SOVRIN FLO

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY
SOVRIN FLO
FUNGICIDE
Reg. No. L7601, Act/Wet No. 36 of/van 1947
Namibian Reg. No. N-AR 1534
1: 11/10/2004
A suspension concentrate locally systemic fungicide for the control of diseases on crops listed.
'n Suspensiekonsentraat lokaal sistemiese swamdoder vir die beheer van siektes op gewasse soos aangedui.
FRAC FUNGICIDE GROUP CODE
40
FRAC SWAMDODERGROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL
Dimethomorph (cinnamic acid derivative)
500 g/ℓ
Dimetomorf (kinnamieksuurderivaat)
Registration Holder / Registrasiehouer
Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.
Reg. No. 2000/010819/07
P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid- Afrika
5ℓ
UN Number: NR
Meridian agritech
GEBRUIKSAANWYSINGS INGESLUIT
Lotnommer
Datum van vervaardiging
VERWYS NA BESONDERHEDE SOOS OP HOUER / SAK GEDRUK
DIRECTIONS FOR USE ENCLOSED
Batch Number
Date of manufacture
REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

WARNINGS

Allow the following number of days between last treatment and harvest or use as food or feed:

Potatoes……………………………………………………………………………………………………..14 days
Wine grapes…..……………………………………………..…………………………………………...21 days
Table grapes…..……………………………………………..…………………………………………..56 days

IMPORTANT: The recommended withholding period between last application and harvest meets local residue requirements, but may not meet export requirements.

- Harmful when swallowed, inhaled or absorbed through the skin.
- Harmful to fish.
- Store in a cool place.
- Store away from food, feed, fertilizer and other agricultural products.
- 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.
- **Sovrin Flo** has been tested on the most important commercial cultivars without any phytotoxic effects. More susceptible cultivars may be released in future which need to be tested; for this apply **Sovrin Flo** to a limited test area before commercial applications are made.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity 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, 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 by 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

- Do not inhale fumes or spray mist.
- Avoid skin and eye contact by wearing protective clothing when mixing the product.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- 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 before destroying the empty container by perforation and flattening.
- Do not use the empty container for any other purpose.

RESISTANCE WARNING

For resistance management, **Sovrin Flo** is a group code 40 fungicide. Any fungus population may contain individuals naturally resistant to **Sovrin Flo** and other group code 40 fungicides. The resistant individuals can eventually dominate the disease population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **Sovrin Flo** or any other group code 40 fungicide.

To 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.

- A spray programme of mixtures or alternations with remedies with a different mode of action may delay resistant strain build-up.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **Sovrin Flo** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to prompt use of a fungicide with a different mode of action for which there is no record of resistance to the relevant disease.

USE RESTRICTIONS

- The uptake and activity of systemic compounds can be reduced when crops are under severe drought and/or nutrient stress conditions. Therefore do not apply **Sovrin Flo** under such conditions.
- Spray programmes with **Sovrin Flo** should commence before disease/s become established.
- In table grapes, do not apply after berries have reached pea size (4 – 6 weeks prior to harvest) as this may cause tarnishing.
- Do not apply **Sovrin Flo** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **Sovrin Flo** using an accurate and safe application technique.
- If **Sovrin Flo** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.

DIRECTIONS FOR USE

Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water, then add the required amount of **Sovrin Flo** to the water in the tank while agitating. Fill the spray tank to the desired volume. Do not use brackish water. Should tank mixtures with other products be made, follow the respective manufacturers' label recommendations. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank**. Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **Sovrin Flo** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **Sovrin Flo** is compatible with Copstar 120 SC and Copflo Super SC.

APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. **Sovrin Flo** can be applied with conventional high volume spray equipment. **Constant agitation throughout the spray operation is essential**. Only clean water should be used.

