

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Fungicide



FLOURISH 500 EC

Reg. No. L 9164 Act/Wet No. 36 of/van 1947

2: 9/10/2018 – Oct2018

*A systematic emulsifiable concentrate fungicide for the control of Powdery mildew on the crops listed.*

*'n Sistemiese emulgeerbare konsentraat swamdoder vir die beheer van Poerieragtige skimmel op die gewasse soos genoem.*

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL**

spiroxamine (spiroketalamine) **500 g/l** spiroksamien (spiroketalamien)

FRAC FUNGICIDE GROUP CODE **5** FRAC SWAMDODER GROEPKODE



**villa**

Registration holder / Registrasiehouer:  
Universal Crop Protection (Pty) Ltd.  
Co. Reg. No. / Mpy. Reg. Nr. 1983/008184/07  
PO Box / Posbus 801, Kempton Park, 1620  
Tel: 011 396 2233  
Website / Webblad: [www.villacrop.co.za](http://www.villacrop.co.za)

UN Number: 3082



Willow Set & Print 011 394-4486



**HARMFUL  
SKADELIK**



GEBRUIKSAANWYSYNGS INGESLUIT

VERWYS NA BESONDERHEDE  
GEDRUK OP HOUER/SAK

Date formulated:

Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED  
ON CONTAINER/BAG

Batch number:

Lotnummer:

**FLOURISH 500 EC**

Reg. No. L 9164 Act/Wet No. 36 of/van 1947

FRAC FUNGICIDE GROUP CODE / FRAC SWAMDODER GROEPKODE: 5

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spiroxamine (spiroketalamine) / spiroksamien (spiroketalamien) ..... 500 g/l

Registration holder / Registrasiehouer:

**UNIVERSAL CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1983/008184/07 Mpy. Reg. Nr.

P.O. Box / Posbus 801, KEMPTON PARK, 1620

Tel. (011) 396 2233

**HARMFUL**  **SKADELIK**

**WARNINGS****Withholding periods:**

Minimum time between the last application and harvest or feeding:	
Wine grapes	21 days
Table grapes	Do not apply after commencement of the flowering stage

**NOTE**

**ABOVE-MENTIONED WITHHOLDING PERIODS REFER TO COMPLIANCE WITH LOCAL MAXIMUM RESIDUE LIMITS (MRL'S). HOWEVER, IT IS IMPORTANT TO NOTE THAT IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE TREATED CROP WILL BE EXPORTED, FIRST CONSULT THE RELEVANT IMPORTER OR EXPORTING BODY REGARDING THE USE OF THIS PRODUCT, MRL'S AND RECOMMENDED WITHHOLDING PERIODS.**

- Handle with care.
- Harmful if inhaled or swallowed.
- Irritant of eyes, nose, throat and skin.
- Toxic to fish and other aquatic life.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Store in a cool, dry, well-ventilated area in the original container, tightly closed and secured.
- 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.

**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. 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 or animal, or for a 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**

- Avoid inhalation of fumes or the spray mist.
- Avoid contact with skin and eyes.
- Wear a face shield and rubber gloves when handling the concentrate and during mixing.
- Wash with soap and water after use or accidental skin contact.
- In case of eye contact, immediately flush the eyes with clean, cold water for 15 minutes, holding the eyelid(s) open. If irritation persists, seek medical advice.
- Wash contaminated clothes daily after use.
- Do not eat, drink or smoke whilst applying or mixing, or before washing hands and face or change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
- 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 empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

## **SYMPTOMS OF HUMAN POISONING**

No specific symptoms are known for this product but may include abdominal pain, diarrhoea and vomiting, eye and skin irritation and irritation of mucous membranes.

## **FIRST AID TREATMENT**

- Skin contact: If irritation occurs, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. If irritation persists, obtain medical attention.
- Eye contact: Immediately flush the contaminated eyes with gently flowing water for 20 minutes, holding the eyelid(s) open until no evidence of the chemical remains. If irritation persists, obtain medical attention.
- Inhalation: Remove source of contamination and move victim to fresh air. Keep patient under observation and obtain medical attention if irritation persists.
- Ingestion: **Do not induce vomiting due to solvent.** If vomiting occurs spontaneously, keep person's head lower than hips to avoid aspiration. Flush mouth. Immediately contact a physician or poison control centre.

## **NOTE TO PHYSICIAN**

No specific antidote available. Treat symptomatically. Gastric lavage followed by activated charcoal (carbo medicalis) and sodium sulfate.

