



SPHINX[®] STAR WDG

Reg. no. L9084 Act/Wet 36 of/van 1947
N-AR 1395

A preventive and local systemic water dispersible granule fungicide for the control of late and early blight in potatoes and late blight and botrytis rot on tomatoes. 'n Voorkomende en lokaal sistemiese water-dispergeerbare korrelswamdoder vir die beheer van laatroes en vroeë roes op aartappels en laatroes en botrytis-vrot in tamaties.

FRAC FUNGICIDE GROUP CODE **40/M5** **FRAC SWAMDODER GROEPKODE**

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

Dimethomorph (cinnamic acid derivative)	80 g/kg	Dimetomorf (kaneelsuurderivaat)
Chlorothalonil (phthalonitrile)	400 g/kg	Chlorotaloniel (ftalonitriël)

NET MASS/NETTO MASSA

..... kg

REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty.) Ltd.

Reg. no. 1992/001741/07

21 Viben Street

7560 Brackenfell

T: +27 21 982 1460 F: +27 21 982 5810

infocpt@adama.com

SPHINX[®] is the registered trademark of a company of the ADAMA GROUP.
SPHINX[®] is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946

Tygerberg Poison Information Centre: +27 861 555 777

Batch number.....

.....Lotnommer

Date of Manufacture.....

.....Datum van Vervaardiging

UN no.: 2588



**CAUTION
VERSIGTIG**



WARNINGS

Withholding periods (minimum number of days between last application and harvest or feeding):

Potatoes	14 days
Tomatoes	3 days

- Handle with care.
- Harmful if swallowed.
- Toxic to fish and wildlife.
- Store in a cool, dry place away from food and feed.
- Store away from sources of ignition (no smoking) and keep away from combustible material. Keep container closed when not in use.
- Keep out of reach of children, uninformed persons and animals.
- May cause sensitization by skin contact.
- **Re-entry:** Do not enter treated area until spray deposit has dried off.

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 humans or animals 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

- Wear gloves and face shield when handling the concentrate.
- Do not inhale fumes or spray mist.
- Avoid prolonged contact with skin and eyes. If eyes are contacted, flush out at once with clean running water. If skin is contacted, wash immediately with soap and cold water.
- Wash exposed body parts with soap and cold water after use and wash contaminated clothes daily.
- Do not eat, drink or smoke while mixing, applying or before washing hands and face.
- Clean spray equipment after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- Avoid drift of spray mist to other crops, grazing, rivers, dams and areas not under treatment.
- All empty cartons to be destroyed through burning should be completely empty. Do not allow humans and animals to come in contact with the smoke and/or fumes.
- Prevent contamination of food, feedstuffs, drinking water and eating utensils.

RESISTANCE WARNING

For resistance management **SPHINX® STAR WDG** is classified as a mixture of FRAC group codes 40 and M5 fungicides. Any fungus population may contain individuals naturally resistant to **SPHINX STAR® WDG** and other group codes 40 and M5 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **SPHINX® STAR WDG** or any other group codes 40 and M5 fungicides.

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 other fungicide group codes, refer to applicable individual product labels.
- Integrate the control methods (chemical, cultural, biological) into disease control programmes.

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

DIRECTIONS FOR USE

Use only as indicated.

Compatibility

It is advisable to always carry out a physical compatibility test prior to application when **SPHINX® STAR WDG** is tank mixed with other pesticides.

Mode of action

SPHINX® STAR WDG is a combination fungicide consisting of dimethomorph and chlorothalonil, both with different modes of action. No cross resistance has been observed. Dimethomorph, a translaminar product with local systemic properties, disrupts fungal cell-wall formation, reduces reinfestation through its antispore activity and has also exhibited some curative activity. Chlorothalonil is a non-systemic foliar fungicide with protective action. However, **SPHINX® STAR WDG** is best applied as a prophylactic treatment.

Mixing instructions

Fill the spray tank with water up to three quarter level. Mix the required volume of **SPHINX® STAR WDG** with at least 10 l of water. Ensure that all the granules are dissolved before adding to the spray tank while agitating. When **SPHINX® STAR WDG** is tank mixed with other products, first mix these products separately with water before adding it to the spray tank. Refer to the labels of the products that will be tank mixed with **SPHINX® STAR WDG** and adhere to the label instructions. Fill the spray tank with water to the required level while continuously agitating. Do not allow tank mixture to settle or leave overnight.

