

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Insecticide



NEMACUR® 240 CS

Reg. No. L 7247 Act/Wet No. 36 of/van 1947

1:18/10/2012 - June2019

A systemic micro-encapsulated suspension concentrate nematicide and insecticide for the control of nematodes on potatoes, tomatoes, citrus, pineapples, vineyard, groundnuts, onions, tobacco (also tobacco spider mite if present at time of application), turfgrass, initial suppression of nematodes on peas and as a foliar application on potatoes for the control of Nematodes and Aphids in the Western Cape only.

'n Sistemiese mikro geënkapsuleerde suspensiekonsentraat aalwurm- en insekdoder vir die beheer van aalwurm op aartappels, tamaties, sitrus, pynappels, wingerd, grondbone, uie, tabak (ook tabakspinmyt indien teenwoordig tydens toediening), baangras, aanvanklike onderdrukking van aalwurm op erte en as 'n blaarbespuiting op aartappels vir die beheer van Aalwurm en Plantluise in die Wes-Kaap alleenlik.

ACTIVE INGREDIENT / AKTIEWE BESTANDEEL

fenamiphos (organophosphate) 240 g/l fenamifos (organofosfaat)

IRAC INSECTICIDE GROUP CODE 1B IRAC INSEKDODER GROEPKODE



villa

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07

PO Box / Posbus 10413, Aston Manor, 1630

Tel: 011 396 2233

Website / Webblad: www.villacrop.co.za

UN Number: 3018

Willow Set & Print 011 394-4486

GERBUIKSAANWYINGS 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:



HARMFUL
SKADELIK



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Registration holder / Registrasiehouer:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box / Posbus 10413, ASTON MANOR, 1630

Tel. (011) 396 2233

**HARMFUL****SKADELIK****WARNINGS****Withholding periods:**

Minimum time between the last application and harvest or feeding:	
Potatoes	6 weeks
Citrus (bearing trees)	150 days
Peas	90 days
Peas (hay)	120 days
Tobacco	42 days
Onions	80 days
Grapes (Table & Wine grapes)	100 days
Pineapples	8 weeks
Groundnuts (human consumption and fodder)	63 days
ADDITIONAL: Only use as a pre-transplant treatment in tomatoes	

NOTE

THE MAXIMUM RESIDUE LEVELS (MRL'S) WILL NOT BE EXCEEDED PROVIDED APPLICATIONS ARE APPLIED AS PRESCRIBED. WHEN PRODUCTION IS DESTINED FOR THE EXPORT MARKET, THE EXPORT AGENCY OF CONCERN MUST BE CONTACTED, PRIOR TO THE USE OF NEMACUR® 240 CS IN A SPRAY PROGRAMME.

- Golf courses: do not use the greens for 48 hours after application. Do not use where turf may be grazed or fed to animals. Prevent any runoff and formation of pools and puddles of spray mixture.
- Handle with care.
- Toxic when in contact with skin.
- Very toxic if swallowed.
- Harmful: may cause lung damage if swallowed
- Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
- Store in a cool place away from food and feed stuffs.
- Keep out of reach of children, uninformed persons and animals.
- **In case of poisoning call a doctor and make this label available to him/her.**
- **POTATO FOLIAGE SYMPTOMS:** Refer warning in "Directions for Use" below.
- **Re-entry:** Do not enter treated area within one day after treatment unless wearing protective clothing.
- Continual use of **NEMACUR® 240 CS** in certain soils may lead to an increase in the rate of bio-degradation of **Fenamiphos** resulting in reduced efficacy.

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 pests 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

- Do not inhale fumes or the spray mist.
- Wear full protective clothing - overalls, rubber boots, gloves and suitable eye goggles.
- Wash contaminated clothing daily.
- Wash with soap and water after use or accidental skin contact.
- Do not eat, drink or smoke during application or before washing hands and face.
- Avoid drift of spray-mist on to other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator 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 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 described manner.
- Destroy empty container by perforation and flattening and never use for any other purpose. Dispose thereof in an appropriate manner.
- Prevent contamination of food, feedstuffs, drinking water, eating utensils.

