POTENT 500 EC

Act No. 36 of 1947 / Wet Nr. 36 van 1947
SA Reg. No. L12017

READ ATTACHED PACKAGED LEAFLET BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

GROUP	5	FUNGICIDE

PRODUCT INFO:
A systemic emulsifiable concentrate fungicide for the control of powdery mildew on crops as listed.

PRODUK INFO:
'n Sistemiese emulgeerbare konsentraat swamdoder vir die beheer van poeieragtige meeldou op gewasse soos aangedui.



DANGER

HAZARD STATEMENTS:
May be fatal if swallowed and enters airways.
Causes damage to organs through prolonged or repeated exposure.
Suspected of damaging the unborn child.
Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:
Obtain, read and follow all safety instructions before use.
Wear protective gloves, protective clothing, eye and face protection.
Wash hands and exposed skin thoroughly after handling. Do not touch eyes.

Active Ingredient / Aktiewe Bestanddeel

Spiroxamine (spiroketalamine) 500 g/ℓ Spiroksamien (spiroketalamien)

Net (ℓ) SEE CONTAINER

Registration Holder / Registrasiehouer

ICA INTERNATIONAL CHEMICALS (PTY) LTD

ICA International Chemicals (Pty) Ltd. • Reg. No. 2001/013319/07
28 Planken Street • Plankenbrug Industrial • STELLENBOSCH • 7600 • SOUTH AFRICA
Tel. +27-21 886 9812 • www.icaonline.co.za

What is GHS?

Batch No. Date of Manufacture Expiry Date	**SEE CONTAINER**	Lot Nr. Datum van Vervaardiging Vervaldatum

In case of poisoning, call the following number: Human Poison Helpline +27-861 555 777
Emergency Number: Griffon Poison Information Centre +27-82 446 8946

GROUP III UN No. 3082 SX-001

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A systemic emulsifiable concentrate fungicide for the control of Powdery mildew on crops as listed.

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REGISTERED BY:
ICA International Chemicals (Pty) Ltd., Reg. No. 2001/013319/07
28 Planken Street • Plankenbrug Industrial • Stellenbosch • 7600 • South Africa
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WARNINGS

May be fatal if swallowed and enters airways
Causes damage to organs through prolonged or repeated exposure
Suspected of damaging the unborn child
Very toxic to aquatic life with long lasting effect

WITHHOLDING PERIODS (Minimum number of days between last application and harvest):

- *Wine Grapes* ..... *21 Days* (*3 Weeks*)
- *Table Grapes* ..... *Do not apply after beginning of flowering*

Compliance with these withholding periods and application methods will ensure that residues do not exceed local maximum residue limits (MRL) but may not meet the import requirements of other countries. If the crop to be treated is intended for export, consult the relevant importer or exporting body regarding the use of this product, MRL and recommended waiting periods. Although **POTENT 500 EC** is regarded as crop-safe on most of the important cultivars, this does not mean that a more sensitive cultivar might be available in future. **POTENT 500 EC** must be tested on new cultivars prior to usage over big areas.

RE-ENTRY INTERVAL: Do not enter treated area within 24 hours after application/until spray deposit has dried, unless wearing protective clothing. Wash protective clothing after use.

AERIAL APPLICATION: Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the required warnings. Do not spray over or allow drift to contaminate water or adjacent areas. Please refer to the SANS Code of Practice for the aerial application of agricultural chemicals.

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, and the environment or harm to man/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 the event of any uncertainty.

PRECAUTIONS

If medical advice is needed, have product container or label at hand.
Keep out of reach of children, uninformed persons and animals.
Read carefully and follow all instructions.
Obtain, read, and follow all safety instructions before use.
Do not breathe mist/vapours/spray.
Wash hands and exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Wear protective gloves, protective clothing, eye and face protection.
If exposed or concerned, get medical advice.
Get medical help if you feel unwell.
IF SWALLOWED: Get emergency medical help immediately.
Do not induce vomiting
Collect spillage.
Dispose of contents and container in accordance with national regulations.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds until the flow has slowed down to a drip. Thereafter, rinse the empty container three times in succession with one quarter of the container volume with 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.

