# DIRECTIONS FOR USE ENCLOSED Batch Number:

# **Fungicide**



# FILUM 520 SC

Reg. No. L 9755 Act No. 36 of 1947

3: 12/1/2023 - Oct2023

A suspension concentrate systemic fungicide for the control of certain fungal diseases on crops as listed.

#### **ACTIVE INGREDIENTS**

pyrimethanil (aniline derivative) 400 g/ $\ell$  trifloxystrobin (strobilurine) 120 g/ $\ell$ 

GROUP

9;11

**FUNGICIDE** 



#### **Hazard Statements:**

May be harmful if swallowed.
May be harmful in contact with skin.
May cause harm to breast-fed children.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

Do not breathe dust, fume, gas, mist, vapours, or spray. Wash hands thoroughly after handling.

Avoid release to the environment.



Registration holder: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
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)

#### **FILUM 520 SC**

Reg. No. L 9755 Act No. 36 of 1947 FRAC FUNGICIDE GROUP CODE: 9 & 11

#### **ACTIVE INGREDIENTS:**

Registration holder:

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

Co. Reg. No. 1983/008184/07

P.O. Box 10413, ASTON MANOR, 1630, Tel. (011) 396 2233

# **WARNINGS**

#### Withholding periods:

Allow the following number of days between the last application and harvest of the following crops:	
Apples	35 days
Pears	35 days
Potatoes	14 days

#### **NOTES**

THE MAXIMUM RESIDUE (MRL'S) LEVELS WILL NOT BE EXCEEDED, PROVIDED APPLICATIONS ARE APPLIED AS HEREWITH PRESCRIBED. WHEN PRODUCTION IS DESTINED FOR THE EXPORT MARKET, THE EXPORT AGENCY OF CONCERN MUST BE CONTACTED, PRIOR TO THE USE OF FILUM 520 SC IN A SPRAY PROGRAMME.

TO PREVENT THAT PERMISSABLE MRL'S ARE EXCEEDED, DO NOT APPLY OTHER TRIFLOXYSTROBIN OR PYRIMETHANIL CONTAINING PRODUCTS IN THE SAME SEASON'S SPRAY PROGRAMME.

#### Hazard statements:

May be harmful if swallowed.
May be harmful in contact with skin.
May cause harm to breast-fed children.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Do not contaminate dams, rivers, lakes or any other water sources.
- Store the product in the original container and always keep the container tightly closed.
- Store in a cool (preferably below 30°C), dry, well-ventilated place, away from food, seed and animal feeds.
- 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.

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 diseases 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 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 the event of any uncertainty.

#### **PRECAUTIONS**

# **Precautionary statements:**

Obtain, read and follow all safety instructions before use.
Do not breathe dust, fume, gas, mist, vapours, or spray.
Avoid contact during pregnancy and while nursing.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

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IF SWALLOWED: Get medical help.	
IF ON SKIN: Get medical help.	
IF exposed or concerned, get medical advice.	
Collect spillage.	
Dispose of content/container to suitable landfill in accordance with local regulations.	

- Avoid prolonged contact of product with skin.
- Wear rubber gloves, a face shield and boots when handling the concentrate.
- Wash contaminated clothes daily.
- In case of eye contamination, rinse the eyes thoroughly with plenty of clean, cold water for at least 20 minutes, holding the eyelid(s) open. If irritation persists obtain medical aid immediately.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean the spraying equipment directly after use by rinsing with clean water and dispose of wash water where it will not contaminate crops, 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 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 (www.croplife.co.za). 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, feed, drinking water and eating utensils.

Relevant hazardous components		
Pyrimethanil	40 %	
Trifloxystrobin	12 %	
Wetting agent	< 10 %	
Dispersant	< 10 %	
Anti-freeze	< 10 %	
Sodium benzoate	< 10 %	
Pyrimethanil	< 10 %	

### **FIRST AID MEASURES**

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. If irritation develops consult a doctor.

<u>Inhalation:</u> Move victim to fresh air and remove source of contamination if safe to do so. Keep affected person warm and at rest. Obtain medical attention if irritation develops.

<u>Skin:</u> Remove contaminated clothing and shoes. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

<u>Eyes:</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 develops.

<u>Ingestion:</u> If the person is alert, have them drink large amounts of water. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting unless instructed to do so by a poison control centre or doctor. Seek medical attention or call a poison control centre for treatment advice immediately.

#### **RESISTANCE WARNING**

**FILUM 520 SC** is a group codes 9 & 11 fungicide. Any fungus population may contain individuals naturally resistant to **FILUM 520 SC** and other group code 9 & 11 fungicides. The resistant individuals may eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **FILUM 520 SC** or any other group code 9 & 11 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 codes X and Y, 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.

Mode of action: FILUM 520 SC contains Pyrimethanil and Trifloxystrobin. Pyrimethanil is a contact fungicide that provide protective and curative activity through the inhibition of methionine biosynthesis, resulting in inhibition of the secretion of hydrolytic enzymes necessary for plant cell wall degradation and

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subsequent fungal infection. **Trifloxystrobin** is a mesostemic fungicide that primarily provides protective activity through mitochondrial electron transport inhibition (MET III) by inhibition of ubiquinol oxidase at the Qo (quinone outside) binding site on cytochrome bc1 (complex III). Controls diseases in early stages of fungal development including spore germination, germ tube extension and appressorium formation.

# Additional notes on resistance management:

For the control of Apple & Pear scab as well as Powdery mildew on apples, it is essential to adhere to the following FRAC (Fungicide Resistance Action Committee) guidelines.

