

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Insecticide



METAMIDOFOS 585 SL

Reg. No. L 4286 Act/Wet No. 36 of/van 1947

2:29/6/2012-March2017

A systemic and contact water-soluble concentrate insecticide for the control of insect pests on agricultural crops as indicated.

'n Sistemiese en kontak-, waterplossbare konsentraat insekdoder vir die beheer van insekplae op landbougewasse soos aangedui.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

methamidophos (organophosphate) **585 g/l** metamidofos (organofosfaat)

IRAC INSECTICIDE GROUP CODE **1B** IRAC INSEKDODER GROEPKODE

GERBUKSAANWYSSINGS 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:



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: 2784



**TOXIC
GIFTIG**

Willow Set & Print 011 394-4486



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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

**TOXIC****GIFTIG****WARNINGS****Withholding periods:**

Minimum time between last application and harvest:	
Tomatoes	3 days
Potatoes	14 days
Cruciferae	21 days
Peaches	28 days

IMPORTANT NOTES ON MRL'S:

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, VILLA CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

- Handle with extreme care.
- Poisonous when absorbed through the skin or swallowed or inhaled.
- Toxic to fish, bees and wildlife.
- **Flammable** - keep away from heat and flames.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- Re-entry: Do not enter treated area within 2 days after treatment unless wearing protective clothing.
- **NOT FOR HOME GARDEN USE.**
- **In case of poisoning call a doctor and make this label available to him/her.**

Aerial Application:

Notify all inhabitants in the immediate vicinity of the lands to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

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 spray mist.
- Avoid contact with skin and eyes.

- Wear full protective clothing, a suitable respirator, rubber gloves and boots when handling the product, preparing the spray mixture and during application.
- Wash with soap and water after use and after accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying the product, or before washing hands and face and change of clothing.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources.
- Thoroughly clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, 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 one 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.

SYMPTOMS OF HUMAN POISONING

Nausea, headache, tiredness, giddiness, blurred vision and pupillary constriction, vomiting, abdominal pain, diarrhoea, sweating and salivation. Confusion, ataxia, slurred speech, loss of reflexes are some of the central nervous system effects which may lead to misdiagnosis as acute alcoholism. After inhalation of vapours, ocular and respiratory effects appear within minutes. This includes marked miosis, ocular pain, conjunctival congestion, diminished vision, ciliary spasm and brow ache. With acute systemic absorption: rhinorrhoea, hyperemia of upper respiratory tract, tightness in the chest and wheezing respiration. Severe intoxication: salivation, involuntary defecation and urination, sweating, lacrimation, penile erection, bradycardia and hypotension.

FIRST AID TREATMENT

- Remove patient from source of poisoning to a well-ventilated area and keep him/her calm and reassured.
- Skin contact: Remove contaminated clothing and rinse contaminated body area thoroughly with plenty of soap and cold water. Do not rub the skin.
- Eye contact: Flush contamination out of eyes with clean running water for at least 15 to 20 minutes, holding the eyelid(s) open.
- If swallowed: If the water diluted mixture has been swallowed, rinse mouth thoroughly with water. Do not induce vomiting due to the presence of the aromatic solvent. **Seek medical attention immediately.** Administer artificial respiration or closed chest cardiac massage if necessary.
- **Do not** apply mouth-to-mouth respiration.
- **Never** give anything by mouth to an unconscious person.
- **Immediately take the patient to the nearest physician.**

NOTE TO PHYSICIAN

Administer atropine as early as possible in an adequate dosage until signs of atropinisation (dry flushed skin, tachycardia and pulse rate of over 120 per minute) occur. To prevent gastrointestinal absorption in the unconscious that have swallowed this product, perform stomach lavage using bicarbonate solution and activated charcoal. In less severe cases begin with 2 mg atropine intravenously for adults or 0.05 mg atropine/kg body weight for children under 12 years of age and repeat administration of the drug at 15 to 30 minute intervals. Morphine and similar drugs are contra-indicated. Avoid aminoglycosides and succinylcholine, which have a blocking effect on the neuromuscular junction. Phenothiazines, reserpine and theophylline are contra-indicated.

RESISTANCE WARNING

METAMIDOFOS 585 SL is a group code 1B insecticide. Any insect population may contain individuals naturally resistant to **METAMIDOFOS 585 SL** 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 **METAMIDOFOS 585 SL** 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.

NOTE

* **The Peach aphid *Myzus persicae* is a pest on peaches and potatoes, but has become resistant to organophosphates in some areas. METAMIDOFOS 585 SL may possibly, not control this aphid satisfactorily nationwide on these two crops.**

DIRECTIONS FOR USE: Use only as directed.

- Add the required quantity of **METAMIDOFOS 585 SL** to the water in the spray tank and agitate well.
- Spraying should be carried out on dry windless days.
- Ensure that the product is applied by accurate calibrated spray equipment, which is in good working order.

Aerial application:

Aerial application of **METAMIDOFOS 585 SL** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A spray mixture volume of 30 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 25 to 35 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 280 to 300 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomizing equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomizers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

Crop / Pest	Dosage Rate	Remarks
Potatoes Potato tuber moth	100 ml / 100 l water Aerial 500 ml / ha	Full cover spray. With tractor applications use 200 to 500 litres spray mixture per hectare depending on the plant size. Apply preventatively with 10 to 14 day intervals. Ridge at least twice during the growing season.
Aphids	50 ml / 100 l water Aerial 250 ml / ha	Spray at the first sign of infestation and repeat every 10 to 14 days.
Cutworm (Western Cape only)	100 ml / 100 l water Aerial 500 ml / ha	Apply as a full cover spray when the plants emerge. Repeat preventative applications at 10 to 14 day intervals.
Cruciferae Aphids, Caterpillars of Greater cabbage moth & Diamond-back moth	100 ml / 100 l water	Apply when infestations are noticed. The under-side of the leaves should also be wetted. Add a spreader. Repeat weekly.
Peaches Aphids*	100 ml / 100 l water	Apply as a high-pressure full cover spray. Repeat if necessary in case of re-infestation.
Tomatoes African bollworm, & Potato tuber moth (Leaf miner)	100 ml / 100 l water	Apply the spray solution under pressure, to wet the plants thoroughly. Start spraying at flowering time and repeat every 7 to 14 days, as long as these pests remain active. Apply up to 500 litres spray mixture to plants below 60 cm high and 1000 litres or more to plants above 60 cm in height. Will also suppress Red spider mites.
	500 to 1000 ml / ha	Apply as low volume applications, with mist blowers: Ensure thorough coverage. Use the lower dose for smaller plants (up to 60 cm high).
Plusia looper	100 ml / 100 l water	As for the above two caterpillar species. Spraying is only justified after appearance of the pest.