

DIRECTIONS FOR USE ENCLOSED

Batch number: REFER TO DETAILS PRINTED
Lotnummer: ON CONTAINER/BAG

GEbruIKSAANwYsINGS INGESLUIT

Date formulated: VERwYS NA BESONDERHEDE
Formuleringsdatum: GEDruk OP HOUEr/SAK

SHAKE THE BOTTLE WELL BEFORE USE.

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Fungicide



SPARTA 375 SC

Reg. No. L 8403 Act/Wet No. 36 of/van 1947
N-AR 1340

5:23/4/2018 - April 2018

A suspension concentrate fungicide for the control of diseases on crops as indicated.

'n Suspensie konsentraat swamdoder vir die beheer van siektes op gewasse soos aangedui.

ACTIVE INGREDIENTS / AKTIEWE BESTANDEDELE

flusilazole (triazole) **250 g/l** flusilasool (triasool)
carbendazim (benzimidazole) **125 g/l** karbendasim (bensimidasool)

FRAC FUNGICIDE GROUP CODE **3** FRAC SWAMDODER GROEPKODE

FRAC FUNGICIDE GROUP CODE **1** FRAC SWAMDODER GROEPKODE



villa

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07

PO Box / Posbus 10413, Aston Manor, 1630

Tel: 011 396 2233

Website / Webblad: www.villacrop.co.za

UN Number: 3082



HARMFUL
SKADELIK

Willow Set & Print 011 394-4486



SPARTA 375 SC

Reg. No. L 8403 / N-AR 1340 Act/Wet No. 36 of/van 1947

FRAC FUNGICIDE GROUP CODE / FRAC SWAMDODER GROEPKODE: 3
FRAC FUNGICIDE GROUP CODE / FRAC SWAMDODER GROEPKODE: 1**ACTIVE INGREDIENTS / AKTIEWE BESTANDELE:**flusilazole (triazole) / flusilasool (triasool) 250 g/l
carbendazim (benzimidazole) / karbendasim (bensimidasool)..... 125 g/l**Registration holder / Registrasiehouer:****VILLA CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box / Posbus 10413, ASTON MANOR, 1630 Tel. (011) 396 2233

HARMFUL**SKADELIK****WARNINGS**

| Allow the following number of days between the last application and harvest or grazing of the crops listed below: | |
|--|----------|
| Barley & Wheat | 56 days |
| Dry beans | 30 days |
| Groundnuts, Dry beans (fodder) & Soybeans (fodder) | 42 days |
| Maize & Sweetcorn | 14 days |
| Maize (grazing), Sorghum & Sweetcorn | 60 days |
| Mangoes | 124 Days |
| Peas | 10 days |
| Pea foliage for feeding | 28 days |

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, UNIVERSAL CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

- Handle with care.
- May be harmful when swallowed, inhaled or absorbed through the skin.
- May cause mild skin irritation. May cause an allergic skin reaction.
- **Do not graze treated barley and wheat fields.**
- Toxic to fish and aquatic organisms with long lasting effects.
- Do not contaminate dams, rivers, lakes or any other water sources.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and away from food and feedstuffs.
- Avoid storage temperatures below -5 °C and above 25 °C.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- **In case of poisoning call a doctor and make this label available to him/her.**

Aerial application:

Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas or water.

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 to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further 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, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.

PRECAUTIONS

- Avoid inhalation of the spray mist.
- Avoid contact with skin and eyes.
- Wear a face shield and rubber gloves when preparing the mixture and during application.
- Wash contaminated clothing after use.
- Wash with soap and water after use and after accidental skin contact.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face, and change of clothing.
- Do not spray, or allow drift of spray, on to other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources.
- Clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- **TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.
- Destroy the container by perforation and flattening and dispose of via a certified incineration plant or approved waste disposal site.
- **Do not** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

SYMPTOMS OF HUMAN POISONING

Prolonged or repeated exposure may cause eye damage or irritate the respiratory tract and eyes, and may cause headaches and dizziness. Some individuals may develop an allergic response.