- Apply Qol (strobilurines) fungicides according to manufacturer's recommendations for the target disease (or complex) at the specific crop growth stage indicated and adapted to size of trees. Effective disease management is a critical parameter in delaying the build-up of resistant pathogen populations.
- Qol fungicides must only be applied in mixtures with partners contributing to the effective control of the target pathogens.
- Apply QoI fungicides preventively. Under high disease pressure the spray interval should not exceed 7 to 10 days.
- Apply a maximum of 3 Qol containing sprays per crop per season. A maximum of 4 Qol fungicide applications may be used where twelve (12) or more applications are made per crop per season.
- A maximum of two (2) consecutive QoI fungicide sprays is preferred. Where field performance was adversely affected apply QoI containing fungicides in mixtures in strict alternation with fungicides from a different group.

Refer to the FRAC Website for latest guidelines: (http://www.frac.info/frac/index.htm).

#### **USE RESTRICTIONS**

• **Do not** apply more than three (3) treatments of **FILUM 520 SC** per season.

## **DIRECTIONS FOR USE: Only use as directed.**

#### General information:

- Apply **FILUM 520 SC** primarily as a preventative application.
- Use alternative registered fungicides with a mode of action that differs from strobilurines / Group Code 11 (Qol) related fungicides.
- The last fungicide treatment of the season must not be a strobilurine related fungicide.
- Use FILUM 520 SC as part of an IPM and Good Agricultural Practice (GAP) programme.

## Compatibility:

- **Do not** apply in mixtures with aluminium containing products.
- The compatibility of **FILUM 520 SC** in a tank mixture with other products is influenced by the formulations of these products, as well as quality of the spray water. It is recommended that a physical compatibility test always be performed prior to application as the formulation of other products can be altered and the quality of water can vary from area to area.

# **Mixing instructions:**

- · Shake container well before opening.
- Half-fill the mixing tank with clean water.
- Premix the required quantity of FILUM 520 SC in at least 10 litres of water in another container.
- Add the FILUM 520 SC mixture into the mixing tank and fill the mixing tank up to the required volume of water.
- If another product is to be added to the mixing tank, premix the required amount of product with at least 10 litres of water, before adding to the mixing tank.
- Ensure continuous agitation during mixing and application.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

#### **Application instructions:**

- Apply FILUM 520 SC with correctly calibrated spray equipment that is in good working order.
- The spray volume required for a specific growth stage must be determined accurately according to the Tree-Row-Volume method as described by Unrath (Deciduous Fruit Grower, November 1986). The application volume rate per hectare is then determined according to the spray volume calculated for high volume application per hectare. Refer to the table below.

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# **APPLICATION RATES**

Crop / Disease	Dosage rate	Remarks
Potatoes Early blight (Alternaria solani)		Refer to "Resistance Management, Directions for use and Crop recommendations" above. Apply preventively as part of a 7-day spray programme.
	770 mℓ / ha	Start with a weekly program application one (1) week after the potatoes have emerged. Use alternative effective fungicides as registered on potatoes up to week 5 in a 7 day spay interval. Apply FILUM 520 SC at 14-day intervals during week 5, 7 and 9 alternated with either Mancozeb containing fungicides or Mission 720 SC during week 6, 8 and 10. Revert back to alternative effective fungicides in a 7-day spray program until such time when disease control is not required anymore.  Do not apply more than three (3) FILUM 520 SC applications per growing season.  Ground application: At least 500 litres water per hectare.  Aerial application: 30 to 40 litres water per hectare.
Apples Scab (Venturia inaequalis)		Refer to "Resistance Management and Application instructions" above. Apply preventively as part of a spray programme.
Powdery mildew (Podosphaera leucotricha)	40 mℓ / 100 ℓ water	Start with the applications at the green-tip stage and apply at weekly intervals until 75 % petal fall. After 75 % petal fall, the spray programme intervals can be extended to 14 days. However, should weather conditions favour disease
<u>Pears</u> Scab	water	development during this time, revert back to weekly intervals.
(Venturia pirina)		FILUM 520 SC can be included during any time of the spray programme. However, it is recommended to apply FILUM 520 SC between flowering and early fruit set for optimum disease control.

# **IMPORTANT**

Use the Tree Row Volume (TRV) formula below to ensure that the correct amount of fungicide is applied per hectare. This is calculated as follows:

# High volume rate:

The water to be applied per hectare must be calculated according to the TRV formula:

# ℓ / ha = <u>Tree height X Tree diameter X 937</u>

# Row width

The TRV calculation is the maximum water volume required when the trees are in full leaf. Use the water volume required per hectare to calculate the amount of **FILUM 520 SC** required per hectare according to the various growth stages of a tree during the season.

# Water requirements per hectare as recommended according to the different growth stages of a tree:

Growth stage	% of the high volume water requirement / ha
From greentip to ± 30 % blossom	60 %
From ± full blossom to ± middle November	80 %
From beginning December	100 %

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Consult all product labels mentioned in this label for **WARNINGS**, **PRECAUTIONS**, **USE RESTRICTIONS** and **DIRECTION FOR USE**.

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

• MISSION 720 SC (L 8432 / N-AR 1298 / W1301395) = ORONIL 720 SC (L 8431) (Chlorothalonil).

ORONIL 720 SC is a registered product of UNIVERSAL CROP PROTECTION (PTY) LTD.

MISSION 720 SC is a registered product of VILLA CROP PROTECTION (PTY) LTD.

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