FIRST AID TREATMENT

- **If poisoning is suspected:** Remove the patient from the source of poisoning to a well-ventilated area and keep him/her calm and at rest. Immediately call a physician.
- **Skin contact:** Remove contaminated clothing and wash the contaminated areas with plenty of soap and cold water for at least 15 to 20 minutes. Do not rub the skin.
- **Eye contact:** Immediately flush contaminated eyes for 15 to 20 minutes with clean cold water, while occasionally lifting upper and lower lids. Obtain medical advice if irritation persists.
- **Inhalation:** Administer artificial respiration and oxygen, if necessary. Do not apply direct mouth-to-mouth respiration.
- **Ingestion:** Have victim rinse mouth thoroughly with clean water. **Do not induce vomiting, due to the aromatic solvent. Obtain medical advice immediately.** If the person is conscious, give large quantities of water to drink. Never give anything by mouth to an unconscious person. Treat respiratory difficulty with artificial respiration and oxygen. Qualified medical personnel must perform administration of oxygen and lavage.
- **TAKE THE PATIENT TO THE NEAREST PHYSICIAN IMMEDIATELY.**

NOTE TO PHYSICIAN

This product contains **Fenamiphos**, an organophosphate insecticide.

Although atropine and 2-PAM are antidotal for most organophosphate insecticides, they may provide only slight therapeutic benefit in cases of **Fenamiphos** poisoning. An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant. Morphine, phenothiazines, reserpine, theophylline and similar drugs are contra-indicated and not to be used. Avoid aminoglycosides and succinylcholine, which have a blocking effect on the neuromuscular junction.

RESISTANCE WARNING

NEMACUR® 240 CS is a group code 1B insecticide. Any insect population may contain individuals naturally resistant to **NEMACUR® 240 CS** and other group code 1B insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **NEMACUR® 240 CS** or any other group code 1B insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product.

USE RESTRICTIONS

All Crops:

NEMACUR® 240 CS has not been tested for its effect on *Globodera rostochiensis* and *Meloidogyne chitwoodi*. Its use is therefore not recommended for the control of these nematode species.

Citrus:

- For plant densities of more than 300 trees per hectare the maximum application rate per tree becomes proportionately less so as not to exceed the maximum application rate of 50 litres **NEMACUR® 240 CS** per hectare or 167 ml per basin. Refer to Table 1 below:

Potatoes:

- Under situations of heavy Nematode infestation, **NEMACUR® 240 CS** will control Nematodes, but a degree of infestation may still occur and may not be possible to have an absolutely clean crop.
- Reduced efficiency can be expected if dry conditions occur after application.
- Plant healthy seed tubers, which have matured uniformly, to ensure synchronized emergence.
- It is important to ensure thorough coverage of plants.
- Plants must be growing vigorously, without stem and foliage damage due to factors e.g. blight, Tuber moth, or hail damage. Also, the plants must not be stressed due to weed competition.
- Ensure that the potatoes are lifted as soon as possible after the crop has reached full potential. Late Nematode infestations can occur if potatoes are left over in the soil.
- **NEMACUR® 240 CS** may cause deformed leaves and necrotic spots under certain conditions. These leaf symptoms must not be mistaken as virus disease symptoms. Plant pest control inspectors must ensure that the differences between these symptoms are known to them. Producers of seed potatoes must inform inspectors that **NEMACUR® 240 CS** has been used. Contact the registration holder of this product when in doubt.

Tobacco:

- In order to minimize possible crop damage, foliar applications of **NEMACUR® 240 CS** must be done as a directed spray onto healthy vigorously growing plants, free from water stress, during cool conditions.

Pineapples:

- Do not apply flower-inducing chemicals within 3 months of the last **NEMACUR® 240 CS** foliar application.
- Very wet or dry conditions may affect the **NEMACUR® 240 CS** treatment adversely.
- Slight chlorotic symptoms may appear after treatment but disappear with time.

DIRECTIONS FOR USE: Use only as directed.**Compatibility:**

- The compatibility of **NEMACUR® 240 CS** with other products may be influenced by the formulation of the other products involved as well as the quality of the water.
- As factors influencing compatibility may vary, a physical compatibility test must always be performed before such tank mixture is sprayed.
- When **NEMACUR® 240 CS** is used in conjunction with any other agricultural remedy, all **WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE** mentioned on that label, must be adhered to.

Mixing instructions:

- Half fill the spray tank with clean water.
- Add the required amount of **NEMACUR® 240 CS** to the water while agitating.
- Fill the spray tank with water to the required level, while maintaining agitation, to ensure thorough mixing.
- Maintain agitation during application.
- Prepared spray mixture should not be left in the spray tank for any length of time, e.g. overnight.
- Apply preferably during cool, windless conditions, when rapid drying conditions exist.

