- Avoid contact with eyes as this may cause irritation.
- Store in a cool, dry place. AQ-10 BIOFUNGICIDE contains living spores and care should be taken to store the product properly. The product is stored best at or below room temperature. Do not store in extreme heat or cold.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.

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 THAT COULD NOT HAVE BEEN FORESEEN IN TERMS OF THE REGISTRATION. CONSULT THE SUPPLIER IN THE EVENT OF ANY UNCERTAINTY.

PRECAUTIONS :

- Do not inhale dust or spray mist.
- Avoid contact with eyes. In case of accidental eye contact immediately flush eyes with plenty of clean water. Call a physician if irritation persists.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Sachets must be completely emptied before being disposed of. Shake out thoroughly into the mixing or spray tank before destroying the empty sachets.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.

- Clean applicator after use and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.

DIRECTIONS FOR USE : Use only as directed.

Compatibility

AQ – 10 BIOFUNGICIDE should not be used as a tankmix with Sulphur or most other fungicides. It can be tank mixed with Copper Oxychloride.

Mixing Instructions

AQ – 10 BIOFUNGICIDE should be thoroughly mixed with water. When preparing the spray mixture the following steps should be taken.

- Mix the required amount of AQ – 10 BIOFUNGICIDE with a small quantity of water to form a smooth cream.
- Fill the spray tank half full with water.
- Add AQ – 10 BIOFUNGICIDE pre-mix to the tank.
- Agitate.
- Add light mineral oil (0,3%) (as the final ingredient) to the tank.
- Fill tank with water to required volume while agitating continuously.
- Agitate tank mix continuously while applying to maintain suspension.
- Spray entire contents of tank within same day of mixing. (AQ-10 BIOFUNGICIDE can lose viability when left in water for over 12 hours)

Mode of Action

AQ – 10 is a Biofungicide that parasitizes powdery mildew. Following rehydration and application, AQ-10 BIOFUNGICIDE spores germinate into the powdery mildew mycelia and parasitizes it. Optimal AQ – 10 BIOFUNGICIDE germination and parasitism occur under high humidity conditions. It is therefore preferable to apply AQ-10 BIOFUNGICIDE when dew is present on the foliage and bunches and / or under slow drying conditions. The addition of a mineral oil is recommended in order to keep the AQ-10-BIOFUNGICIDE in an aqueous state for a sustained period.

Use of AQ-10-BIOFUNGICIDE in an integrated Powdery Mildew spray programme

AQ-10-BIOFUNGICIDE may be an effective resistance management tool when integrated in a spray programme with sulphur and / or sterol inhibitors (triazoles) for control of powdery mildew. It is important to use AQ – 10 BIOFUNGICIDE in at least two consecutive sprays 10 – 14 days apart. These consecutive applications give AQ – 10 BIOFUNGICIDE the opportunity to build up sufficient populations for the most effective long-term control. A practical strategy is to commence the spray programme with 2 to 3 AQ – 10 BIOFUNGICIDE applications followed by 2 to 3 applications of a triazole. Thereafter, revert to applications of AQ – 10 BIOFUNGICIDE (minimum of 2 consecutive applications) or sulphur or continue with triazole applications.

CROP / DISEASE	DOSAGE / HECTARE	REMARKS
Wine Grapes Powdery Mildew (Oidium) <u>Uncinula necator</u>	30 grams	High volume applications (500 - 1 200 litres water per ha) depending on stage of grape vine development. Dosage rate is 30 grams per hectare irrespective of spray volume used. Thorough coverage of all fruit and leaf surfaces is essential to ensure maximum efficacy. Commence application when shoots are ± 10cm long and apply first block of 2 – 3 applications at intervals of 10 – 14 days. Change to a triazole fungicide for the second block of 2 – 3 applications during period of high infection potential (flowering to pea-berry stage). Thereafter in the third block revert to applications of AQ – 10 BIOFUNGICIDE (a minimum of 2 consecutive applications) or continue with alternative Powdery Mildew fungicides e.g. sulphur or triazoles.

