

Vlymskerp

Reg. No: L 11473 Act/Wet No. 36 of/van 1947



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

ACTIVE INGREDIENT

Potassium phosphite 560 g/l
(phosphorous acid equivalent) 400 g/l

FRAC FUNGICIDE GROUP CODE: 33



WARNING

HAZARD STATEMENTS:

- May be corrosive to metals.
- Harmful if swallowed, in contact with skin or if inhaled.
- Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS:

- Wear protective gloves/protective clothing/eye protection/face protection.

Registration holder: **Green Island Investments (Pty) Ltd.**

Co. Reg. No.: 2013/043963/07

P.O. Box 1822, Heidelberg 1438, South Africa

Tel +27 78 737 9236

24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre: +27 82 446 8946

24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411 (Typhoon Plant Protection)

Distributed by: **Typhoon Plant Protection (Pty) Ltd.**

Co. Reg. No.: 1998/006156/07, C/O Farm Vlakfontein

Corner of the R23 Benoni Road & R550 Nigel Road

Brakpan District, Heidelberg 1438, Gauteng, South Africa

Tel +27 78 737 9236

Net Volume:

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Expiry Date:

Batch No:

Date of Manufacture:

U.N. No. 1805

 **Typhoon**
PLANT PROTECTION



READ LABEL IN DETAIL BEFORE OPENING THE CONTAINER. FOR FULL PARTICULARS, SEE ENCLOSED LEAFLET.
KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

WARNINGS:**Withholding periods:**

Minimum number of days between the last application and harvest:	
Grapes (Wine and Table)	28 days
Citrus	14 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 A FUNGICIDE OR FERTILIZER, AND THEREFORE EXPORTING VLYMSKERP 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 VLYMSKERP.

WARNINGS:**HAZARD STATEMENTS:**

- May be corrosive to metals.
 - Harmful if swallowed, in contact with skin or if inhaled.
 - Causes severe skin burns and eye damage.
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- **Do not** apply within 21 days before or after copper applications.
 - Handle with care.
 - Harmful when swallowed.
 - Irritating to eyes, skin and respiration system.
 - **VLYMSKERP** must only be applied to actively growing plants and trees.
 - Plants to be treated should not suffer from any stress such as drought or heat as this could lead to phytotoxic response such as gummosis and leaf scorch.
 - **VLYMSKERP** may still be corrosive to metal, despite neutralization.
 - Store in a dry, cool place away from food and feed stuffs.
 - Keep out of reach of children, animals and uninformed persons.
 - **Resistance:** Similar to most other systemic fungicides, **VLYMSKERP** is also subject to the selection of less susceptible fungal races and the development of less sensitive fungal pathogen populations. It is therefore highly advisable to alternate **VLYMSKERP** with other chemically non-related fungicides e.g. metalaxyl.
 - **Re-entry:** **Do not** enter treated field until spray deposit has dried, unless wearing protective clothing.

Although this remedy has been extensively tested under a wide 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; incompatibility 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 furthermore does not accept responsibility for damage to crops, vegetation, the environment, or harm to man and animal, or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions, or 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:

- Wear protective gloves/protective clothing/eye protection/face protection.
- **Do not** inhale spray mist.
- Wear rubber gloves and face shield during handling, mixing and application.
- Wash with soap and cold water after application or skin contact.
- Wash contaminated clothing after application.
- **Do not** eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams, and areas not under treatment.
- Clean spray equipment and mixing containers after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- Triple rinse empty containers in the following manner: 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 in the described manner.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Related ingredients:

Substance/Mixture: Mixture Ingredients:

Substance name (IUPAC)	CAS - No.	Concentration % By weight
Phosphorous acid (98.5 % H_3PO_3)	7664-38-2	41%
Potassium hydroxide 90%	1310-58-3	>43%

SYMPTOMS OF HUMAN POISONING:

May irritate the eyes and skin.

FIRST AID TREATMENT:

Remove from source of exposure. Wash affected area.

Eye and skin contact: Flush eyes with water for 15 minutes after eye contact.

Wash with soap and water after skin contact.

Should irritation of skin or eyes persist, consult a physician.