## **RESISTANCE WARNING**

**FLOURISH 500 EC** is a group code 5 fungicide. Any fungus population may contain individuals naturally resistant to **FLOURISH 500 EC** and other group code 5 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **FLOURISH 500 EC** or any other group code 5 fungicide.

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,
- integrate other 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: Only use as directed.****Compatibility:**

- **FLOURISH 500 EC** can be used on grapes in tank mixtures with any one of the following: **Fenhexamid 500 SC, Delta-Thrin 25 EC, Lambda 50 EC, Newzeb 750 WDG, Cozeb 800 WP, Newzeb 455 SC, Newzeb 480 SC, Iprodione 500 SC, Copper Oxychloride WP, Ripple 500 EC** and **Figure 500 SC**. Tank mixtures of **FLOURISH 500 EC** with other products are not recommended.
- **Do not** apply **FLOURISH 500 EC** and products not listed above within 1 one week of each other.
- **Do not** apply **FLOURISH 500 EC** in combination with surfactants, stickers or as a tank mixture with trace or macro element foliar feeds in grapes.
- A physical compatibility test of all products involved is recommended before application, as formulations can be altered, and water quality can vary from area to area.
- Always consult the labels of products to be tank mixed with **FLOURISH 500 EC**.

**Mixing instructions:**

- Fill the spray tank to half of the desired volume with clean water and ensure continuous agitation.
- Add the required quantity of **FLOURISH 500 EC** to the mixing tank, while agitation is continued.
- Note the following formulation mixing sequence if other products will be tank mixed with **FLOURISH 500 EC**: buffer/acidifier; powders or granules, suspension concentrate, emulsifiable formulations (EC/EW), wetters. Pre-mix each product separately with a small volume of water before adding it to the spray tank. Thereafter, fill the tank to the required volume with clean water while maintaining agitation to ensure thorough mixing of the spray mixture before application commences.
- **Replace cap directly after use.**
- Ensure continuous agitation during mixing and application.
- The spray mixture must be sprayed immediately after mixing. Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

**Application:**

- Calibration: It is important to ensure that all application equipment is in good working order and correctly calibrated to apply the required spray volumes and dosage rate. Ensure good coverage by using the spray volumes as indicated.
- Rain: Repeat the application if rain falls within 2 hours after application.

**APPLICATION RATES**

<b>Crop / Disease</b>	<b>Dosage rate</b>	<b>Remarks</b>														
<b>Table grapes</b> Powdery mildew ( <i>Oidium tuckeri</i> )	<u>High volume application:</u> 10 to 14-day programme: 60 ml / 100 ℓ water (300 to 600 ml / ha)	Start spraying when shoots are ± 2 to 5 cm long. Repeat at indicated intervals. Do not apply after flowering began. <b>Do not</b> apply more than three (3) <b>FLOURISH 500 EC</b> treatments per season. Apply other non-related, registered fungicides to control Powdery mildew after flowering.														
	6 ml / 10 ℓ water (Home garden)	As above. Spray to point of run-off and ensure even coverage.														
<b>Wine grapes</b> Powdery mildew ( <i>Oidium tuckeri</i> )	<u>High volume application:</u> 10 to 14-day programme: 60 ml / 100 ℓ water (180 to 900 ml / ha)	Start spraying when shoots are ± 2 to 5 cm long. Repeat at indicated intervals. Refer to notes below.														
<b>NOTES - Application in grapes:</b>																
<ul style="list-style-type: none"> <li><u>High volume application:</u> Spray to point of runoff and ensure even coverage. Depending on leaf surface area at time of application, apply 300 to 1500 litres spray mixture per hectare as follows: <table border="1" data-bbox="226 884 1406 1048"> <thead> <tr> <th rowspan="2"><b>Crop stage</b></th> <th colspan="2"><b>Water volume (ℓ/ha)</b></th> </tr> <tr> <th><b>Wine grapes</b></th> <th><b>Table grapes</b></th> </tr> </thead> <tbody> <tr> <td>Shoots 2 to 5 cm long, up until just before flowering</td> <td>300 to 750</td> <td>500 to 1000</td> </tr> <tr> <td>Flowering to pea-size berries</td> <td>750 to 1000</td> <td>-</td> </tr> <tr> <td>Pea-size berries up to harvest</td> <td>1000 to 1500</td> <td>-</td> </tr> </tbody> </table> </li> </ul>			<b>Crop stage</b>	<b>Water volume (ℓ/ha)</b>		<b>Wine grapes</b>	<b>Table grapes</b>	Shoots 2 to 5 cm long, up until just before flowering	300 to 750	500 to 1000	Flowering to pea-size berries	750 to 1000	-	Pea-size berries up to harvest	1000 to 1500	-
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<ul style="list-style-type: none"> <li><u>Low volume application:</u> <b>FLOURISH 500 EC</b> can be applied as a low volume application. Calculate the volume of product required per hectare from the corresponding high-volume application. However, the concentration of the spray mixture may not be 4 times stronger than that of a high-volume application concentration. Apply in at least 250 litres water per hectare and ensure even coverage.</li> </ul>																
<b>Mangoes</b> Powdery mildew ( <i>Oidium mangiferae</i> )	60 ml / 100 ℓ water	Apply first treatment at the first signs of infection (normally when 50 % of the flowers are open). Repeat at 10 to 14-day intervals up to 100 % petal drop. This is followed by a further 2 to 3 sprays depending on weather conditions and uniformity of the flowering period. Apply as a cover spray and ensure complete coverage of the flower panicles.														
	6 ml / 10 ℓ water (Home garden)															
<b>Roses</b> Powdery mildew ( <i>Sphaerotheca pannosa</i> )	90 ml / 100 ℓ water	Only roses in tunnels and enclosed areas. Apply at the first signs of infection as a high-volume spray. Repeat at 7 to 10-day intervals, but <b>do not</b> exceed three (3) applications per season. Apply alternative registered fungicides for further control of powdery mildew. <b>NOTE</b> Some rose varieties may be sensitive to <b>FLOURISH 500 EC</b> . Therefore, it is recommended to conduct a compatibility test on a few roses prior to a commercial / large scale application.														
	9 ml / 10 ℓ water (Home garden)															