Foliar application:

- Good coverage of the plants is essential. The plants should be in a state of healthy growth and not subject to stem and foliage damage by factors such as Blight, Tubermoth and hail. Similarly, the plants should be free from weed competition. Healthy seed tubers, of uniform maturity, should be planted in order to ensure simultaneous emergence which is important.
- Under certain conditions **NEMACUR® 240 CS** will cause deformed leaves - necrotic spots may also occur. The leaf symptoms differ from those caused by virus diseases and will not be mistaken by Plant Pest Control Inspectors. Seed potato producers should inform inspectors when using **NEMACUR® 240 CS**. Also consult your Villa Crop Protection consultant when in doubt.

Foliar and Soil application:

- Irrespective of treatment rate, the persistency and nematicidal activity of **NEMACUR® 240 CS** is strongly influenced by factors beyond the manufacturer's control, such as monocropping, rotation with nematode

susceptible crops, soil type and the amount of irrigation or rainfall and some nematode damage must be expected.

- When heavy nematode infestations are present producers should not expect an absolutely clean crop and severe losses can occur.
- Dry conditions after application may lead to decreased efficacy. If abnormal cultural practices are followed, e.g. continuous planting of nematode susceptible crops on the same land, or where high nematode levels are present, the use of **NEMACUR® 240 CS** alone is not recommended and in the case of seed and chipping potatoes, **NEMACUR® 240 CS** is not recommended, even in combination with other nematicides.

Table 1: Application rate in ml **NEMACUR® 240 CS** per m² basin area.

No. of trees / ha	Basin area				
	4 m ²	6 m ²	8 m ²	10 m ²	12 m ²
200	17	17	17	17	13
250	17	17	17	17	13
300	17	17	17	13	13
350	17	17	17	12	12
400	17	17	15	10	10
450	17	17	13	8	8
500	17	17	12	8	8
550	17	15	10	7	7

APPLICATION RATES

Crop / Pest	Rate of Application	Remarks
Citrus Nematodes Young non-bearing trees	17 ml / m ² basin area.	Apply evenly to the soil surface in the tree basin area, after the trees have become established and repeat annually in Spring. Irrigate immediately after application with at least 25 mm water.
Bearing trees Excluding lemons and kumquat	17 to 7 ml / m ² basin area	Initial Treatment Apply evenly to the soil surface in the tree basin area during spring. Irrigate immediately after application with at least 25 mm water. Application rate depends on number of trees per hectare and size of basin area (Refer Table 1 under " DIRECTIONS FOR USE ").
	8 ml / m ² basin area	Maintenance Treatment Apply the following season in spring as indicated above. Thereafter repeat annually.
DO NOT exceed 50 litres product per hectare or 167 ml per basin. Refer "DIRECTIONS FOR USE".		
Groundnuts Nematode (<i>Ditylenchus destructor</i>)	6.7 to 13.4 l / ha	Irrigated Lands Apply immediately after planting as an overall treatment in approximately 300 litres water per hectare. Irrigate immediately after application. Dry Lands Apply as an overall treatment in approximately 500 litres water per hectare and incorporate mechanically (e.g. by harrowing) to a depth of 7.5 cm before planting. Sufficient rainfall is necessary for optimal efficacy of NEMACUR® 240 CS . Use the lower dosage on dry lands or where the infestation pressure is known to be light.

Crop / Pest	Rate of Application	Remarks
Onions Nematodes	12.5 ℓ / ha	Bulb- and Transplanted Onions Apply evenly to the soil in a minimum of 250 litres water per hectare prior to planting or transplanting and incorporate mechanically (e.g. shallow disking). Application can also be made immediately after planting or transplanting. Incorporate immediately after application by means of overhead irrigation.
Potatoes Nematodes All areas excluding the Northern Cape and North West Province:	420 ml / 2.5 ℓ water / 100 m plant furrow (42 ℓ / ha) for rows 1 metre apart)	Draw the planting furrows. Spray the NEMACUR® 240 CS onto the total furrow area, plant potatoes then close furrows.
	250 ml / 2.5 ℓ water / 100 m plant furrow (25 ℓ / ha for rows 1 metre apart)	Use the lower rate only on table potatoes in the Eastern Highveld of Gauteng/Mpumalanga. Use only after a 4-year rotation with non-susceptible crops, on soils with a light infestation pressure and on July-August plantings. Apply as indicated above. Prevent application directly onto the tubers.
Nematodes Northern Cape and North West Province (Prieska, Hopetown, Douglas, P.K. le Roux Dam irrigation areas, Vaalharts irrigation area, Barkly West, Christiana, Vryburg, Coetzersdam and Tosca)	Soil fumigation	Before planting Fumigate soil prior to planting with a registered soil fumigant.
	Followed by: 420 ml / 2.5 ℓ water / 100 m plant furrow (42 ℓ / ha for rows 1 metre apart)	Draw the planting furrows. Spray the NEMACUR® 240 CS onto the total furrow area, plant potatoes then close furrows. Prevent application directly onto the tubers.
Nematodes and aphids Western Cape only:	Soil fumigation	Before planting Fumigate soil prior to planting with a registered soil fumigant.
	Followed by: Apply 6.7 ℓ in 500 ℓ water / ha A total of six (6) sprays are required	Tractor-mounted spray The first three sprays should be applied at weekly intervals commencing about 7 to 10 days after emergence of the plants. The fourth and subsequent sprays are applied at 14-day intervals. Spray nozzles should be mounted so as to direct the spray to the plant rows ensuring full coverage.

