# FIGHTER

Reg. No. L7330 Act No. 36 of 1947



# FRAC FUNGICIDE GROUP CODE 33

FIGHTER is a systemic water-soluble liquid fungicide for the control of diseases in crops as indicated.



# **Active Ingredient**

Potassium phosphite 555 g/ $\ell$ Phosphorous acid equivalent 350 g/ $\ell$ 



SEE CONTAINER FOR BATCH DETAILS COUNTRY OF ORIGIN: REPUBLIC OF SOUTH AFRICA VERSION 1.2: 05/2017





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#### WARNINGS:

· Withholding periods: Minimum number of days between last application and harvest:

 Apples
 14 days

 Citrus
 14 days

 Potatoes
 14 days

 Wine & Table grapes
 28 days

Phosphorous acid formulations are in many countries viewed as fertilizers rather than fungicides, and thus in many countries no MRL has been determined or established. Other countries may not use phosphorous acid formulations either as a fungicide or a fertilizer. Exporting produce treated with FIGHTER to countries without established MRLs may present problems. It is recommended that growers who want to export produce discuss this matter with their export agents or their local representative before using FIGHTER.

- · Poisonous when swallowed.
- May cause skin and eye irritation.
- . Store in a cool, dry place away from food and feed.
- · Keep out of reach of children, uninformed persons and animals.
- Apply only to actively growing citrus trees and vines that are not under stress, otherwise
  phytotoxicity (i.e., gummosis and/or leaf scorch) can occur.
- Apply FIGHTER from plastic or fibreglass containers because although it has been neutralised, it may still be corrosive to metal.
- Overdosage may result in scorching of leaves.
- RE-ENTRY INTÉRVAL: 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 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 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:

- . Do not inhale spray mist.
- · Wear rubber gloves, eye and face protection whilst mixing and applying.
- Do not eat, drink or smoke whilst mixing or applying, or before washing hands and face.
- Wash with soap and water after application or skin contamination. Change and wash your work clothes. Wash yourself. If you spill it on your clothes, change and wash them.
- Invert the empty container over the spray or mixing tank and allow to drain 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 minimum of 10% of that of the container. Add the rinsings to the contents of the spray tank before destroying the container.
- · Destroy empty container and do not use for any other purpose.
- While spraying, avoid contact with the spray as much as you can. Avoid spray drift onto other crops, grazing rivers or dams.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- · Prevent contamination of food, feed, drinking water and eating utensils.

#### RESISTANCE WARNING.

For resistance management, **FIGHTER** is a group code 33 fungicide. Any fungus population may contain individuals naturally resistant to **FIGHTER** and other group code 33 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **FIGHTER** or any other group code 33 fungicide.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered 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: USE ONLY AS INDICATED**

#### COMPATIBILITY

- . FIGHTER is compatible with Mancozeb 800 WP.
- Do NOT add stickers, buffers or acidifiers in a tank mix containing FIGHTER.
- Do NOT add any inorganic salts of zinc, iron, copper, manganese, calcium or magnesium in a mix with FIGHTER.
- . Do NOT mix FIGHTER with highly alkaline material such as lime sulphur and Bordeaux mixture.
- It is advisable to do a miscibility test prior to mixing FIGHTER with other chemicals.
- Do not mix FIGHTER with acidic products such as those in the PRO NuTech and CARBOLOGY ranges as well as any foliar feeds containing organic acids, e.g., ONLY-K.

#### MIXING INSTRUCTIONS:

Observe mixing instructions under **COMPATIBILITY**. Fill the spray tank half with clean water. Start agitation and add the recommended amount of **FIGHTER** to the water. Complete the filling of the spray tank with water and agitate thoroughly.

#### IMPORTANT NOTES:

# GENERAL

- FIGHTER must only be applied to actively growing plants to ensure that there is adequate sap flow to transport the product throughout the plant.
- Plants should not be treated when under any kind of stress (moisture or heat stress or waterlogged soil) as this may lead to phytotoxicity, i.e., leaf spot, gummosis, chlorosis, necrosis, stunting or deformation.
- Do not apply if day temperatures are above 30°C or under conditions of high relative humidity.
- FIGHTER should preferably be applied early in the morning or late in the afternoon.
- Repeat application if more than 10 mm rainfall has occurred within one hour of application.
   Wait for leaves and fruit (in citrus especially) to dry after rain or heavy dew before applying FIGHTER.
- · Always ensure that spray equipment is clean and correctly calibrated before spraying.

#### **APPLES**

Certain cultivars (e.g., Golden Delicious) are prone to russeting during conditions of extreme climatic stress and **FIGHTER** should not be applied when such conditions occur. The addition of wetting agents to the tank mixture should be avoided during stress conditions as it could further enhance the incidence of russeting.