RECOMMENDATIONS

CROP/DISEASE	APPLICATION RATE/HA	REMARKS
Potatoes Late blight (*Phytophthora infestans*)	360 mℓ/ha **PLUS** suitable contact fungicide such as Copstar 120 SC **OR** Copflo Super SC at recommended dosage rates	Commence with a preventive spray programme early in the season with at least two consecutive applications. First application should take place at around 50% emergence. Repeat application every 7 – 14 days depending on disease pressure, weather conditions and crop development. Use at shorter intervals when potatoes are irrigated frequently or when conditions become conducive to the development of late blight. Apply at least once every four weeks even under conditions of low disease pressure. For varieties susceptible to late blight, do not apply at intervals longer than 10 days. Apply during period of active growth of plant as a high volume, full cover spray. Depending on the plant size, apply in 300 – 500 ℓ water per ha. Apply in a programme and use sufficient spray mixture to obtain adequate coverage. **Sovrin Flo** will not control early blight (*Alternaria solani*). Read "Remarks" below.
Wine and table grapes Downy mildew (*Plasmopara viticola*)	36 mℓ/100 ℓ water **PLUS** Suitable contact fungicide such as Copstar 120 SC **OR** Copflo Super SC at recommended dosage rates	Commence with a preventive spray programme early in the season (10 cm shoot length) to provide protection to young vine growth, flowers and fruit. Apply every 10 – 14 days up to the beginning of January. Apply during period of active growth of plant as a high volume, full cover spray. Do not apply to table grapes after the pea-berry stage. Depending on the plant size, apply in 500 – 1 500 ℓ water / ha. Apply in a preventive programme and use sufficient spray mixture to obtain adequate coverage. Read "Remarks" below.

Remarks

Sovrin Flo contains dimethomorph, a translaminar/locally systemic fungicide with protective properties against late blight and downy mildew. **Sovrin Flo** acts by disrupting fungal cell wall formation and also possesses anti-sporulant properties to combat reinfection. **Sovrin Flo** must always be used in tank mixture with a contact fungicide such as Copstar 120 SC or Copflo Super and must always be used prophylactically. In the case of potatoes, products registered for the control of early blight must be employed when this disease is present as **Sovrin Flo** will not control early blight. Products such as **Corona 250 EW** or **Pronto 250 EC** may be used. **Sovrin Flo** must not be applied to any crop suffering from stress as a result of drought, water logging, low temperature, insect attack, nutrient or lime deficiency or other factors reducing crop growth.

ACKNOWLEDGEMENT OF TRADEMARKS:

Corona 250 EW	Meridian Agrochemical Company (Pty) Ltd
Pronto 250 EC	Meridian Agrochemical Company (Pty) Ltd
Copstar 120 SC	Ag-chem Africa (Pty) Ltd
Copflo Super SC	Ag-chem Africa (Pty) Ltd

WAARSKUWINGS

Laat die volgende aantal dae toe tussen laaste toediening en oes, of vir gebruik as voedsel of voer:

Aartappels……………………………………………………………………………………………..….14 dae
Wyndruiwe…………...……………………………………………………………………………………21 dae
Tafeldruiwe……..………………………………………………………………………………………56 dae

BELANGRIK: Die aanbevole onthoudingsperiode tussen laaste toediening en oes voldoen aan die vereistes vir plaaslike residuvlakke maar mag dalk nie aan die vereistes vir uitvoer voldoen nie.

- Skadelik wanneer die produk ingesluk, ingeasem of deur die vel opgeneem word.
- Skadelik vir visse.
- Bêre in ‘n koel plek.
- Bêre weg van voedsel, voer, kunsmis en ander landbouprodukte.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Herbetreding** – Moet nie behandelde gebiede betree alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word.
- **Sovrin Flo** is sonder enige fitotoksisiteitskade op die mees belangrikste kommersiële kultivars getoets. Meer vatbare kultivars mag in die toekoms vrygestel word wat eers getoets moet word; hiervoor moet **Sovrin Flo** eers op ‘n klein toetsoppervlakte aangewend word, alvorens groot kommersiële bespuitings gemaak word.

Alhoewel hierdie middel omvattend onder ’n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die siekte teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van die toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige invloede op mens of dier of vir ’n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om 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 die geval van enige onsekerheid.