RELEVANT SUBSTANCES:
Spiroxamine (Cas no: 7704-34-9) Reproductive Toxicity Category 2, H361d; Acute Inhalation Toxicity Category 4, H332; Acute Dermal Toxicity Category 4, H312; Acute Oral Toxicity Category 4, H302; STOT RE Category 2, H373; Skin Irritation Category 2, H315; Skin Sensitization Category 1, H317 (50 % w/v).
Solvent naphtha (Cas no: 64742-94-5) Aspiration Hazard Category 1, H304 (30 – 40 % w/v).

FIRST AID TREATMENT

In case of accident or if you feel unwell seek medical advice immediately and show this LABEL where possible

INHALATION:	Remove the victim from immediate source of exposure. Move victim to fresh air, if it can be done safely, and keep comfortable. If victim's breathing has stopped, perform artificial respiration. Administer oxygen if victim's breathing is difficult or irregular. Get medical help immediately.
SKIN:	Remove and isolate contaminated clothing, shoes, and leather goods immediately and take a shower. Rinse affected areas (skin) immediately with non-abrasive soap or mild detergent and large amounts of running water for at least 15 minutes. Wash contaminated clothing before reuse. Get medical help if irritation develops and persists.
EYES:	Rinse eyes cautiously with clean running water for at least 15 minutes, while holding eyelids apart. Remove contact lenses after 5 minutes if present and easy to do. Continue rinsing while holding eyelids apart. Seek medical help if irritation continues.
INGESTION:	If swallowed, DO NOT induce vomiting, unless instructed to do so by poison control center or doctor. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person. If vomiting does occur, keep on giving fluids. Get medical help immediately.
NOTE TO PHYSICIAN:	There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient.
POTENTIAL HEALTH EFFECTS, ACUTE AND DELAYED:	Effects of exposure (inhalation, ingestion, or skin contact) to substance may be delayed.

RESISTANCE WARNING

For resistance management: POTENT 500 EC is a FRAC group code **(5)** fungicide. Any fungal population may contain individuals naturally resistant to **POTENT 500 EC** and other FRAC group code **(5)** fungicides. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **POTENT 500 EC** or any other FRAC group code **(5)** fungicides.

To prevent or delay fungicide resistance:

- avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered products from different fungicide group codes such as triazoles (DMI fungicides), strobilurins, etc.
- for tank mixing or alternation with products in other fungicide group codes, refer to individual product labels,
- integrate other forms of control methods (chemical, cultural, biological) into disease control programmes,
- where resistance has been confirmed or previously suspected do not apply **POTENT 500 EC** alone but in combination with a suitable partner from different fungicide group codes. This management strategy to prevent resistance should, however, not include fungicide products to which resistance has already developed in the past, or fungicides using the same mode of action,
- for specific information on resistance management contact the registration holder of this product or contact your local supplier,
- in order to maintain the efficacy of **POTENT 500 EC**, it is necessary to prevent the development of resistance of the diseases against the FRAC group code **(5)** fungicide groups,
- adhere to the dosage rates recommended on the label, DO NOT reduce dosage rate,
- **DO NOT** apply more than **THREE POTENT 500 EC** sprays per season.

MODE OF ACTION

POTENT 500 EC is a systemic fungicide that provides protective, curative, and eradicant activity. It is readily absorbed by leaf tissue and translocated acropetally through the xylem, ensuring uniform distribution throughout the leaf.

The active ingredient, spiroxamine (FRAC Group 5), inhibits fungal sterol biosynthesis by blocking the Δ^{14}-reductase and Δ^{8}-to-Δ^{7} isomerase enzymes. This disruption of ergosterol production compromises fungal cell membrane integrity, ultimately inhibiting fungal growth and development.