Inhalation: Remove to fresh air. Assist breathing if necessary. Get medical attention.

Ingestion: Wash out mouth. Give a spoon of activated charcoal in a glass of water. Get medical attention.

Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN:

Treat symptomatically.

RESISTANCE WARNING

For resistance management, **VLYMSKERP** is a **code 33 fungicide**. Any fungus population may contain individuals naturally resistant to **VLYMSKERP** 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 **VLYMSKERP** or any other **group code 33 fungicide**.

To delay fungicides resistance:

- Avoid the exclusive repeated use of the same fungicides group code. Alternate with or use in tank mixture with products with different fungicide group codes.
- For tank mixing or alteration with products in fungicide group code M, refer to the applicable individual product labels.
- Integrate the control method (chemical, cultural, biological) into disease control programmes.

For specific information on resistance management, contact the registration holder of **VLYMSKERP**.

USE RESTRICTIONS

- To ensure effective translocation of this systemic product, only use **VLYMSKERP** 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, 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 **VLYMSKERP** when the matrix potential is between -18 and -50 kPa. Although this problem seems to be specific for 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 **VLYMSKERP**.

- **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 **VLYMSKERP** within a week before, or after, a copper application.
- Although **VLYMSKERP** 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 of young leaves.

CITRUS:

- **VLYMSKERP** 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 **VLYMSKERP** 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 **VLYMSKERP** to control Phytophthora root and Collar rot is more effective when applied preventatively, rather than curatively. It is therefore recommended to commence **VLYMSKERP** 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 **VLYMSKERP** if waterlogging occurred shortly before harvest or during harvest. Treat only after harvest is completed.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

Compatibility:

- The compatibility of **VLYMSKERP** with other agricultural chemicals has not been confirmed. It is therefore recommended not to use **VLYMSKERP** in tank mixtures or dipping solutions with other products.
- The use of **VLYMSKERP** in tank mixtures with mineral oils, copper containing products, Dimethoate, products from the diclorol group, products with high potassium content, or highly alkaline products, is not recommended.
- Due to the fact that **VLYMSKERP** 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 **VLYMSKERP**.
- 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 **VLYMSKERP** is being mixed with an agricultural chemical that already contains a wetting agent.
- If **VLYMSKERP** 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 **VLYMSKERP** container thoroughly just before use.
- Add the required volume of **VLYMSKERP** to the mixing tank and ensure thorough agitation.
- In the case of Late blight control in potatoes, add **VLYMSKERP** to the spray water first. Continue filling the spray tank while agitating the spray solution and then add the **Chlorothanil**.
- If any other product is to be mixed with **VLYMSKERP**, the required volume of that product must be pre-mixed in 10 litres water in a separate container. When mixing with a wettable powder, premix 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 **VLYMSKERP**, it must be added only after the **VLYMSKERP** has completely dissolved in the water (refer to the other product's label for directions).
- Fill the tank up 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. overnight.

APPLICATION RATES:

CROP/DISEASE	DOSAGE RATE	REMARKS
CITRUS: Preventive use of VLMSKERP against <i>Phythora</i> - root and collar rot should ideally commence before the first visual symptoms of decline appear and also not later than “stage 4” on the 0 to 10 scale of decline as presented in “Outspan’s Production Guidelines Part 3”.		
Root Rot <i>(Phytophthora parasitica)</i> & Collar Rot <i>(Phytophthora citrophthora)</i>	Dilute VLMSKERP in a 1:1 ratio with water in a plastic container	A. Truck Application: Apply with a paint brush around the trunk from soil level to 35 cm upwards. The product will perform better on clean trunks. The addition of wetting agent to the mixture will improve wetting of trunk, uptake and translocation. In case of graft incompatibility, only treat above the graft joint. Applications should commence just after first seasonal rain and repeated at bi-monthly intervals during rainy season. To enhance translocation after application to citrus roots via the phloem, avoid treatment when trees are in full flush. Rather postpone treatment when new flush starts to harden off. Although VLMSKERP is safe to use on green stems, it is advisable to confirm safety of stem application on specific rootstock/scion combinations before commercial use. Consideration should be given with irrigation water.
	500 mL/100 L water	B. Foliar Application: VLMSKERP is applied as a foliar spray to citrus as a light cover spray. Do not apply on Satsuma trees which were placed under stress for improvement of internal quality. The addition of WEN 51 will improve wetting and uptake. Sprays should be applied when trees are high in turgidity to avoid leaf burn. Applications should therefore be made in early morning of late afternoon. Avoid spraying within one hour before temperatures are expected to reach 30 °C. Spray application should commence just after the rainy season has started and continued at intervals of 2 months during the rainy season. To optimize systemic uptake and translocation to roots via the phloem bundles, avoid application during strong flushes and rather postpone application to when flushes have hardened off.