VOORSORGMAATREËLS

- Moet nie damp of spuitnewel inasem nie.
- Vermy kontak met die vel en oë deur beskermende oorklere te dra wanneer die produk gemeng word en gedurende toediening.
- Was met seep en koue water onmiddellik na gebruik en toevallige velkontak; so ook die besoedelde klere.
- Was besoedelde klere onmiddellik na gebruik.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Vermy wegdrywing van spuitnewel na ander gewasse, weiding, riviere, damme en plekke wat nie behandel moet word nie.
- Maak toedieningsapparaat skoon na gebruik. Uitspoelwater moet nie gewasse, weiding, riviere, damme en boorgate besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Spoel leë houer **drie keer** uit met ‘n volume water gelykstaande aan ‘n minimum van 10% van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer op die voorgeskrewe wyse vernietig word.
- Vernietig die leë houer en moet vir geen ander doel gebruik nie.

WEERSTANDSWAARSKUWING

Vir weerstandbestuur is **Sovrin Flo** ‘n groepkode 40 swamdoder. Enige swampopulasie mag individue bevat wat ‘n natuurlike weerstand teen **Sovrin Flo**, of enige ander groepkode 40 swamdoder het. Indien hierdie swamdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die siekte-populasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **Sovrin Flo** of enige ander groepkode 40 swamdoder beheer word nie

Om weerstand teen swamdoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van swamdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, produkte in verskillende swamdodergroepkodes.
- ‘n Spuitprogram of tenkmengsels met middels met ‘n ander metode van werking kan die opbou van weerstandbiedendheid vertraag.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in siektebeheerprogramme.

Aangesien die voorkoms van weerstand nie voorspel kan word nie, word gebruikers derhalwe gemaan om behandelde gewasse noukeurig dop te hou. Indien die behandeling nie doeltreffend is na die bespuiting met **Sovrin Flo** soos aanbeveel nie, mag ‘n weerstandbiedende ras teenwoordig wees. Indien ‘n weerstandbiedende ras positief geïdentifiseer word, skakel dadelik oor na ander geskikte swamdoders met ‘n ander werking waar daar geen rekord van weerstand teen die betrokke siekte is nie. Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

GEBRUIKSBEPERKINGS

- Die opname en werking van sistemiese middels kan verlaag word wanneer gewasse onder ernstige droogte- en/of voedingsgebrektoestande verkeer. Moet dus nie **Sovrin Flo** onder sulke omstandighede toedien nie.
- Begin spuitprogramme met **Sovrin Flo** voordat die siekte(s) posvat.
- By tafeldruiwe moet nie na ertjiekorrelgrootte (4 – 6 weke voor oes) toedien nie, aangesien dit vlekke mag veroorsaak.
- Moet nie **Sovrin Flo** toedien op enige gewas of situasie wat nie op hierdie etiket verskyn nie.
- Dien **Sovrin Flo** slegs met akkurate en veilige toedieningsmetodes toe.
- As **Sovrin Flo** met ander middels in tenkmengsels gebruik word, moet die gebruiksaanwysings van daardie betrokke produkte gevolg word.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water en voeg die benodigde hoeveelheid produk by die water terwyl daar aanhoudend geroer word. Maak die spuittenk tot die aanbevole volume vol. Moet nie brakwater gebruik nie. As tenkmengsels met ander middels gemaak word, moet die spesifieke vervaardiger se etiket gevolg word. **Die tenkmengsel moet onmiddellik uitgespuit word en nie toegelaat word om in die spuittenk te staan nie.** Die spuittoerusting moet aan die einde van toediening deeglik uitgewas word.

VERENIGBAARHEID

Die verenigbaarheid van **Sovrin Flo** met ander produkte hang van die formulering van die betrokke produkte af, asook van die kwaliteit van die spuitwater. Deurdat formulerings van tyd tot tyd kan verander, word dit aanbeveel om eers ‘n fisiese verenigbaarheidstoets uit te voer voordat die tenkmengsel gemaak word. **Sovrin Flo** is verenigbaar met Copstar 120 SC en Copflo Super SC.