USE RESTRICTIONS

- Consult the product labels for **USE RESTRICTIONS, WARNINGS (including RESISTANCE WARNINGS), PRECAUTIONS** and **DIRECTIONS FOR USE.**
- **FOR ALL CROPS AND DISEASES, DO NOT EXCEED THREE (3) APPLICATIONS OF POTENT 500 EC PER SEASON.**

DIRECTIONS FOR USE – use only as directed

COMPATIBILITY:

The compatibility of **POTENT 500 EC** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. It is possible that formulations may change from time to time. It is therefore recommended that a small-scale physical compatibility test be done prior to the tank mixture being made. Always consult the labels of products to be tank mixed with **POTENT 500 EC**.

ICA International Chemicals (Pty) Ltd. does not accept responsibility for the crop tolerance or any adverse effects of tank mixtures.

Allow **7 days** between the application of **POTENT 500 EC** and do not apply **POTENT 500 EC** in combination with wetter/stickers or as a tank mixture with trace or macro element sprays in grapes.

MIXING INSTRUCTIONS:

Shake the POTENT 500 EC container well before use. Replace cap directly after use. Half-fill the spray tank with water and ensure continuous agitation.

Pre-mix **POTENT 500 EC** as follows:

Observe the following formulation mixing sequence if other products will be tank mixed with **POTENT 500 EC**: buffer/acidifier, wettable powders, water dispersible granules, suspension concentrates, emulsifying concentrates and soluble concentrates last.

- Pre-mix each product(s) separately with a small volume of water before adding it to the spray tank.

Add the required quantity of **POTENT 500 EC** in at least 10 ℓ water and mix. Add the pre-mixture to the water and fill the tank to the required volume with clean water while maintaining agitation, to ensure thorough mixing of the spray mixture, before and during application. **TANK MIXTURES MUST BE SPRAYED OUT IMMEDIATELY AND NOT ALLOWED TO STAND IN THE SPRAY TANK OVERNIGHT.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

AERIAL APPLICATION:

Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the required warnings. Do not spray over or allow drift to contaminate water or adjacent areas. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavourable environmental conditions. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that a drift is not occurring.

Aerial application of **POTENT 500 EC** 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:

1. **Volume:** A spray mixture volume of 30 ℓ per hectare is recommended. The product has not been evaluated at reduced volume rates and the registration holder cannot guarantee efficacy or be held responsible for any adverse effects if the product is applied aerially at a lower rate than recommended above.
2. **Droplet coverage:** 25 – 35 droplets / cm^2 must be recovered at the target area.
3. **Droplet size:** A droplet spectrum with a VMD of 280 – 300 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift & evaporation potential) to a minimum.
4. **Flying height:** Maintain the height of the spray boom at 3 – 4 m above the target. Do not spray when aircraft is diving, climbing or when banking.
5. Use suitable **atomizing equipment** 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.
6. Position all the atomizers within the inner 60 – 75 % of the wingspan to prevent droplets from entering the **wingtip vortices**.
7. The differences in **temperature** between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
8. Stop spraying if the **wind speed** exceeds 15 km/h.
9. Stop spraying under **turbulent**, unstable, and dry conditions during the heat of the day.
10. Spraying under temperature **inversion conditions** (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
    a) reduced efficacy due to evaporation of small droplets in the air (inadequate coverage),
    b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
11. Ensure that the aerial spray operator knows exactly which fields to spray.
12. Obtain an assurance from the aerial spray operator that the above requirements will be met, and that the relevant data will be compiled in a logbook and kept for future reference.

APPLICATION TABLE

CROP and DISEASE	DOSAGE RATE	REMARKS
TABLE GRAPES **Powdery mildew** (*Oidium tuckeri*)	**HIGH VOLUME APPLICATION:** 10 – 14-day programme: 60 mℓ/100 ℓ water (300 – 600 mℓ/ha)	‣ Commence applications when shoots are ± 2 – 5 cm long. Repeat at indicated intervals. ‣ **DO NOT** apply after commencement of the flowering stage. ‣ **DO NOT** apply more than three (3) **POTENT 500 EC** sprays per season. ‣ Apply other registered fungicides to control Powdery mildew after flowering.
WINE GRAPES **Powdery mildew** (*Oidium tuckeri*)	**HIGH VOLUME APPLICATION:** 10 – 14-day programme: 60 mℓ/100 ℓ water (180 – 900 mℓ/ha) 18 – 21-day programme: 90 mℓ/100 ℓ water (270 – 1350 mℓ/ha)	‣ Commence applications when shoots are ± 2 – 5 cm long. Repeat at indicated intervals. ‣ **DO NOT** apply more than three (3) **POTENT 500 EC** sprays per season. ‣ Apply other registered fungicides for the further control of Powdery mildew.