## CITRUS

Foliar application:

- Do not mix with products which contain copper. Do not apply FIGHTER within 14 days before or
  after a copper application, and do not apply a copper application within 7 days after a FIGHTER
  application.
- Do not apply on wet fruit. Application can only commence once fruit has dried off.
- High volume, high pressure applications to citrus may cause phytotoxicity. Care should be taken when applying FIGHTER on soft citrus cultivars as rind cells are physiologically more sensitive to damage, especially under stress conditions. Application during cool waterlogged conditions can cause turgid oil cells on citrus fruit to rupture with resulting fruit blemishes.
- Apply as a light cover spray to citrus trees from September to early March, except for areas in the Cape where it can also be applied during the winter months.
- Apply as a preventive spray as soon as disease symptoms are noticed, or earlier if an infection is diagnosed in roots, soil or irrigation water.

 Do not apply to citrus later than stage 4 on the scale 0 – 10 of decline. Refer to "CRI Production Guidelines". Part III.

Stem paint application:

- FIGHTER as a stem paint should not be applied in combination with other pesticides.
- Where graft incompatibility occurs, apply by painting the scion and lower scaffold branches
  only. Certain scion/rootstock combinations may exhibit sensitivity. Confirmation of tolerance
  of the specific scion/rootstock combination is therefore recommended before the orchard is
  treated as a whole

#### POTATOES

Infected seed tubers can result in early infections, depending on climatic conditions. In this instance, start application after plant emergence, before the first signs of disease symptoms.

CROP & DISEASE	MAX RATE PER Ha	RATE PER 100 & WATER	REMARKS
APPLES Scab (Venturia inaequalis)	6 <b>e</b>		Apply as part of a spray programme. Apply at $7-10$ day intervals until full blossom. Apply at $10-14$ day intervals thereafter, depending on climatic conditions favourable for the development of the disease. Once the application of calcium commences, cease to apply <b>FIGHTER</b> .
CITRUS			
Foliar application Phytophthora root rot	7 €	570 mℓ	Apply as a light cover spray as determined by tree row volume. Repeat every 8 weeks. Do not apply when trees are flushing. Delay application until the new flush begins to harden off. Also refer to <b>IMPORTANT NOTES</b> .
Brown rot ( <i>Phytophthora</i> spp.)	7 &	570 mℓ	Apply once every $2-3$ weeks before harvest as a light cover spray in $1500-2500$ & spray water per hectare. Summer rainfall areas: Apply to the skirts of the trees up to a height of $1.5$ m above ground.  Winter rainfall areas (Western and Eastern Cape): Spray the whole tree, and not only the skirts, as the disease occurs more frequently in the cooler winter rainfall areas. Do not apply on trees that are stressed (e.g., waterlogged conditions, drought, bergwinds) or on trees being stressed in order to achieve improved fruit quality. Do not apply on heavily loaded fruit trees, especially when fruit is wet. Also refer to IMPORTANT NOTES.
Stem paint application Phytophthora root rot	Refer to Remarks		Dilute the product with an equal volume of water (50 % product and 50 % water). Apply by painting the whole trunk from the ground level upwards for about 35 cm. Applications should commence before the start of the rainy season. Repeat at $6-8$ week intervals during the rainy season. In cases of severe infection, a dilution of 70 % product and 30 % water may be used. Also refer to IMPORTANT NOTES.
Soil application Phytophthora root rot	11 − 22 ℓ		Apply after flushing, once the new flush begins to harden off. Repeat after 14 days. When applying, use sufficient water to allow the product to reach the root zone of the trees.
POTATOES Late blight (Phytophthora infestans)	3 £ + 2 kg Mancozeb 800 WP		Start application 21 days after emergence or sooner depending on conditions favouring late blight infections, or with susceptible cultivars. Apply every 7 days in 500 2 water per hectare as a direct spray over the rows. Increase the spray water volume per hectare as the plants increase in size. If late blight is present in a field, the spray interval should be shortened to 5 days. Also refer to IMPORTANT NOTES.
WINE & TABLE GRAPES Downy mildew (Plasmopara viticola)	5 £ + 1,8 kg Mancoz- eb 800 WP	350 ml + 120 g Manco- zeb 800 WP	Start application at $10 \text{ cm}$ shoot length. Repeat with $10-14$ day intervals until berries begin to soften (stage $34$ according to Goombe, $1995$ ). Apply in $1200-1500$ & spray water per hectare. Continued spraying with the mixture under conditions of high disease pressure will lead to visible spray deposits on berries. It is therefore recommended to apply <b>FIGHTER</b> on its own after the berries have reached pea-size.