

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Fungicide



ROOTEX 400SL

Reg. No. L 7467 Act/Wet No. 36 of/van 1947

3: 20/11/07-June 2017

A water-soluble systemic fungicide for the control of diseases in crops as indicated.

'n Wateroplosbare sistemiese swamdoder vir die beheer van siektes in gewasse soos aangedui.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

potassium phosphite 560 g/l kaliumfosfiet

(phosphorous acid equivalent) 400 g/l (fosforigsuur ekwivalent)

FRAC FUNGICIDE GROUP CODE **33** FRAC SWAMDODER GROEPKODE

20 l

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

UN Number: 3264

Willow Set & Print 011 394-4486



CAUTION
VERSIGTIG



GEBRUIKSAANWYSINGS INGESLUIT

VERWYS NA BESONDERHEDE
GEDRUK OP HOUER/SAK

Date formulated:

Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED

ON CONTAINER/BAG

Batch number:

Lotnommer:

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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

CAUTION / VERSIGTIG**WARNINGS****Withholding periods:**

Minimum number of days between last application and harvest:	
Grapes (Wine and Table)	28 days
Grapes (Table) when used in a tank mixture with Mancozeb	4 to 6 weeks When berries have reached pea-size
Pineapples	96 days
Potatoes	21 days

PHOSPHOROUS ACID FORMULATIONS ARE VIEWED AS FERTILIZERS, RATHER THAN FUNGICIDES IN MANY COUNTRIES OF THE WORLD AND THEREFORE NO MRL (MAXIMUM RESIDUE LEVEL) HAS BEEN DETERMINED OR ESTABLISHED. OTHER COUNTRIES MAY NOT USE PHOSPHOROUS ACID FORMULATIONS EITHER AS FUNGICIDE OR FERTILIZER, AND THEREFORE EXPORTING ROOTEX 400SL TREATED FRUIT TO COUNTRIES WITHOUT ESTABLISHED MRL VALUES, MAY PRESENT PROBLEMS. PRODUCERS WHO WANT TO EXPORT FRUIT ARE THUS RECOMMENDED TO DISCUSS THIS MATTER WITH THEIR EXPORT AGENTS BEFORE USING ROOTEX 400SL.

- Handle with care.
- Harmful if swallowed.
- Causes irritation of eyes, air passages and skin.
- Product reacts with metals and generates hydrogen that may cause potential flammable and explosive mixtures.
- Store in a cool, well-ventilated and dry area. Keep away from metals and naked flames.
- Store away from food, feeds, seeds, fertilizers and other agricultural chemicals.
- 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 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 eyes and skin.
- Wear rubber gloves and a face shield when handling, mixing and applying the product.
- Wash with soap and water after use or accidental skin contact. Do not rub the skin. If irritation persists, seek medical attention.
- In case of eye contact, flush eyes thoroughly with copious amounts of clean cold water for at least 15 to 20 minutes, while keeping the eyelid(s) open. If irritation persists, seek medical attention.

- If the product has been ingested, do not induce vomiting. Let the person rinse his/her mouth thoroughly and drink plenty of water or milk. Get medical attention immediately.
- Wash contaminated clothes daily after use.
- Do not eat, drink or smoke whilst applying, mixing or before washing hands and face or change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean spraying equipment directly after use and dispose of wash water where it will not contaminate crops, 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 minimum of 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.

USE RESTRICTIONS

- To ensure effective translocation of this systemic product, only use **ROOTEX 400SL** on actively growing trees and vines when sufficient sap flow is taking place.
- Do not treat trees or vines under stress (e.g. heat, drought, waterlogged or heavy fruitset). Application under such conditions may cause damage to the trees/vines (e.g. scorching of leaves or fruit, gummosis).
- Do not apply to plants that are oxygen deprived within 6 days after heavy rains or when soil is waterlogged. The longer the saturation persists, the more the stress will increase. Only apply **ROOTEX 400SL** when the matrix potential is between -18 and -50 kPa. Although this problem seems to be specific to citrus trees, it may also be the case with other crops. Thus, rather wait until harvesting is completed, before trees are to be treated with **ROOTEX 400SL**.
- Do not treat plants if the leaves are wet due to rain or dew. Wait until the leaves are dry before commencing treatment.
- Do not apply **ROOTEX 400SL** within a week before, or after, a copper application.
- Although **ROOTEX 400SL** has been neutralized, it may still be corrosive to metal surfaces. It is recommended to use plastic or fiberglass containers when using the product as a trunk paint treatment.

PINEAPPLES:

- Do not apply this product during the 6 week period, preceding flower induction.

GRAPES (Table and Wine):

- The higher dosage rate can cause yellowing on young leaves.