WAARSKUWINGS

- Daar is geen onthoudingsperiode nie. AQ – 10 BIOFUNGICIDE kan tot en met die dag van oes toegedien mag word.
- Hanteer versigtig.
- Voorkom kontak met oë. AQ – 10 BIOFUNGICIDE kan irritasie veroorsaak.
- Stoor onder koel, droë toestande. AQ – 10 BIOFUNGICIDE bevat lewende spore en daar moet gesorg word dat die produk onder die gewensde toestande gestoor word. Die produk word die beste gestoor teen of onder kamertemperatuur. Moenie in warm of koue uiterstes stoor nie.
- Stoor weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.

ALHOEWEL HIERDIE MIDDEL OMVATTEND ONDER 'N GROOT VERSKEIDENHEID TOESTANDE GETOETS IS WAARBORG DIE REGISTRASIEHOUEUR NIE DAT DIT ONDER ALLE TOESTANDE DOELTREFFEND SAL WEES NIE AANGESIEN DIE WERKING EN EFFEK DAARVAN BEÏNVLOED KAN WORD DEUR FAKTORE SOOS ABNORMALE KLIMAATS- EN BERGINGSTOESTANDE; KWALITEIT VAN VERDUNNINGSWATER, VERENIGBAARHEID MET ANDER STOWWE WAT NIE OP DIE ETIKET AANGEDUI IS NIE EN DIE VOORKOMS VAN WEERSTAND VAN DIE SIEKTE TEEN DIE BETROKKE MIDDEL SOWEL AS DIE METODE, TYD EN AKKURAAKTHEID VAN TOEDIENING. VERDER AANVAAR DIE REGISTRASIEHOUEUR NIE VERANTWOORDELIKHEID VIR SKADE AAN GEWASSE, PLANTEGROEI, DIE OMGEWING OF VIR NADELIGE EFFEK OP MENS OF DIER OF VIR 'N GEBREK AAN PRESTASIE VAN DIE BETROKKE MIDDEL AS GEVOLG VAN DIE VERSUIM VAN DIE GEBRUIKER OM ETIKETAAMWYSINGS NA TE KOM OF AS GEVOLG VAN DIE ONTSTAAN VAN TOESTANDE WAT NIE KRAGTENS DIE REGISTRASIE VOORSIEN KON WORD NIE. RAADPLEEG DIE VERSKAFFER IN DIE GEVAL VAN ENIGE ONSEKERHEID.

VOORSORGMATREËLS

- Moet nie stof of spuitmis inasem nie.
- Voorkom kontak met oë. Indien die produk per ongeluk in oë kom, spoel oë onmiddellik met voldoende skoon water uit. Raadpleeg 'n geneesheer indien irritasie volhou.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.
- Die sakkie moet totaal leeggemaak word voordat dit vernietig word. Skud die inhoud van die sakkie sorgvuldig in die spuittenk uit voordat die leë sakkie vernietig word.
- Voorkom wegdrywing van spuitmis na ander gewasse, weiding, riviere, damme en areas nie onder behandeling nie.
- Maak spuitapparaat na gebruik skoon en raak van waswater ontslae waar dit nie gewasse, weiding, riviere en damme sal besoedel nie.

GEBRUIKSAANWYSINGS: Gebruik slegs soos aangedui

Mengbaarheid

AQ – 10 BIOFUNGICIDE moet nie as 'n tenkmengsel saam met Swael en die meeste ander swamdoders gebruik word nie. AQ – 10 BIOFUNGICIDE kan wel in kombinasie met koperoksichloried gebruik word.

Menginsruksies :

AQ – 10 BIOFUNGICIDE moet deeglik met water gemeng word. As die spuitmengsel voorberei word, moet die volgende stappe nagekom word:

- meng die nodige hoeveelheid AQ – 10 BIOFUNGICIDE met 'n bietjie water om 'n room te vorm.
- maak die spuittenk halfvol met water.
- Voeg die AQ – 10 BIOFUNGICIDE room by die tenk.
- Roer
- Voeg minerale olie (0,3%) by die tenk (as laaste komponent).
- Vul tenk verder met water tot die verlangde volume terwyl aanhoudend geroer word.