NOTES – Application in grapes

1. **High volume application on grapes:**
   Spray to point of run off ensuring even coverage. Depending on leaf area present, 300 – 1500 ℓ spray mixture/ha should be applied as follows:

GROWTH STAGE	WATER VOLUME (ℓ/ha)	
	WINE GRAPES	TABLE GRAPES
Shoots 2-5 cm long up to and including just before blossom	300 – 750	500 – 1000
Flowering up to pea-berry size	750 – 1000	-
Berries at pea-size up to harvest	1000 – 1500	-

2. **Low volume application on grapes:**
   POTENT 500 EC can be applied as a low volume application. The volume of product needed per hectare should be calculated from the corresponding high-volume application. The concentration of the spray mix should not exceed four times (4X). Apply in at least 250 ℓ/ha. Ensure even coverage.

ROSES **Powdery mildew** (*Sphaerotheca pannosa*)	90 mℓ/100 ℓ water	‣ For use on roses in glasshouses and enclosed areas only. ‣ Apply as a high-volume spray at the first signs of infection and repeat at 7 – 10 day intervals. ‣ **DO NOT** apply more than three (3) **POTENT 500 EC** sprays per season. ‣ Apply other registered fungicides for the further control of Powdery mildew.

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

POTENT 500 EC

Wet Nr. 36 van 1947
SA Reg. Nr. L12017

'n Sistemiese emulgeerbare konsentraat swamdoder, vir die beheer van Poeieragtige meeldou op gewasse soos gelys.

AKTIEWE BESTANDDEEL:
Spiroksamien (spiroketalamien) ..... 500 g/ℓ

GEREGISTREER DEUR:
ICA International Chemicals (Pty) Ltd., Reg. Nr. 2001/013319/07
Plankenstraat 28 • Plankenbrug Industrieël • Stellenbosch • 7600 • Suid-Afrika
Tel. +27-21 886-9812 • www.icaonline.co.za

WAARSKUWINGS

Mag dodelik wees indien ingesluk en in lugweg beland
Veroorsaak skade aan organe deur langdurige of herhaalde blootstelling
Vermoede dat dit die ongebore kind beskadig
Baie giftig vir waterlewende organismes met langdurige gevolge

ONTHOUDINGS PERIODES (Minimum aantal dae tussen laaste toediening en oes):

- *Wyn Druiwe* ..... *21 Dae* (*3 Weke*)
- *Tafel Druiwe* ..... *Moet nie toedien na die begin van die blomstadium nie.*

Nakoming van hierdie onthoudingsperiodes en toedieningsmetodes sal verseker dat die plaaslike maksimum residu limiete (MRL) nie oorskry word nie, maar mag dalk nie voldoen aan die invoervereistes van ander lande nie. Indien die gewas wat behandel gaan word, bestem is vir uitvoer, raadpleeg die betrokke in- of uitvoerder rakende die gebruik van hierdie produk, die MRL en aanbevole onthoudingsperiodes. Alhoewel **POTENT 500 EC** as gewasveilig beskou word op meeste van die belangrike kultivars, beteken dit nie dat 'n meer sensitiewe kultivar in die toekoms op die mark kan kom nie. **POTENT 500 EC** moet eers op nuwe kultivars getoets word voordat dit oor groot areas aangewend word.

HERBETREDINGSINTERVAL: Moenie behandelde gebied binne 24 uur na toediening betree alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word. Beskermende oorklere moet gewas word na gebruik.

