

HARVEST FENAMIPHOS 400 EC

Harvest Crop Solutions (Pty) Ltd.
Reg. No.2014/187205/07
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HARVEST
CHEMICALS



A systematic emulsifiable concentrate nematicide and insecticide for the control of the pests mentioned on the crops listed.

'n Systemiese emulgeerbare konsentraat aalwurmdoder en insekdoder vir die beheer van genoemde plaë op die onderstaande gewasse.

Batch No	Reg. No. L 10212, Act No 36 of 1947.	Reg Nr L10212 Wet Nr. 36 van 1947	Lot Nr
	INSECTICIDE GROUP CODE	1B	INSEKDODERGROEP KODE
Date of manufacture	Active Ingredient: Fenamiphos (organophosphate)	400g/ℓ	AktieweBestandeel: Fenamifos (organofosfaat)
	Nett Volume	20ℓ	Netto Volume



WARNINGS

- Allow the following minimum number of days between the last application and harvesting:
Ground Nuts – 63 days Potatoes – 42 days

NOTE: The recommended withholding period between last application and harvest meets local residue requirements but may not meet export requirements.

- Handle with extreme care.
- Poisonous when absorbed through the skin or swallowed or inhaled.
- Toxic to fish, bees and wildlife.
- Store under lock and key in a cool place away from food and feedstuffs.
- Flammable – do not store near open flame.
- Keep out of reach of children, uninformed persons and animals.
- In case of poisoning CALL A DOCTOR AND MAKE THE LABEL KNOWN TO HIM/HER.
- POTATO FOLIAGE SYMPTOMS: see warning in “Directions for Use” below.
- 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 actions and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions; quality of dilution water; compatibility with other substance not indicated on the label and occurrence of resistance against the remedy concerned as well 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 event of any uncertainty.
- Continual use of **HARVEST FENAMIPHOS 400 EC** in certain soils may lead to an increase in the rate of bio-degradation of **HARVEST FENAMIPHOS 400 EC** resulting in reduced efficacy.

PRECAUTIONS

- Avoid contact with skin and eyes and inhalation of fumes or spray mist.
- Wear full protective clothing – overalls, rubber boots, gloves and a suitable respirator.
- Wash contaminated clothing daily.
- Do not eat, drink or smoke during application or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use and dispose of wash water where it will contaminate crops, grazing, rivers or dams.
- Rinse empty container three times with a volume of water equal to at least one tenth of that of the container and add the rinsings to the contents of the spray tank before disposing of the container in the prescribed manner.
- Destroy empty container by perforation and flattening and never use for any other purpose.
- Prevent contamination of food, feedstuffs, drinking water, eating utensils.

SYMPTOMS OF HUMAN POISONING

Symptoms of **HARVEST FENAMIPHOS 400 EC** poisoning includes headaches, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, diarrhoea, tightness of the chest, anxiety, blurred vision, muscle twitching beginning in the eyelids and tongue, small pupils, respiratory distress, convulsions, coma.

FIRST AID TREATMENT

If poisoning is suspected, remove the patient from the source of poisoning to a well-ventilated area and keep him/her quiet. Contact a doctor immediately.

Eyes: Flush with plenty of water for at least 15 minutes. If contact lenses are worn, flush for 5 minutes before removing contact lenses and then continue to flush once removed. Get medical attention immediately.

Skin: Remove contaminated clothing. Wash affected area with plenty of soap and water. Seek medical attention if irritation develops. Contaminated clothing must be thoroughly washed before reuse. **Do not** rub the skin.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. Get medical attention immediately. Do not give direct mouth-to-mouth respiration.

Ingestion: Get medical attention immediately. If the person is conscious have them rinse their mouth thoroughly with clean water and give large quantities of water to drink. **Do not** induce vomiting. **Do not** give direct mouth to mouth respiration. **Do not** give anything by mouth to an unconscious person. If person is experiencing respiratory difficulty give oxygen or artificial respiration. Only experienced medical personnel must administer lavage and administer oxygen.

NOTE TO THE PHYSICIAN

This product contains an organophosphate insecticide, Fenamiphos.

Although atropine and 2-PAM are antidotes for most organophosphate insecticides, they may prove only a slight therapeutic benefit in cases of poisoning. An aqueous suspension of activated charcoal can be administered to absorb any remaining toxins. **Do not use** morphine, phenothiazine's, reserpine, theophylline or similar drugs, as these are contra indicative. Avoid aminoglycosides and succinylcholine, which have a blocking effect on the neuromuscular junction.

RESISTANCE WARNING

For resistance management **HARVEST FENAMIPHOS 400 EC** is a group code 1B insecticide. Any insect/nematode population may contain individuals naturally resistant to **HARVEST FENAMIPHOS 400 EC** and other group code 1B insecticides. The resistant individuals can eventually dominate the insect/nematode population if these insecticides are used repeatedly. These resistant insects/nematodes may be controlled by **HARVEST FENAMIPHOS 400 EC** 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.

COMPATIBILITY

HARVEST FENAMIPHOS 400 EC may be influenced by several factors. As these factors may vary, a physical compatibility test must be done before the tank mixture is sprayed.