TOEDIENINGSMETODES

Maak seker dat die spuittoerusting reg gekalibreer is en gereeld tydens toediening nagegaan word om egalige en akkurate toediening te verseker. **Sovrin Flo** kan toegedien word met ‘n gewone hoë-volumespuit. **Die mengsel moet aanhoudend en deeglik geroer word tydens toediening.** Slegs skoon water moet gebruik word.

AANBEVELINGS

GEWAS/SIEKTE	DOSIS/ha	OPMERKINGS
Aartappels Laatroes *(Phytophthora infestans)*	360 mℓ/ha **PLUS** geskikte kontakswamdoder soos Copstar 120 SC **OF** Copflo Super SC teen aanbevole dosisse	Begin met 'n voorkomende spuitprogram vroeg in die seisoen met ten minste twee agtereenvolgende bespuitings. Die eerste toediening moet by 50% -plantopkoms geskied. Herhaal bespuitings elke 7 – 14 dae afhangende van siektedruk, omgewingstoestande en gewasontwikkeling. Gebruik die korter tussenpose op aartappels wat meer gereeld besproei word of wanneer toestande gunstig is vir die ontwikkeling vir laatroes. Dien toe ten minste een keer elke vier weke al is die siektedruk nie baie hoog nie. Op kultivars vatbaar vir laatroes, moet die tussenpose nie langer as 10 dae wees nie. Dien toe gedurende aktiewe groei teen 'n hoë-volume, voldekbespuiting. Dien toe in 300 – 500 liter water per ha afhangend van plantgrootte. Dien toe as deel van 'n program en gebruik genoeg spuitmengsel om goeie bedekking te verseker. **Sovrin Flo** sal nie vroeëroes (*Alternaria solani*) beheer nie. Lees "Opmerkings" hieronder.
Wyn- en tafeldruiwe Donsskimmel (*Plasmopara viticola*)	36 mℓ/100 ℓ water **PLUS** geskikte kontakswamdoder soos Copstar 120 SC **OF** Copflo Super SC teen aanbevole dosisse	Begin bespuiting vroeg in die seisoen (10 cm lootlengte) as 'n voorkomende spuitprogram vir beskerming van jong groei, blomme en trosse. Dien elke 10 – 14 dae toe tot en met begin-Januarie. Dien toe gedurende aktiewe groei teen 'n hoë-volume, voldekbespuiting. Dien toe in 500 – 1 500 liter water per ha afhangend van plantgrootte. Dien toe as deel van 'n program en gebruik genoeg spuitmengsel om goeie bedekking te verseker. Moet nie na die ertjiekorrelstadium op tafeldruiwe toedien nie. Lees "Opmerkings" hieronder.

Opmerkings
Sovrin Flo bevat dimetomorf, 'n translaminêr/lokaal sistemiese swamdoder met beskermende eienskappe teen laatroes en donsskimmel. **Sovrin Flo** se aktiewe bestanddeel verhoed selwandvorming by swamme, en werk spoorvoming teen om herinfeksie to bestry. **Sovrin Flo** moet altyd in tenkmengsels saam met kontakswamdoders soos Copstar 120 SC of Copflo Super SC gebruik word en moet altyd voorkomend gebruik word. By aartappels moet produkte wat vir die beheer van vroeëroes geregistreer is, gebruik word indien die siekte voorkom, aangesien **Sovrin Flo** nie vroeëroes sal beheer nie. Produkte wat op vroeëroes geregistreer is, soos **Corona 250 EW** of **Pronto 250 EC**, kan gebruik word. **Sovrin Flo** moet nie op gewasse wat aan stresfaktore soos droogte, versuiping, lae temperature, insekskade, voedings- of kalktekorte of ander faktore wat gewasontwikkeling sal strem, gespuit word nie.

ERKENNING VAN HANDELSMERKE:

Corona 250 EW	Meridian Agrochemical Company (Edms.) Bpk.
Pronto 250 EC	Meridian Agrochemical Company (Edms.) Bpk.
Copstar 120 SC	Ag-chem Africa (Edms.) Bpk.
Copflo Super SC	Ag-chem Africa (Edms.) Bpk.