Crop / Pest	Rate of Application	Remarks
Peas Nematodes (Initial suppression)	6.7 ℓ / 250 ℓ water / ha	Apply evenly to the soil surface immediately after planting before emergence and incorporate with sufficient irrigation. Only to be used when peas are planted early when soil temperatures are still at a level where Nematodes are active. NOTE This treatment is intended to protect the young pea plant against attack for a limited period until soil temperatures fall so low that Nematode attack becomes minimal.
Pineapples Nematodes	10.4 ℓ in a minimum of 1000 ℓ water / ha A total of 3 sprays per crop cycle is required	Apply by ground-rig. Use only on plant crop The first foliar spray should be applied at the first signs of root formation. Two subsequent sprays are applied at 3-month intervals. Spray nozzles should be mounted so as to direct the spray onto the plant rows, ensuring full coverage. Flower-inducing chemicals should not be applied within 3 months of the last NEMACUR® 240 CS foliar spray. Very dry or wet conditions can adversely influence the treatment. Slight chlorosis which disappears with time may occur after treatment.
Tobacco Root-knot nematodes and Tobacco spider mite	Soil fumigation	Before transplanting Fumigate soil prior to planting with a registered soil fumigant.
	5.0 ℓ in 500 ℓ water / ha	After transplanting 1. Apply as a directed foliar spray onto the leaves below the growing point (heart) of the plant 3 weeks after transplanting. 2. Repeat above application 5 to 6 weeks after transplanting. WARNING Do not apply during hot, dry conditions on plants that are under water stress. The above-mentioned treatment will also control Tobacco spider mite if present at the time of application.
Tomatoes Root-knot nematodes	Apply 420 ml / 2.5 ℓ water / 100 linear m in a 30 cm band over the planting row	Pre-plant soil treatment Apply to the soil prior to transplanting at any time from two weeks before until immediately before transplanting. Calibrate the applicator with clean water before the actual application in order to determine the volume of water the applicator requires to cover the required distance of band treatment. Mix the dosage prescribed in the volume of water thus determined. After the NEMACUR® 240 CS is applied; it should immediately be incorporated lightly into the top layer of soil either by mechanical means or by sprinkler irrigation. Under careful supervision, it could also be applied onto standing irrigation water diverted into planting basins. Avoid washing the material away with strong flooding while it is still on the soil surface.

Crop / Pest	Rate of Application	Remarks
Turfgrass Nematodes	33.3 ℓ / ha	Only for use on golf courses. Apply as a broadcast application in ± 250 litres water per hectare in Spring or early Summer onto established turf. Irrigate immediately (within 5 minutes) after application with a minimum of 15 mm water. Only use coarse sprays directed at soil. Prevent formation of spray mist.
Vineyards (Table & Wine grapes) Nematodes	4.2 ml / m ² (420 ml / 2.5 ℓ water per 100 m row as a 1 m band over the row)	NEMACUR® 240 CS must be applied as a 50 cm band on either side of the vine row on the “bankie” to a weed-free surface, either as a Spring application 14-days before expected bud burst, or as an Autumn application directly after harvest. NEMACUR® 240 CS must be incorporated in the soil either by sufficient rain in order to wash the product into the soil or by irrigation. If at least 20 mm of rain has not fallen within 14 days of application, then incorporate by means of irrigation, applying 13 mm followed by further 13 mm water 10 days later.

NEMACUR® 240 CS is a registered trademark of / is 'n geregistreerde handelsmerk van
AMVAC CHEMICAL CORPORATION USA.