## **Fungicide**



# SPARTA PLUS 375 SC

Reg. No. L 9499 Act No. 36 of 1947

4: 18/01/2023- Oct2023

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

#### **ACTIVE INGREDIENTS**

flusilazole (triazole) carbendazim (benzimidazole) 125 g/ℓ 250 g/ℓ

GROUP

FUNGICIDE

Hazard Statements:



May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. May damage fertility or the unborn child

Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles. Avoid release into the environment.



Registration holder: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel. (011) 396 2233

# Website: www.villacrop.co.za 24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

#### **SPARTA PLUS 375 SC**

Reg. No. L 9499 Act No. 36 of 1947

FRAC FUNGICIDE GROUP CODE: 3 & 1

#### **ACTIVE INGREDIENTS:**

flusilazole (triazole). 125 g/ $\ell$  carbendazim (benzimidazole). 250 g/ $\ell$ 

Registration holder:

VILLA CROP PROTECTION. (PTY) LTD. Co. Reg. No. 1992/002474/07 P.O. Box 10413, ASTON MANOR, 1630,

Tel. (011) 396 2233

#### **WARNINGS**

Allow the following number of days between the last application and harvest or grazing of the crops listed below:		
Barley & Wheat	56 days	
Groundnuts (fodder)	42 days	
Soybeans	30 days	
Soybeans (fodder)	42 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, VILLA CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

#### Hazard statements:

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May cause an allergic skin reaction.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

- Do not graze treated barley and wheat fields.
- Handle with care.
- Do not contaminate dams, rivers, lakes or any other water sources.
- Store in a cool, dry, well-ventilated place in the original container, 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.

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## **PRECAUTIONS**

#### **Precautionary statements:**

Obtain, read and follow all safety instructions before use.

Wash hands thoroughly after handling. Do not touch eyes.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

IF ON SKIN: Wash with plenty of water and non-abrasive soap.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned, get medical advice.

If skin irritation or rash occurs: Get medical help.

If eye irritation persists: Get medical help.

Collect spillage.

Store locked up.

Dispose of contents/container to suitable landfill in accordance with local regulations.

- Avoid inhalation of the spray mist.
- Avoid contact with skin and eyes.
- Wash contaminated clothing after use.
- 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 THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume 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 (<a href="www.croplife.co.za">www.croplife.co.za</a>). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- · Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Flusilazole	125 g/ℓ	
Carbendazim	250 g/ℓ	
Emulsifier	<25 g/ℓ	
Emulsifier	<25 g/ℓ	
Anti-freeze	<50 g/ℓ	
Anti-bacterial	<10 g/ℓ	

#### 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**

- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- <u>Skin contact:</u> 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 or rash occurs.**
- <u>Eye contact:</u> 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.**
- <u>Ingestion:</u> **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.

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#### **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 PLUS 375 SC** is a mixture of group codes 3 and 1 fungicides. Any fungus population may contain individuals naturally resistant to **SPARTA PLUS 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 PLUS 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 3 or 1, 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 PLUS 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 PLUS 375 SC** is not influenced by rain occurring three (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 PLUS 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 PLUS 375 SC is compatible with Link, other Villa approved adjuvants and most commonly used fungicides, insecticides and foliar feeds normally used with the various crops.
- The compatibility of SPARTA PLUS 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 PLUS 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 PLUS 375 SC container well before use.
- Add the required amount of SPARTA PLUS 375 SC to the water in the spray tank while stirring.
- If any other product is to be mixed with **SPARTA PLUS 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 PLUS 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 PLUS 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

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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.
- <u>Droplet coverage</u>: 25 to 35 droplets per cm<sup>2</sup> must be recovered at the target area.
- <u>Droplet size</u>: 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.
- <u>Flying height</u>: 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 <u>atomising equipment</u> 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 <u>temperature</u> 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 <u>inversion conditions</u> (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
Wheat & Barley	700 mℓ / ha	
Eye spot ( <i>Pseudocercosporella</i>	(Ground application)	Apply between the 5- and 7-leaf crop stages.
herpotrichoides)	OR	Ground application in at least 300 litres water per hectare and Aerial application in at least 30 litres water per hectare.
	840 mℓ / ha	·
	(Aerial application)	
Groundnuts Leafspot (Cercospora arachidicola) (Cercosporidium personatum) Leaf blotch (Phoma arachidicola)	500 mℓ / ha (Ground application) <b>OR</b> 675 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. <b>Aerial application on dry land groundnuts only.</b> Apply as a full cover spray, starting when the first symptoms of disease appear. Repeat at 10- to 14-day intervals up to 2 weeks before lifting of the groundnuts. <b>Do not</b> apply more than six (6) applications per season. Allow at least 42 days to lapse between the last application
Botrytis (Botrytis cinerea)	(Aeriai application)	and use of straw for feeding.
Rust ( <i>Puccinia arachidis</i> )	1000 mℓ in 500 litres	Apply as discussed for Leafspot and Blotch disease.
	water / ha	Ground application only.

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Crop and Disease	Dosage rate	Remarks
<u>Soybeans</u>	Ground application in at least 500 litres water per hectare and Aerial application in at least 40 litres water per hectare. Ensure thorough coverage of the foliage.	
Ascochyta leafspot (Ascochyta spp.)	600 mℓ / ha (Ground application)	Apply when the first signs of disease appear on the foliage and repeat 10 to 14 days later if climatic conditions favour disease development.
Rust (Phakopsora pachyrhizi)	OR 750 mℓ / ha (Aerial application)	Apply at the onset of flowering or first signs of dise around early flowering. Ensure thorough coverage of whole plant. If the first application is applied during flower or at early pod-fill, a follow-up application 3 to 4 weeks lais recommended. If weather conditions favour dise
<b>Li</b> i (50 mℓ	PLUS  Link (50 mℓ / 100 ℓ  water)	development (high humidity and temperatures of 15 to 28 °C) use the shorter interval. A single application will be sufficient should the disease appear late in the growing season.  Allow at least 42 days between the last application and use of hay for feeding. <b>Do not</b> exceed two (2) applications per season.

## **NOTES**

- 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.
- Fungicides should not be applied when plants are under severe drought stress or when high infection pressure is present.

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

• **LINK** (L 8675) = **DIRECT** (L 8680).

LINK is a registered product of UNIVERSAL CROP PROTECTION (PTY) LTD.

**DIRECT** is a registered product of **VILLA CROP PROTECTION (PTY) LTD.** 

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