CITRUS:

- **ROOTEX 400SL** is generally suitable for use on non-bearing trees with green stems. However, some scion/rootstock combinations may exhibit sensitivity. It is therefore recommended that tolerance of trees be confirmed, before the orchard is treated as a whole.
- Easy peeler varieties (e.g. Mineola) exhibit a certain degree of sensitivity towards **ROOTEX 400SL** treatments. Rather apply onto the rootstock areas of such sensitive varieties.
- Do not treat Easy peeler varieties which tend to set very heavy crops.
- The use of **ROOTEX 400SL** to control *Phytophthora* root and Collar rot is more effective when applied preventatively, rather than curatively. It is therefore recommended to commence **ROOTEX 400SL** treatments before the first visual signs of disease decline are observed, preferably before stage 4 (according to the scale of disease decline, 0 to 10 as indicated in *Outspan Production Guidelines, Part 3*), to ensure optimal efficiency.
- Do not apply **ROOTEX 400SL** if waterlogging occurred shortly before harvest or during harvest. Treat only after harvest is completed.

RESISTANCE WARNING

ROOTEX 400SL is a group code 33 fungicide. Any fungus population may contain individuals naturally resistant to **ROOTEX 400SL** 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 **ROOTEX 400SL** 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 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.

DIRECTIONS FOR USE: Only use as directed.

Compatibility:

- The compatibility of **ROOTEX 400SL** with other agricultural chemicals has not been confirmed. It is therefore recommended not to use **ROOTEX 400SL** in tank mixtures or dipping solutions with other products.
- The use of **ROOTEX 400SL** in tank mixtures with mineral oils, copper containing products, **Dimethoate**, products from the diclorfol group, products with a high potassium content, or highly alkaline products, is not recommended.
- Due to the fact that **ROOTEX 400SL** is to be applied as a light cover spray on citrus, any product to be applied as a high volume spray must be considered as incompatible with **ROOTEX 400SL**.
- A suitable wetting agent can be added if necessary. The wetting agent should be added last into the mixing tank, to avoid excessive foaming. Do not add a wetting agent, if **ROOTEX 400SL** is being mixed with an agricultural chemical that already contains a wetting agent.
- If **ROOTEX 400SL** is used in combination with any other agricultural chemical, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE**, as indicated on that label, must be followed.

Mixing instructions:

- Half fill the mixing tank with clean water.
- Shake the **ROOTEX 400SL** container thoroughly just before use.
- Add the required volume of **ROOTEX 400SL** to the mixing tank and ensure thorough agitation.
- In the case of Late blight control in potatoes, add **ROOTEX 400SL** to the spray water first. Continue filling the spray tank while agitating the spray solution and then add the **CHLORONIL 500 SC** (L 7394).
- If any other product is to be mixed with **ROOTEX 400SL**, the required volume of that product must be pre-mixed in 10 litres water in a separate container. When mixing with a wettable powder, pre-mix the wettable powder with a small quantity of water to form a smooth cream, before adding to the mixing tank.
- Ensure thorough agitation and then add the product(s) in the following order (as applicable): wettable powder, suspension concentrate, water-soluble concentrate, emulsifiable concentrate. If a wetting agent is used, it should be added last into the mixing tank. Consult the other products' labels for more details.
- If any other product is to be tank mixed with **ROOTEX 400SL**, it must be added only after the **ROOTEX 400SL** has completely dissolved in the water (refer to the other product's label for directions).
- Fill the tank to the desired volume, whilst agitating continuously.
- Ensure continuous agitation during application.
- Do not allow the spray mixture to stand over for a prolonged period of time in the mixing/spray tank, e.g. over night.

APPLICATION RATES

Crop / Disease	Dosage	Remarks
Citrus Root and Collar rot (<i>Phytophthora</i> spp.)	Mix in a 50 : 50 ratio with water	<p>Trunk paint treatment: Commence treatment just after the rainy season has started and repeat with 6 to 8 week intervals during the rainy season. The systemic translocation of ROOTEX 400SL to the roots of citrus trees is enhanced if the application of the product is not performed when the trees are flushing. Under such conditions it is recommended to delay application until the new flush starts to harden off. Paint the whole trunk from ground level upwards for \pm 35 cm. In case of graft incompatibility, only paint the scion and lower scaffold branches. Wetting, and therefore absorption, of ROOTEX 400SL can be improved by the addition of a wetter.</p>
	500 ml / 100 l water	<p>Foliar application: Commence treatment just after the rainy season has started and repeat with 6 to 8 week intervals. The systemic translocation of ROOTEX 400SL to the roots of citrus trees is enhanced if the application of the product is not performed when the trees are flushing. It is recommended to delay application until the new flush starts to harden off. Apply as a light cover spray at 1800 to 2000 litres spray solution per hectare on medium to large trees. Too high spray volumes may result in unsatisfactory control, due to loss through run-off of the product and damage to fruit and leaves. In case of smaller trees, use proportionally less spray volumes and rather use a handgun. Leaves must be in a condition of high turgidity to prevent scorching. Apply early morning or late afternoon. It is recommended to stop application about 1 hour before an air temperature of 30 °C is reached.</p>
Pineapples Root and Collar rot (<i>Phytophthora</i> spp.)	500 to 750 ml / 100 l water	<p>Dip treatment before planting: Dip, by means of total immersion, all plant material for 10 minutes in solution. Ensure that all plant parts, especially the crown, are thoroughly wetted, to prevent rotting after planting.</p>
	500 to 1000 ml / 100 l water	<p>Foliar application: Apply at 1000 to 2000 litres spray solution per hectare when infection is expected, normally during autumn and spring. Apply a maximum of 5 applications per annum. Repeat applications at 2 to 3 month intervals.</p> <p>IMPORTANT Do not apply within the 6-week period of flower induction. ROOTEX 400SL application during this period could result in poor induction efficiency. Do not apply ROOTEX 400SL during the fruit maturation period.</p>