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APPLICATION DOSAGE RATES: (Continued)

CROP/DISEASE	DOSAGE RATE	REMARKS
TABLE & WINE GRAPES:		
Downy mildew (<i>Plasmopara viticola</i>)	Tank mixture: 300 mL plus 120 g mancozeb 800 g/kg WP/WG per 100 L water	Preventative Foliar Treatment: Application must commence when shoots are 10 to 15 cm long and repeated at 10 to 14 day intervals depending on conditions favouring infection. Application should continue up to pea size of berries after which alternate measures should be taken should infection continue. After pea size of berries, mancozeb applications may result in visible spray deposits and in which case the application of VLYMSKERP alone could be considered maintaining the withholding period. In such a case intervals must be shortened. Spray application should be made when plants are high in turgidity to avoid leaf burn. Sprays should also be conducted early mornings and late afternoons for the same reason. To avoid spraying during hot conditions, application should be discontinued one hour before air temperatures reach 30°C. Compatibility of VLYMSKERP with other pesticides has not been studied yet. Should the need arise for a specific combination, it is recommended to mix and spray on a small scale first. Apply the recommended dosage as a high volume spray and do not reduce volume, with a proportional increase in concentration. Ensure thorough coverage of all parts of the grapevine.
PINEAPPLES:		
Root Rot (<i>Phytophthora cinnamoni</i>) & Base (Heart) Rot (<i>Phytophthora nicotianae</i> var <i>parasitica</i>)	500 – 750 mL/2000 L water solution	A. Dipping of Plant Material: Immerse tops thoroughly a 10 minutes in a VLYMSKERP solution with agitation to ensure wetting immediately prior to planting. The addition of WEN 51 will improve wetting and coverage of the planting material.

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APPLICATION DOSAGE RATES: *(Continued)*

Root Rot (<i>Phytophthora cinnamoni</i>) & Base (Heart) Rot (<i>Phytophthora nicotianae</i> var <i>parasitica</i>)	10 ℓ/1000 – 2000 ℓ water/ha	B. Post Plant Treatment. Apply a foliar drench spray of VLYMSKERP in autumn and again in spring. Autumn and spring are the period of active growth closest to periods of anticipated <i>Phytophthora</i> risk. Repeat sprays at intervals of 2 to 3 months, but avoid spraying during periods of dormancy caused by water, heat or cold stress. Do not apply more than 5 sprays per annum. Do not apply within 6 weeks of flower induction as a shorter period may result in poor induction efficacy. As a resistance strategy it is recommended to alternate VLYMSKERP applications with chemical non-related registered fungicides. Conditions which are conducive to <i>Phytophthora</i> root and base rot in pineapples are; high rainfall, poor soil drainage, ineffective or no soil fumigation for nematode control and poor cultivation practices.
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APPLICATION DOSAGE RATES: (Continued)

CROP/DISEASE	DOSAGE RATE	REMARKS
POTATOES: Late blight <i>(Phytophthora infestans)</i>	400 ml / 100 l water PLUS 100 ml Chlorthanoniil 720 SC / 100 l water	It is important to ensure effective disease control early in the season. VLYMSKERP must be applied in combination with Chlorthanoniil 720 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. 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. 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. Lower spray volumes can be used provided the dosage rate of fungicides is maintained per hectare. It is recommended that the VLYMSKERP 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 Chlorthanoniil.720 SC dosage per hectare must be 25 % of the VLYMSKERP 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.