FIRST AID TREATMENT

- Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- Skin contact: Remove contaminated clothing and wash before re-using. Wash skin gently and thoroughly with water and non-abrasive soap. Seek medical attention if skin irritation persists.
- Eye contact: Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
- Ingestion: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If alert, rinse mouth with plenty of water.

NOTE TO PHYSICIAN

There is no specific antidote available. Treat symptomatically. Consider gastric lavage avoiding aspiration. Do not give ephedrine or related drugs.

RESISTANCE WARNING

SPARTA 375 SC is a mixture of group codes 3 and 1 fungicides. Any fungus population may contain individuals naturally resistant to **SPARTA 375 SC** and other group code 3 and 1 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **SPARTA 375 SC** or any other group code 3 and 1 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 fungicide group code M, refer to applicable, individual product labels,
- integrate other control methods (chemical, cultural, biological) into disease control programmes.

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

GENERAL PROPERTIES

- **SPARTA 375 SC** is a mixture of systemic foliar fungicides containing **Flusilazole**, a DMI fungicide, and **Carbendazim**, an MBC fungicide, with both protective and post-infection curative action.
- The efficiency of **SPARTA 375 SC** is not influenced by rain occurring 3 hours after application, due to rapid uptake of the active ingredients by plant tissue.

USE RESTRICTIONS

- It is not recommended to apply systemic products, such as **SPARTA 375 SC**, when crops are under severe drought and/or fertility stress conditions. The uptake and activity of systemic compounds may be reduced under these conditions. Consult a representative or the distributor in the event of any uncertainty.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- **SPARTA 375 SC** is compatible with **Link, Villa 51** and other Villa approved adjuvants and most commonly used fungicides, insecticides and foliar feeds normally used with the various crops.
- The compatibility of **SPARTA 375 SC** with other products may be influenced by various factors. A physical compatibility test must always be performed prior to application of such a tank mixture.
- When **SPARTA 375 SC** is used in combination with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on these labels.

Mixing instructions:

- Half fill the spray tank with clean water.
- Shake the **SPARTA 375 SC** container well before use.
- Add the required amount of **SPARTA 375 SC** to the water in the spray tank while stirring.
- If any other product is to be mixed with **SPARTA 375 SC**, the required volume of this product must be pre-mixed in a mixing tank with 10 litres water. When a wettable powder is to be added, cream in advance.
- Agitate the water in the spray tank and then add the product(s) to the tank in the following sequence (as applicable): acidifier/buffer or adjuvant, suspension concentrate, water soluble concentrate, emulsifiable concentrate.
- Fill the spray tank with water to the required level while maintaining agitation, to ensure thorough mixing.
- Maintain agitation while spraying.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

APPLICATION

Ground application:

SPARTA 375 SC can be applied with conventional high-volume spray equipment. Calibrate the apparatus before application, to ensure that the correct dosage is applied. The distribution of the spray solution must be even throughout the target area.

Aerial application:

Aerial application of **SPARTA 375 SC** 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:

- Volume: A spray mixture volume of 30 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 25 to 35 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 280 to 300 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 meters above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomising 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.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- 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 suspension and 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.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

| Crop and Disease | Dosage rate | Remarks |
|--|---|---|
| Barley Leafspot (<i>Rhynchosporium secalis</i>) Net blotch (<i>Helminthosporium teres</i>) Powdery mildew (<i>Erysiphe graminis</i>) | 400 ml / ha (Ground application) OR 450 ml (Aerial application) | Ground application in at least 300 litres water per hectare and Aerial application in at least 30 litres water per hectare. Apply between the 5- and 7-leaf crop stage. |
| Leaf rust (<i>Puccinia hordei</i>) | | Apply when the flag leaf has appeared. |
| Wheat Eye spot (<i>Pseudocercospora herpotrichoides</i>) Speckled leaf blotch (<i>Septoria tritici</i>) Powdery mildew (<i>Erysiphe graminis</i>) | 400 ml / ha (Ground application) OR 450 ml / ha (Aerial application) | Apply between the 5- and 7-leaf crop stage. Apply when the first symptoms appear, normally after first node up to emergence of the ear. |
| Leaf rust (<i>Puccinia recondita</i>) | | Apply just after the flag leaf has appeared. |
| Glume blotch (<i>Septoria nodorum</i>) | | Apply just after appearance of the ear. |
| Yellow rust (<i>Puccinia striiformis</i>) | | Apply at first sign of disease. A follow-up application may be necessary 21 days later. |
| Dry beans Rust (<i>Uromyces appendiculatus</i>) Angular leafspot (<i>Isariopsis griseola</i>) Ascochyta leafspot (<i>Ascochyta</i> spp.) | 400 to 500 ml / ha (Ground application) OR 450 to 650 ml / ha (Aerial application) | Full cover application. Ground application in at least 500 litres water per hectare and Aerial application in at least 30 litres water per hectare. Use the lower rate in a preventive programme in the absence of disease symptoms. Should the first symptoms of disease already be present at the start of the application, use the higher rate. Repeat application every 10 to 14 days if climatic conditions favour disease development. It is recommended that a suitable wetting agent be added to the spray mixture for Aerial application. Do not apply more than 4 applications per season. Allow at least 42 days between the last application and use of hay for feeding. |