Application

SPHINX® STAR WDG can be applied by means of any suitable medium or high volume applicator provided it is calibrated correctly, has an efficient agitation system, and is able to distribute the spray mixture evenly over the target area.

Apply **SPHINX® STAR WDG** in a preventative spray programme. **SPHINX® STAR WDG** should be applied during the early part of the season when plants are actively growing and also to give protection to the flowering and fruit formation stages which are critical.

APPLICATION RATES

CROP AND TARGET	DOSAGE	REMARKS
<p>Potatoes</p> <p>Late blight (<i>Phytophthora infestans</i>)</p> <p>Early blight (<i>Alternaria solani</i>)</p>	2 kg/ha	Apply SPHINX® STAR WDG as a <u>preventative treatment</u> every 10–14 days, as part of a disease management strategy. Start application early, before any symptoms appear or when weather conditions that are conducive to infection are predicted. When conditions favour development of late blight, reduce application intervals to 7–10 days. Apply as a high volume application in at least 500 L water/ha, depending on plant size. Apply at least 3 times during the season.
<p>Tomatoes</p> <p>Late blight (<i>Phytophthora infestans</i>)</p> <p>Botrytis rot (<i>Botrytis cinerea</i>)</p>	1 kg/ha	Apply SPHINX® STAR WDG as a <u>preventative treatment</u> every 10–14 days. Start application at the beginning of flowering, before any symptoms appear. Spray at least 4 times during the season. When conditions favour development of late blight, reduce application intervals to 7–10 days. Apply as high volume application in 500 to 1 500 L water/ha, depending on plant size or whether plants are trellised or not. Ensure adequate coverage of the plants. When botrytis rot threatens apply at 7 day intervals.

WAARSKUWINGS

Onthoudingsperiodes (minimum aantal dae tussen laaste toediening en oes):

Aartappels	14 dae
Tamaties	3 dae

- Hanteer versigtig.
- Skadelik indien ingesluk.
- Giftig vir vis en natuurlewe.
- Berg in 'n koel, droë plek weg van voedsel en voer.
- Berg weg van moontlike bronne van ontsteking (rook verbode) en hou weg van vlambare materiale. Houer moet dig toegehou word wanneer dit nie gebruik word nie.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Velkontak mag sensitisering veroorsaak.
- **Herbetreding:** Moet nie die behandelde gebied betree voor die spuitmengsel afgedroog het nie.

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 die 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 tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mense of diere of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van 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

- Dra handskoene en 'n gesigskerm as konsentraat hanteer word.
- Moet nie dampe of sproei newel inasem nie.
- Vermy langdurige kontak met vel en oë. In geval van oogkontak spoel dadelik uit met skoon lopende water. Indien met vel in aanraking kom, was dadelik met koue water en seep.
- Was blootgestelde liggaamsdele met seep en water na gebruik en was besoedelde klere daaglik.
- Moet nie eet, drink of rook terwyl vermeng of toegedien word of voordat hande en gesig gewas is nie.
- Maak spuitapparaat skoon na gebruik en gooi waswater weg waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.
- Verhoed dat die spuit newel wegdryf na ander gewasse, weiding, riviere, damme en gebiede wat nie behandel moet word nie.
- Alle leë kartonhouers wat deur brand vernietig word moet heeltemal leeg wees. Mense en diere moet nie in aanraking met rook of dampe kom nie.
- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur is **SPHINX® STAR WDG** as 'n mengsel van FRAC groepkodes 40 en M5 swamdoders geklassifiseer. Enige swambevolking mag individue bevat wat 'n natuurlike weerstand teen **SPHINX® STAR WDG** en ander groepkodes 40 en M5 swamdoders het. Die weerstandbiedende individue kan uiteindelik die swambevolking oorheers as hierdie swamdoders herhaaldelik gebruik word. Hierdie weerstandbiedende swamme mag dalk nie deur **SPHINX® STAR WDG** of enige ander groepkodes 40 en M5 swamdoders beheer word nie.

Om swamdoderweerstand te vertraag:

- Vermy die uitsluitlike herhaalde gebruik van swamdoders van dieselfde swamdodergroepkode. Wissel af, of gebruik in tenkmengsels met middels van ander swamdodergroepkodes.
- Indien van tenkmengsels gebruik gemaak word of met ander produkte afgewissel word, moet na die etikette van die ander individuele produkte verwys word.
- Integreer beheermetodes (chemiese, bewerking, biologies) in siekte beheerprogramme.