- Roer spuitmengsel aanhoudend terwyl gespuit word om te verseker dat die AQ-10 BIOFUNGICIDE in suspensie bly.
- Die totale inhoud van die spuittenk moet uitgespuit word op dieselfde dag wat die spuitmengsel opgemaak is (AQ – 10 BIOFUNGICIDE mag lewensvatbaarheid verloor indien dit langer as 12 ure in water bly staan).

Werkingsmeganisme :

AQ – 10 BIOFUNGICIDE is 'n bioswamdoder wat poeieragtige skimmel (meeldou) parasiteer. Na hidrasie en toediening ontkiem die AQ – 10 BIOFUNGICIDE spore en penetreer en parasiteer die skimmel (meeldou) swamdrade. Optimale AQ – 10 BIOFUNGICIDE ontkieming en parasitering vind plaas onder toestande van hoë humiditeit. Derhalwe is dit verkieslik om AQ – 10 BIOFUNGICIDE toe te dien as die blare en trosse natgedou is en/of onder toestande wanneer die spuitmengsel stadig droog word. Dit word aanbeveel om 'n minerale olie by die spuitmengsel te voeg om die AQ – 10 BIOFUNGICIDE langer klam te hou na bespuiting.

GEBRUIK VAN AQ – 10 BIOFUNGICIDE IN 'N GEÏNTEGREERDE POEIERAGTIGE SKIMMEL (MEELDOU) SPUITPROGRAM

AQ – 10 BIOFUNGICIDE kan as 'n effektiewe weerstandbestuurshulpmiddel gebruik word wanneer dit geïntegreer word in 'n spuitprogram met Swael en / of sterool inhibeerders (triasole) vir beheer van meeldou. Dit is belangrik om AQ – 10 BIOFUNGICIDE in ten minste twee opvolgende bespuitings toe te dien met 10 – 14 dae tussenposes. Hierdie opeenvolgende toedienings gee AQ – 10 BIOFUNGICIDE geleentheid om voldoende bevolkings op te bou vir die mees doeltreffende langtermyn beheer. 'n Praktiese strategie is om die spuitprogram met 2 tot 3 AQ – 10 BIOFUNGICIDE behandelings te begin, gevolg deur 2 tot 3 behandelings van 'n triasool. Daarna kan teruggekeer word na AQ – 10 BIOFUNGICIDE behandelings (minimum van twee opeenvolgende behandelings) of Swael of daarna kan voortgegaan word met triasool behandelings.

GEWAS / SIEKTE	DOSIS / HEKTAAR	OPMERKINGS
Wyndruiwe Poeieragtige Skimmel (Meeldou) (Oidium) <u>Uncinula necator</u>	30 gram	<p>Hoë volume toediening (500 – 1 200 liter water per ha) afhangende van die stadium van ontwikkeling van die wingerd. Dosis is 30 gram per hektaar ongeag die spuitvolume wat gebruik word.</p> <p>Deeglike benatting van alle vrug- en blaaroppervlakke is noodsaaklik om maksimum effektiwiteit te verseker.</p> <p>Begin met toediening wanneer lote ± 10 cm lank is en spuit die eerste blok van 2 – 3 toedienings met tussenposes van 10 – 14 dae.</p> <p>Skakel oor na 'n triasool swamdoder vir die tweede blok van 2 – 3 toedienings tydens die periode van hoë infeksie potensiaal (blomstadium tot ertjekorrel stadium).</p> <p>In die derde blok kan teruggekeer word na AQ – 10 BIOFUNGICIDE ('n minimum van 2 opeenvolgende toedienings) of daar kan voortgegaan word met alternatiewe poeieragtige skimmel (meeldou) swamdoders b.v. swael of triasole.</p>