| Crop and Disease | Dosage rate | Remarks |
|---|---|--|
| <u>Groundnuts</u> Leafspot (<i>Cercospora arachidicola</i>) (<i>Cercosporidium personatum</i>) Leaf blotch (<i>Phoma arachidicola</i>) Botrytis (<i>Botrytis</i> spp.) | 300 ml / ha (Ground application) OR 400 ml / ha (Aerial application) | Ground application in at least 500 litres water per hectare and Aerial application in at least 30 litres water per hectare. Aerial application on dryland groundnuts only . Apply as a full cover spray, starting when the first symptoms of disease appear. Repeat at 10- to 14-day intervals up to 14 days prior to pulling of the groundnuts. Do not exceed more than 5 applications per season. Allow at least 42 days to lapse between the last application and use of straw for feeding. |
| Rust (<i>Puccinia</i> spp.) | 500 ml in 500 litres water / ha | Apply as discussed for Leaf spot and Blotch disease. Ground application only . |
| <u>Maize and Sweetcorn</u> Grey leaf spot (<i>Cercospora zeae-maydis</i>) | 500 ml / ha PLUS Link | <p>Application timing – low risk / disease incidence: Scout fields from 2 months after planting for disease symptoms. IMPORTANT The first application must be performed before disease symptoms reach the third leaf below the cob and/or 3 % of the total leaf area is covered by visible Grey leaf spot lesions. If more than 28 days remain from the date of the first spray until full grain maturity, apply a second spray. IMPORTANT The second application must be performed 28 days after the first treatment and/or before 5 % of the total leaf area is covered by visible Grey leaf spot lesions. Scout fields from 6 to 8 weeks after planting for disease symptoms.</p> <p>Application timing – medium risk disease incidence: In cases where higher disease pressure exists, apply MYCOBLOCK 250 SC (L 8591) at 6-leaf stage 25 days after planting (stage V4 to V6) at a dosage rate of 400 ml per hectare, followed by a tank mixture of Mycoblock 250 SC (400 ml per hectare) plus SPARTA 375 SC 3 to 4 weeks later. Apply SPARTA 375 SC as a last treatment of 3 to 4 weeks after the second application. Refer to the Mycoblock 250 SC label for instructions.</p> |
| <u>Maize, Sweetcorn and Grain sorghum</u> Northern leaf blight (<i>Exserohilum turcicum</i> = <i>Helminthosporium turcicum</i>) | 500 ml / ha PLUS Link | Apply preventatively at the very first signs of the disease. A second application 14 to 21 days later is mandatory if the crop has not yet reached the hard dough stage 14 days after the first application. Use the shorter interval on highly susceptible hybrids and/or when weather conditions favour disease development (wet conditions, e.g., rain or overhead irrigation). In cases where the first application was performed very early and high disease risk exists, apply two applications of Mycoblock 250 SC at 4 to 5-week intervals, followed by SPARTA 375 SC as last treatment 3 to 5 weeks after the second application. Refer to the Mycoblock 250 SC label for instructions. |
| <u>Maize, Sweetcorn and Grain sorghum</u> Notes on application methods: <ul style="list-style-type: none"> • Ground application (vertical boom): 300 to 400 litres water per hectare. • Knapsack with hand-held boom: 50 to 100 litres water per hectare. • Aerial application: boom and nozzle, not less than 40 litres per hectare water volume; rotary atomiser (e.g., Micronair) 5 to 20 litres per hectare water volume. • Refer Aerial application under “NOTES” below. • SPARTA 375 SC can also be applied as part of an INTEGRATED DISEASE MANGEMENT PROGRAMME in conjunction with Indicate 250 SC. Refer to the Indicate 250 SC label for detailed INSTRUCTIONS, WARNINGS, USE RESTRICTIONS and DIRECTIONS FOR USE. | | |