LUGTOEDIENING: Stel alle inwoners in die onmiddellike bespuitingsarea in kennis wanneer daar behandel gaan word en gee die nodige waarskuwings deur. Moet nie dat waterbronne of aanliggende areas deur direkte spuit of spuitnewel gekontamineer word nie. Verwys ook na die SANS Gebruikskode vir lugtoediening van landbouchemikalieë.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie, aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander produkte wat nie op die etiket aangedui is nie en die voorkoms van weerstand teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effekte op mens of dier of vir 'n gebrek aan doeltreffendheid, as gevolg van die versuim van die gebruiker om die etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in geval van enige onsekerheid.

VOORSORGMAATREËLS

Indien mediese advies benodig word, hou die produkhouer of -etiket byderhand.
Hou buite bereik van kinders, oningeligte persone en diere.
Lees sorgvuldig en volg alle instruksies.
Verkry, lees en volg alle veiligheidsinstruksies voor gebruik.
Vermy die inaseming van stuifsel/dampe/spuitstof.
Was hande en blootgestelde vel deeglik na hantering.
Moet nie eet, drink of rook wanneer hierdie produk gebruik word nie.
Vermy vrystelling in die omgewing.
Dra beskermende handskoene, beskermende klere, oog- en gesigbeskerming.
INDIEN blootgestel of besorg, verkry mediese advies.
Verkry mediese hulp indien jy ongesteld voel.
INDIEN INGESLUK: Kry onmiddellik mediese noodhulp.
Moet NIE vomering induseer nie.
Maak stortsel bymekaar.
Raak ontslae van inhoud en houer in ooreenstemming met nasionale regulasies.

SPOEL DIE LEË HOUER DRIE MAAL SOOS VOLG: Keer die leë houer om oor die spuit- of mengtenk en dreineer vir minstens 30 sekondes totdat die vloei tot 'n gedrup verminder het. Spoel daarna die leë houer drie keer uit met vars water, teen 'n kwart van die houer se volume, en giet die spoelwater in die spuit- of mengtenk. Kap gate in die drie keer gespoelde houer, waarna dit aan 'n goedgekeurde versamelaar of verwerker oorhandig moet word (www.croplife.co.za). Moenie die houer begrawe, verbrand of aan enige ander partye skenk wat dit as houer vir voedsel of drinkgoed mag gebruik nie.

RELEVANTE STOWWE:
Spiroksamien (Cas no: 7704-34-9 Reproduktiewe Toksisiteit Kategorie 2, H361d; Akute Giftigheid Inaseming Kategorie 4, H332; Akute Giftigheid Vel Kategorie 4, H312; Akute Giftigheid Mondelings Kategorie 4, H302; Spesifieke Teikenorgaangiftigheid, Herhaalde Blootstelling Kategorie 2, H373; Vel Irritasie Kategorie 2, H315; Vel Allergie Kategorie 1, H317 (50 % m/v).
Oplosmiddel nafta (petroleum) (Cas no: 64742-94-5) Inasemingsgevaar Kategorie 1, H304 (30 – 40 % m/v).

NOODHULP BEHANDELING

In geval van 'n ongeluk of as jy onwel voel, verkry onmiddellik mediese advies en wys hierdie ETIKET waar moontlik