DIRECTIONS FOR USE- Use only as directed.

MIXING INSTRUCTIONS

Half fill the spray tank with water and then add the required **HARVEST FENAMIPHOS 400 EC**. Fill the spray tank to the required volume with water. Agitate while mixing and spraying. Do not let the spray mixture stand for any length of time.

APPLICATIONS: Use a correctly calibrated sprayer to give an even droplet distribution on the target soil surface or foliage. Only apply **HARVEST FENAMIPHOS 400 EC** while the soil is moist at the surface or after rain/irrigation unless **HARVEST FENAMIPHOS 400 EC** is to be incorporated. Do not apply to dry soil or during prolonged dry spells unless irrigation is available. Irrigation or rainfall is required within 24 hours after application to a soil surface. Rinse the spray tank, pump and lines with plenty of water after spraying, and before using the same tank for fungicides and insecticides.

Pre-planting: Apply anytime from 7 days before and up to the time of planting. Apply onto moist soil. Incorporate with rain or irrigation within 24 hours of application or incorporate with a rotary hoe or discs to a depth of 10 cm as soon as possible after spraying.

USE RESTRICTIONS

POTATOES

HARVEST FENAMIPHOS 400 EC can be used as a furrow treatment at planting or as a foliar treatment after crop emergence. Healthy seed tubers of uniform maturity should be planted in order to ensure simultaneous emergence which is important. Foliar Application: In the case of foliar application good droplet coverage of the plant leaves 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, tuber moth and hail. Do not apply to plants under stress. The plants should be free from weed competition. Under certain conditions **HARVEST FENAMIPHOS 400 EC** will cause deformed leaves and/or 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 **HARVEST FENAMIPHOS 400 EC**. Always consult your technical advisor when in doubt. Soil and Foliar Application: When heavy nematode infestations occur **HARVEST FENAMIPHOS 400 EC** will control the problem but potato producers should not expect an absolutely clean crop. Dry conditions after application may lead to decreased efficacy. Under abnormal conditions such as the continuous planting of nematode susceptible crops and/or where very high nematode infestation occurs, the use of **HARVEST FENAMIPHOS 400 EC** alone or in combination with other nematicides is not recommended. The potatoes should be harvested as soon as the full crop potential is reached. The practice of storing potatoes in the ground may result in a late nematode infestation.

Crop / Pest	Dosage	Remarks
GROUNDNUTS Nematodes (<i>Ditylenchus destructor</i>)	4,0-8,0 ℓ/h	<u>Irrigated lands:</u> Apply immediately after planting as an overall treatment in approximately 300 ℓ water/ha. Irrigate immediately after application. <u>Dry lands:</u> Apply as an overall treatment in approximately 500 ℓ water/ha and incorporate mechanically (e.g. by harrowing) to a depth of 10cm before planting. Sufficient rainfall after application is necessary for optimal efficiency of HARVEST FENAMIPHOS 400 EC . Use the lower dosage on dry lands or where the infestation pressure is known to be light.
POTATOES <u>Pre-plant in furrow application.</u> All areas except N/Cape and Northwest Province.	250ml in 2.5 ℓ water/100m plant furrow (25 ℓ/ha if rows are 1m wide)	First draw the planting furrows and apply HARVEST FENAMIPHOS 400 EC over the total furrow area. Plant tubers and close furrows. The lower rate is only for use on table potatoes in the Eastern Highveld areas of Gautang and Mapumalanga. Only use on July/August plantings, after 4-year rotation programme with non-susceptible crops, on soils with low nematode pressure. Apply as indicated.
POTATOES <u>Pre-plant in furrow application</u> Northern Cape and Northwest Province (Prieska, Douglas, Hopetown, P.K. le Roux irrigation areas, Vaalharts irrigation area, Barkley West, Vryburg, Tosca and Coetzer dam) <u>Foliar application</u> Western Cape only Nematodes and Aphids	Nematodes 150ml in 2.5 ℓ water/100m plant furrow (15 ℓ/ha if rows are 1m wide) 250ml in 2.5 ℓ water/100m plant furrow (25 ℓ/ha if rows are 1m wide). 4.0 ℓ in 500 ℓ water/ha	Soil must be fumigated with a registered soil fumigation before planting. First draw the planting furrows and apply HARVEST FENAMIPHOS 400 EC over the total furrow area. Plant tubers and close furrows. The soil must be fumigated with a registered soil fumigant before planting. <u>Tractor mounted application.</u> Apply 6 sprays: 1st 3 sprays at 7 day intervals starting 7-10 days from emergence of the crop or after transplanting. Treatments 4 to 6 must be applied fortnightly. Mount spray nozzles such that the spray is directed towards the plant rows to ensure full coverage.
TOMATOES Root-knot Nematodes (<i>Meloidogyne</i> species)	250ml in 2.5 ℓ water/100m planting furrow as a 30cm band on the furrow (25 ℓ/ha if rows are 1m wide).	Apply as an overall pre-plant or pre-transplanting soil treatment 2 weeks to immediately before planting. Immediately after planting cover the plant furrow with soil. Immediately after application incorporate with either a light cultivation (10 cm deep) or with sprinkler irrigation.