| Crop and Disease | Dosage rate | Remarks |
|---|---|--|
| Soybeans <i>Ascochyta</i> leaf spot (<i>Ascochyta</i> spp.) Rust (<i>Phakopsora</i> <i>pachyrhizi</i>) | 400 ml / ha (Ground application) OR 500 ml / ha (Aerial application) | Ground application in at least 500 litres water per hectare and Aerial application in at least 40 litres water per hectare. Apply when the first signs of disease appear on the leaves and repeat 10 to 14 days later if climatic conditions favour disease development. Ensure thorough coverage of the foliage. Apply at the onset of flowering or at the first signs of disease at or around early flowering. If the first application is performed during flowering or at early pod-fill, a follow-up application 21 to 28 days later is recommended. If weather conditions favour disease development (temperatures of 15 to 28 °C and high humidity) use the shorter interval. Should the disease appear late in the growing season, a single application will be sufficient. Ensure thorough coverage of the whole plant. Allow at least 42 days between the last application and use of hay for feeding. Do not exceed two (2) applications per season. |
| Mangoes Powdery mildew (<i>Pseudoidium</i> <i>anacardii</i>) | 15 ml / 100 litres water | Apply as a full cover spray with a vehicle mounted sprayer. Commence with applications at first signs of disease development or at the 50 % flowering stage. Repeat applications at 2 to 3-week intervals up to the beginning of fruit set. Do not exceed three (3) applications per season. |
| Peas Powdery mildew (<i>Erysiphe pisi</i>) | 125 ml / ha (Ground application) OR 150 ml / ha (Aerial application) | Ground application in at least 500 litres water per hectare and Aerial application in at least 30 litres water per hectare. Commence with applications at the first signs of disease symptoms or during early flowering. Repeat applications at a 12-to-14-day interval. Foliage should not be used for feeding within 28 days after the last application. Do not exceed three (3) applications per season. |

NOTES

- Cereal diseases are best controlled if fungicide applications are performed preventively. Applications should therefore be performed before infection takes place or when disease incidence is low. The best recommendation would be to spray at the first appearance of disease symptoms.
- The above times of application may not be ideal under all circumstances for cereal diseases, but will be the most effective for the majority of seasons.
- Fungicides should not be applied when plants are under severe drought stress or when high infection is present.
- Aerial application should **ONLY** be considered if ground application is not possible.

The following products mentioned in this label may be replaced with equivalent products:

- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315),
- **LINK** (L 8675) = **DIRECT** (L 8680) = **SOLWET** (L 8679) and
- **INDICATE 250 SC** (L 9310 / N-AR 1482 / W 130688) = **IMPROVE 250 SC** (L 9311) = **ESTRICON 250 SC** (L 9433) (**Azoxystrobin + Epoxiconazole**).

IMPROVE 250 SC, LINK, DIRECT, VILLA 51 and/en **WEN 51** are registered products of / is geregistreerde produkte van
VILLA CROP PROTECTION (PTY) LTD.

MYCOBLOCK 250 SC and/en **INDICATE 250 SC** are registered products of / is geregistreerde produkte van
UNIVERSAL CROP PROTECTION (PTY) LTD.

SOLWET is a registered product of / is 'n geregistreerde produk van
SPECTRUM RESEARCH SERVICES.

ESTRICON 250 SC is a registered product of / is 'n geregistreerde produk van
CROPASURE (PTY) LTD.