INASEMING:	Neem die slagoffer weg van die onmiddellike bron van blootstelling. Verskuif die slagoffer na vars lug as dit veilig gedoen kan word en hou gemaklik. Indien die slagoffer ophou asemhaal, pas kunsmatige asemhaling toe. Dien suurstof toe as die slagoffer se asemhaling moeilik of onreëlmatig is. Verkry mediese hulp.
VEL:	Verwyder en isoleer besmette klere, skoene en leergoedere dadelik en stort. Spoel aangetaste areas (vel) onmiddellik met nieskurende seep of sagwerkende wasmiddel en groot hoeveelhede lopende water. Was besmette klere voor hergebruik. Kry mediese hulp indien irritasie ontwikkel en voortduur.
OË:	Spoel oë versigtig met skoon lopende water vir ten minste 15 minute terwyl die ooglede vanmekaar gehou word. Verwyder kontaklense na 5 minute indien aanwesig en maklik om te doen. Hou aan met spoel terwyl ooglede vanmekaar gehou word. Kry mediese hulp indien irritasie voortduur.
OPNEMING:	Indien ingesluk, MOENIE vomering induseer nie, tensy 'n gifsentrum of dokter opdrag gee om dit te doen. Laat die persoon slukkies water neem indien dit moontlik is om te sluk. Moet nooit iets per mond aan 'n bewustelose persoon gee nie. Indien die persoon wel vomeer, hou aan om vloeistowwe te gee. Verkry mediese hulp.
NOTA AAN GENEESHEER:	Daar is nie 'n spesifieke teenmiddel nie. Alle behandeling moet gebaseer word op waargenome tekens en simptome van nood by die pasiënt.
MOONTLIKE GESONDHEIDSGEVOLGE, AKUUT EN VERTRAAGD:	Gevolge van blootstelling (inaseming, opneming of velkontak) aan stof kan vertraag wees.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur: POTENT 500 EC is 'n FRAC groepkode **(5)** swamdoder. Enige swam populasie mag individue insluit wat 'n natuurlike weerstand teen **POTENT 500 EC**, of enige ander FRAC groepkode **(5)** swamdoders het. Indien hierdie swamdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die swam populasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **POTENT 500 EC** of enige ander FRAC groep kode **(5)** swamdoders beheer word nie.

Om weerstand te vertraag:

- vermy die herhaaldelike gebruik van swamdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende swamdoder groepkodes,
- raadpleeg toepaslike individuele produketikette wanneer daar afgewissel word, of tenkmengsels gemaak word, met produkte in ander swamdoder groepkodes,
- integreer ander beheermaatreëls (chemies, verbouing, biologies) in swamdoder programme,
- waar weerstand bekend is of vermoed word, moet **POTENT 500 EC** nie alleen toegedien word nie, maar in kombinasie met swamdoders van 'n ander swamdoder groepkode. Hierdie bestuur strategie om weerstand te voorkom, moet egter nie swamdoder produkte insluit waar weerstand in die verlede aangemeld is nie, of dieselfde werkswyse het nie,
- vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk of jou plaaslike verskaffer,
- om die effektiwiteit van **POTENT 500 EC** te handhaaf is dit belangrik om die onwikkeling van siekte weerstand teen FRAC groepkode **(5)** swamdoders te voorkom,
- gebruik slegs die aanbevole dosisse wat op die etiket aangedui word, MOENIE die dosisse verlaag nie,
- **MOENIE** meer as **DRIE POTENT 500 EC** behandelings per seisoen oorskry nie.

WERKINGSWYSE

POTENT 500 EC is 'n sistemiese swamdoder wat beskermende, genesende en uitwissende aktiwiteit bied. Dit word geredelik deur blaarweefsel geabsorbeer en akropetaal deur die xileem getranslokeer, wat 'n eenvormige verspreiding deur die blaar verseker.

Die aktiewe bestanddeel, spiroksamien (FRAC Groep 5), inhibeer swamsterolbiosintese deur die Δ^{14}-reduktase en Δ^{8}-tot-Δ^{7} isomerase-ensieme te blokkeer. Hierdie ontwrigting van ergosterolproduksie kompromitteer die integriteit van swamselmembraan, wat uiteindelik swamgroei en -ontwikkeling inhibeer.

GEBRUIKSBEPERKINGS

- Raadpleeg die betrokke etikette vir **GEBRUIKSBEPERKINGS**, **WAARSKUWINGS** (**insluitend WEERSTANDSWAARSKUWING**), **VOORSORGMAATREËLS** en **GEBRUIKSAANWYSINGS**.
- **VIR ALLE GEWASSE EN SIEKTES MOET NIE MEER AS DRIE (3) POTENT 500 EC TOEDIENINGS PER SEISOEN OORSKRY NIE.**

GEBRUIKSAANWYSINGS – gebruik soos aangedui

VERENIGBAARHEID:

Die verenigbaarheid van **POTENT 500 EC** met produkte hang af van die formulasie van die betrokke produkte asook die kwaliteit van die water wat gebruik gaan word. Dit is moontlik dat formulasies van tyd tot tyd kan verander, en dus word daar aanbeveel dat 'n klein skaalse fisiese verenigbaarheidstoets (fles toets) uitgevoer word, voordat 'n tenkmengsel gemaak word. Raadpleeg altyd die individuele produk etikette voor mengsels met **POTENT 500 EC** gemaak word.