Vir meer spesifieke inligting rakende weerstandsbestuur, skakel die registrasiehouer van hierdie produk.

GEBRUIKSAANWYSINGS

Gebruik alleenlik soos voorgeskryf.

Verenigbaarheid

Dit word aanbeveel dat 'n fisiese verenigbaarheidstoets gedoen word voor bespuiting indien tenkmengsels met **SPHINX® STAR WDG** en ander plaagdoders gemaak gaan word.

Werking

SPHINX® STAR WDG is 'n kombinasie swamdoder wat bestaan uit 'n kombinasie van dimetomorf en chlorotaloniel bevat, beide met verskillende werksywyses. Geen kruisweerstand tussen die twee aktiewes is al waargeneem nie. Dimetomorf is 'n translaminêre swamdoder met lokale sistemiese eienskappe. Dit ontwrig die vorming van swamselwande, verminder herbesmetting as gevolg van anti-spoor aktiwiteit asook deur beperkte genesende eienskappe. Chlorotaloniel is 'n nie-sistemiese blaarswamdoder met beskermende werking. Die beste resultate sal egter verkry word indien **SPHINX® STAR WDG** toegedien word as 'n profilaktiese behandeling.

Menginstruksies

Vul die spuittenk driekwart met water. Meng die benodigde hoeveelheid **SPHINX® STAR WDG** vooraf met ten minste 10 ℓ water. Maak seker dat alle korrels opgelos is voordat dit by die spuittenk gevoeg word. Roer die inhoud van die spuittenk voortdurend terwyl die voorafmengsel bygevoeg word. Indien tenkmengsels met **SPHINX® STAR WDG** en ander produkte gemaak gaan word, moet hierdie produkte eers afsonderlik met water gemeng word voordat dit in die spuittenk bygevoeg word. Verwys na die etikette van die produkte waarmee **SPHINX® STAR WDG** mee gemeng gaan word en volg die etiketaanwysings. Vul die spuittenk met water tot die verlangde volume terwyl voortdurend geroer word. Moet nie tenkmengsels laat uitsak of oornag laat staan nie.

Toediening

SPHINX® STAR WDG kan toegedien word met enige geskikte medium of hoë volume toediener mits dit korrek gekalibreer is, met 'n doeltreffende roermeganisme toegerus is en die spuitmengsel eweredig oor die teikengebied versprei kan word.

Dien **SPHINX® STAR WDG** toe in 'n voorkomende spuitprogram. **SPHINX® STAR WDG** behoort toegedien te word vroeg in die seisoen wanneer plante aktief groei om beskerming aan die kritiese blom-en vrugvormingstadia te verleen.

TOEDIENINGSHOEVEELHEDE

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
Aartappels Laatroes (<i>Phytophthora infestans</i>) Vroeë roes (<i>Alternaria solani</i>)	2 kg/ha	Dien SPHINX® STAR WDG elke 10–14 dae toe as 'n <u>voorkomende behandeling</u> , as deel van 'n siektebestuurstrategie. Begin toedienings vroeg, voordat enige simptome verskyn of wanneer weerstoestande bevorderlik vir infeksie voorspel word. Wanneer toestande gunstig is vir die ontwikkeling vir laatroes moet die spuitintervalle na 7–10 dae verkort word. Dien toe as 'n hoë volume toediening in ten minste 500 L water/ha, afhangend van plantgrootte. Dien ten minste 3 keer tydens die seisoen toe.
Tamaties Laatroes (<i>Phytophthora infestans</i>) Botritis-vrot (<i>Botrytis cinerea</i>)	1 kg/ha	Dien SPHINX® STAR WDG elke 10–14 dae toe as 'n <u>voorkomende behandeling</u> . Toediening moet met die begin van blom in aanvang neem, voordat enige simptome verskyn. Dien ten minste 4 keer tydens die seisoen toe. Wanneer toestande gunstig is vir die ontwikkeling vir laatroes moet die spuitintervalle na 7–10 dae verkort word. Dien toe as 'n hoë volume toediening in 500–1 500 L water/ha, afhangend van plantgrootte en of plante opgelei is of nie. Verseker voldoende bedekking van die plante. Indien daar 'n gevaar is van botrytis-vrot dien met tussenposes van 7 dae toe.