Crop / Disease	Dosage	Remarks
<p>Potatoes Late blight (<i>Phytophthora infestans</i>)</p>	<p>400 ml / 100 l water PLUS 100 ml Chloronil 500 SC / 100 l water</p>	<p>It is important to ensure effective disease control early in the season. ROOTEX 400SL must be applied in combination with Chloronil 500 SC. In areas of high risk, application should commence at 3 weeks post-emergence or earlier if conditions favour development of the disease. Early sprays, 2 to 3 weeks post-emergence, are best applied as directed sprays over the row.</p> <p>Repeat applications weekly under conditions of high disease pressure. If there is a possibility that Late blight can gain a foothold due to a break in the spray programme, or any other reason, the spray intervals must be reduced to 5 days. The ideal is that plants should be at least 95 % Blight free at all times.</p> <p>Apply as conventional high volume sprays and ensure complete coverage of the leaves and stems. Spray volumes of 500 to 600 litres per hectare are recommended at the first cover spray, which can increase to 1000 litres at development of full canopy. Due to over fertilization, canopies may be excessively dense and may therefore require even higher spray volumes.</p> <p>Lower spray volumes can be used provided the dosage rate of fungicides is maintained per hectare. It is recommended that the ROOTEX 400SL dosage per hectare should be 2.0 to 2.5 litres at the first applications, increasing to 4.0 to 4.5 litres per hectare at development of full canopy. The Chloronil 500 SC dosage per hectare must be 25 % of the ROOTEX 400SL dosage. Note that with reduced application volumes factors such as droplet size, distribution and penetration become much more critical. Accurate calibration and spray equipment in good working order, determine the success of disease control to a large degree.</p>

Crop / Disease	Dosage	Remarks
<p>Table and Wine grapes Downy mildew (<i>Plasmopora viticola</i>)</p>	<p>From 10 to 15 cm shoot length up to pea berry stage:</p> <p>300 to 500 ml PLUS 120 g to 200 g Mancozeb (800 g / kg) / 100 l water</p> <p>From pea berry stage to harvest:</p> <p>300 ml / 100 l water</p>	<p>Foliar application: Apply when shoots are 10 to 15 cm long. Repeat every 10 to 14 days depending on infection pressure. Under conditions that favour disease development, the spray intervals can be reduced to 7 days. Use the higher dosage rate for improved protection of the bunch. Spray until berries are pea-size. Continued application of the ROOTEX 400SL/Mancozeb mixture may result in visible spray deposit on the berries.</p> <p>If, under conditions of abnormally high disease pressure, the foliage still needs protection after berries have reached pea-size. It is recommended to continue application of ROOTEX 400SL on its own, at a rate of 300 ml per 100 litres water for as long as necessary.</p> <p>The berry stems are still susceptible to infection even though the berries are resistant to infection after reaching pea-size. Infection of the berry stems later during the season may result in shrivelled berries (individually or a section of the bunch).</p> <p>Apply as a normal high volume application to ensure thorough coverage of the leaves as well as bunches. Refer to the spray volume guidelines for specific growth stages as compiled by the ARC-Infruitec-Nietvoorbij.</p> <p>Too high spray volumes are not recommended as this may result in unsatisfactory control due to loss through run-off of the product. Applying higher dosages than recommend may cause damage to the crop.</p> <p>A suitable wetter can be added to improve wetting of the plants. Tank mixture with additional agrochemicals that already contain a wetter can result in overwetting. It may be better to exclude a wetting agent under such conditions.</p> <p>Leaves must be in a condition of high turgidity to prevent scorching. Apply early morning or late afternoon. It is recommended to stop application about 1 hour before an air temperature of 30 °C is reached.</p>

CHLORONIL 500 SC is a registered product of / is 'n geregistreerde produk van
UNIVERSAL CROP PROTECTION (Pty) Ltd.