ICA International Chemicals (Edms) Bpk. aanvaar geen verantwoordelikheid vir die gewasverdraagsaamheid of enige nadelige effekte van tenkmengsels nie.

Laat **7 dae** toe tussen die toediening van **POTENT 500 EC** en produkte nie hierbo genoem nie. Moenie **POTENT 500 EC** saam met benattings/kleefmiddels of as 'n tenkmengsel met spoor- of makro-elemente op wingerd toedien nie.

MENGINSTRUKSIES:

Skud die POTENT 500 EC houer deeglik voor gebruik. Plaas prop terug op houer direk na gebruik. Vul die spuittenk halfvol met skoon water en maak seker dat spuittenk deurentyd gemeng word.

Meng **POTENT 500 EC** vooraf as volg:

Let op die volgende mengvolgorde van die formulasies indien ander produkte saam met **POTENT 500 EC** in 'n tenkmengsel toegedien word: Buffer/versuurder, benatbare poeiers, waterdispergeerbare korrels, wateroplosbare vloeistof, suspensie konsentraat, en emulgeerbare konsentrate laaste.

- Meng elke produk afsonderlik met 'n klein hoeveelheid water voordat dit in die spuittenk gevoeg word.

Voeg die benodigde hoeveelheid **POTENT 500 EC** by ongeveer 10 ℓ water en meng goed. Voeg die mengsel by die tenk en vul met skoon water tot by finale volume. Maak seker dat die spuittenk voordurend gemeng word om vermening te verseker voor en tydens toediening. **DIE TENKMENGSEL MOET ONMIDDELLIK**

UITGESPUIT WORD EN NIE TOEGELAAT WORD OM OORNAG IN DIE SPUITTENK TE STAAN NIE. Spuit toerusting moet deeglik uitgespuit/skoongemaak word na afloop van toediening.

LUGTOEDIENING:

Stel alle inwoners in die onmiddellike bespuitingsarea in kennis wanneer daar behandel gaan word en gee die nodige waarskuwings deur. Moet nie dat waterbronne of aanliggende areas deur direkte spuit of spuitnewel gekontamineer word nie. Die aanwending van groter druppels verminder wegdryf potensiaal, maar dit sal nie kontaminasie verhoed as toedienings onder ongunstige omgewingstoestande gemaak word nie. Dit is die verantwoordelikheid van die toediener om te bepaal of omgewingstoestande gunstig is vir 'n toediening sodat spuitnewel verspreiding deur wind nie sal plaasvind nie.
Lugtoediening van **POTENT 500 EC** kan slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (Aerial Application of Agricultural Pesticides) gedoen word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word.

Dit is daarom belangrik om aan die volgende vereistes te voldoen:

1. **Volume:** 'n Spuitmengsel volume van 30 ℓ per hektaar word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
2. **Druppel bedekking:** 25 – 35 druppels / cm² moet op die teikenarea herwin word.
3. **Druppelgrootte:** 'n Druppelspektrum met 'n VMD van 280 tot 300 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
4. **Vlieghoogte:** Handhaaf die spuitbalk 3 – 4 m bo die teiken. Moet nie spuit wanneer die vliegtuig duik, klim of draai nie.
5. Gebruik geskikte **atomiseringsapparaat** wat die vereiste druppelgrootte en bedekking sal produseer, maar die verlies van produk minimaliseer. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike relatiewe span produseer.
6. Plaas al die atomiseerders binne die 60 – 75 % vlerkspan om te verhoed dat druppels in die **vlerkpuntvorteks** inbeweeg.
7. Die verskil in **temperatuur** tussen die nat- en droëboltermometer van 'n swaaihigrometer, moet nie 8 °C oorskry nie.
8. Staak bespuiting indien die **windspoed** 15 km/h oorskry.
9. Staak bespuiting tydens **turbulente**, onstabiele en droë toestande gedurende die hitte van die dag.
10. Bespuiting onder temperatuur **inversie toestande** (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80 % en hoër) mag tot die volgende probleme lei:
    a. verlaagde effektiwiteit as gevolg van verdamping van klein druppels (onvoldoende bedekking),
    b. skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken areas.
11. Verseker dat die lugbespuitingsoperateur presies weet watter lande bespuit moet word.
12. Dit is noodsaaklik om 'n versekering van die lugbespuitingsoperateur te kry dat daar aan al die bogenoemde vereistes voldoen sal word en dat relevante data in 'n logboek saamgevat word vir toekomstige verwysing.