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

- **DELTA-THRIN 25EC** (L 7263 / W 130451) = **DELTA-THRIN 25 EC** (L 7426 / N-AR 0992),
- **LAMBDA 50EC** (L 7787) = **JUDO 50 EC** (L 7785 / N-AR 1104) = **LAMBDA-CYTHRIN 50 EC** (L 8343),
- **NEWZEB 750 WDG** (L 8811) = **VILLA UNIZEB 750 WDG** (L 8812) = **COZEB 750 WDG** (L 8964),
- **COZEB 800 WP** (L 7098) = **VILLA UNIZEB 800 WP** (L 8056) = **NEWZEB 800 WP** (L 8167),
- **NEWZEB 455 SC** (L 9175) = **MULTIZEB 455 SC** (L 9174),
- **NEWZEB 480 SC** (L 9178) = **UNIZEB 480 SC** (L 9179),
- **IPRODIONE 500 SC** (L 8459) = **TAURUS 500 SC** (L 8499 / N-AR 1137) = **IPRO 500 SC** (L 8961),
- **COPPER OXYCHLORIDE WP** (L 5809) = **COPPER OXYCHLORIDE WP** (L 6231),
- **RIPPLE 500 EC** (L 9208) = **CAPACITY 500 SC** (L 9206) (**Bromopropylate**) and
- **FIGURE 500 SC** (L 9920) = **FORTUNE 500 SC** (L 9918) (**Folpet**).

**DELTA-THRIN 25 EC, JUDO 50 EC, VILLA UNIZEB 800 WP, MULTIZEB 455 SC, UNIZEB 480 SC, TAURUS 500 SC, COPPER OXYCHLORIDE WP, CAPACITY 500 SC** and/en **FORTUNE 500 SC** are registered products of / is geregistreerde produkte van **VILLA CROP PROTECTION (PTY) LTD.**

**LAMBDA-CYTHRIN 50 EC, NEWZEB 800 WP, COZEB 750 WDG** and/en **IPRO 500 SC** are registered products of / is geregistreerde produkte van **CROPASURE (PTY) LTD.**

**DELTA-THRIN 25 EC, LAMBDA 50EC, NEWZEB 750 WDG, COZEB 800 WP, NEWZEB 455 SC, NEWZEB 480 SC, IPRODIONE 500 SC, COPPER OXYCHLORIDE WP, RIPPLE 500 EC** and/en **FIGURE 500 SC** are registered products of / is geregistreerde produkte van **UNIVERSAL CROP PROTECTION (PTY) LTD.**