TOEDIENINGSTABEL

GEWAS en SIEKTE	DOSIS	AANBEVELINGS
TAFELDRUIWE **Poeieragtige meeldou** (*Oidium tuckeri*)	**HOË VOLUME TOEDIENING:** 10 – 14-dae program: 60 mℓ/100 ℓ water (300 – 600 mℓ/ha)	‣ Begin toediening wanneer lote ± 2 – 5 cm lank is. Herhaal met aangeduide tussenposes. ‣ **MOENIE** toedien na die aanvang van die blomstadium nie. ‣ **MOENIE** meer as drie (3) **POTENT 500 EC** bespuitings per seisoen toedien nie. ‣ Dien ander geregistreerde swamdoders toe vir die beheer van poeieragtige meeldou na blom.
WYNDRUIWE **Poeieragtige meeldou** (*Oidium tuckeri*)	**HOË VOLUME TOEDIENING:** 10 – 14-dae program: 60 mℓ/100 ℓ water (180 – 900 mℓ/ha) 18 – 21-dae program: 90 mℓ/100 ℓ water (270 – 1350 mℓ/ha)	‣ Begin toediening wanneer lote ± 2 – 5 cm lank is. Herhaal met aangeduide tussenposes. ‣ **MOENIE** meer as drie (3) **POTENT 500 EC** bespuitings per seisoen toedien nie. ‣ Dien ander geregistreerde swamdoders toe vir die verdere beheer van poeieragtige meeldou.

NOTA – Toediening op druiwe

1. **Hoë volume toediening op druiwe:**
   Spuit tot die punt van afloop en verseker egalige bedekking. Afhangende van blaaroppervlakte sal 300-1 500 l spuitmengsel per hektaar benodig word soos volg:

GROEISTADIUM	WATER VOLUME (ℓ/ha)	
	WYNDRUIWE	TAFELDRUIWE
Lote 2-5 cm lank tot en met net voor blom	300 – 750	500 – 1000
Blomstadium tot ertjiekorrelgrootte	750 – 1000	-
Ertjiekorrelgrootte tot oestyd	1000 – 1500	-

2. **Lae volume toediening op druiwe:**
   POTENT 500 EC kan ook toegedien word as 'n lae volume bespuiting. Die volume produk benodig per hektaar moet bereken word van die dienooreenkomstige hoë volume toedieningshoeveelheid. Die konsentrasie van die spuitmengsel mag nie vier keer (4X) die konsentrasie oorskry nie. 'n Minimum spuitvolume van ten minste 250 ℓ/ha word aanbeveel. Verseker egalige bedekking.

<u>ROSES</u> **Poeieragtige meeldou** (*Sphaerotheca pannosa*)	90 mℓ/100 ℓ water	‣ Slegs vir die gebruik op rose in glashuise en toegemaakte areas. ‣ Dien toe as ’n hoë volume bespuiting sodra eerste simptome opgemerk word en herhaal elke 7 – 10 dae. ‣ **MOENIE** meer as drie (3) **POTENT 500 EC** bespuitings per seisoen toedien nie. ‣ Dien ander geregistreerde swamdoders toe vir die verdere beheer van poeieragtige meeldou.

Raadpleeg die etikette vir **GEBRUIKSBEPERKINGS**, **WAARSKUWINGS** (insluitend WEERSTANDSWAARSKUWINGS), **VOORSORGMAATREëLS** en **GEBRUIKSAANWYSINGS.**

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