

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Insecticide



METHOMATE 200 SL

Reg. No. L 8123 Act/Wet No. 36 of/van 1947

4: 15/8/2018-Aug2018

*A water soluble liquid insecticide for the control of pests on crops as indicated.
'n Wateroplosbare vloeistof insekdoder vir die beheer van plae op gewasse soos aangedui.*

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

methomyl (carbamate) 200 g/l metomil (karbamaat)

IRAC INSECTICIDE GROUP CODE 1A 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

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UN Number: 2758



Willow Set & Print 011 394-4486



VERY TOXIC
UITERS GIFTIG



DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED
ON CONTAINER/BAG

Batch number:

Lotnummer:

VERWYS NA BESONDERHEDE
GEDRUK OP HOUER/SAK

Date formulated:

Formuleringsdatum:

METHOMATE 200 SL

Reg. No. L 8123 Act/Wet No. 36 of/van 1947

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ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:

methomyl (carbamate) / metomil (karbamaat)200 g/l

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

**VERY TOXIC****UITERS GIFTIG****WARNINGS****Withholding periods:**

Minimum time which should be allowed between last application and harvest or grazing (feeding):	
Barley	35 days
Cotton	14 days
Citrus - 90 ml per 100 l dosage rate	2 days
Citrus - higher than 90 ml per 100 l dosage rate	28 days
Cruciferae	4 days
Grain Sorghum, Lupins, Lucerne, Maize, Pastures, Tobacco (flue-cured) and Wheat	7 days
Peaches	16 days
Potatoes and Green beans	3 days
Tobacco (air-cured)	14 days
Tomatoes	2 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 FRUIT EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

METHOMATE 200 SL MAY CAUSE YELLOWING OF LEAF TIPS WHEN USED ON CERTAIN CARNATION VARIETIES.

DO NOT USE METHOMATE 200 SL IN COMBINATION WITH G49 WETTING AGENT ON TOBACCO SEEDBEDS OR ON CITRUS.

- Handle with extreme care.
- Poisonous by contact, swallowing or inhalation.
- A small quantity may be fatal, if swallowed or inhaled.
- Toxic to fish, bees and wildlife.
- **Flammable** - do not store or spray near open flames.
- Store under lock and key in a cool, dry, place away from food, feeds, fertilizers and drinking water.
- Keep container well closed.
- Keep out of reach of animals, children and uninformed persons.
- Re-entry: Do not enter treated area within 2 days after treatment unless wearing protective clothing.
- **In case of poisoning call a doctor immediately and make this label available to him/her.**

Aerial application:

Notify all inhabitants in the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas e.g. crops, rivers, dams and wetlands.

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 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

- Avoid inhalation of vapour or spray mist, during mixing and spraying.
- Avoid contact with eyes, skin or clothing.
- Wear protective clothing - suitable overalls, rubber boots, gloves, a face shield and a respirator.
- Wash contaminated clothing daily after use with soap and water.
- Wash immediately with soap and water after use, handling and after accidental skin contact.
- In case of eye contact, wash immediately with running water.
- Do not eat, drink or smoke whilst the product is mixed and applied or before washing hands and face and change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams and any other area not under treatment.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate food, 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 the volume 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

Methomyl is a carbamate compound, which inhibits cholinesterase. Systemic effects may begin within a few minutes or several hours of exposure. Symptoms may include nausea, vomiting, diarrhoea, abdominal cramps, headache, vertigo, tightness of the chest, anxiety, ocular pain, ciliary muscle spasm, blurred vision, small pupils, or mydriasis, lacrimation, salivation, sweating, and confusion.

In severe cases, there may be bradycardia, hypotension, pulmonary oedema, convulsions, coma, and death from respiratory failure or cardiac arrest.

FIRST AID TREATMENT

- Remove patient immediately from source of poisoning to a cool, well-ventilated area and keep him/her calm and reassured. If breathing has stopped, give mechanical artificial respiration (not direct mouth-to-mouth). Qualified personnel should perform administration of oxygen. Get medical attention immediately.
- Inhaled: Maintain airway and administer oxygen if available. Keep affected person warm and at rest.
- Skin contact: Remove contaminated clothing immediately and rinse contaminated body area thoroughly with plenty of soap and cold water, followed by alcohol. Do not rub the skin. Emergency personnel should wear gloves and avoid contamination.
- Eye contact: Flush contamination out of eyes with clean lukewarm, gently flowing water for at least 20 minutes, while holding eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.
- Swallowed: If swallowed, rinse mouth thoroughly with water and immediately get medical attention. If person is alert and respiration is not depressed, give syrup of Ipecac followed by water or activated charcoal, if instructed. If vomiting occurs, keep head below hips to prevent aspiration. Establish and maintain airway.
- **Never** give anything by mouth to an unconscious person.
- **Take the person to a physician immediately.**

NOTE TO PHYSICIAN

If consciousness level declines or vomiting has not occurred in 15 minutes, empty stomach by gastric lavage. Avoid aminoglycosides and succinylcholine. Phenothiazines, reserpine, theophylline, morphine, Pralidoxime (2-PAM, Protopam) and other oximes are contra-indicated.

Antidote: Administer atropine sulphate intravenously or intramuscularly. In moderately severe poisoning administer atropine sulphate, 0.4 to 2.0 mg repeated every 15 minutes, until atropinization is achieved (dry, flushed skin, dry mouth and tachycardia). Maintain atropinization by repeated doses for 2 to 12 hours, or longer, depending on the severity of poisoning.

RESISTANCE WARNING

METHOMATE 200 SL is a group code 1A insecticide. Any insect population may contain individuals naturally resistant to **METHOMATE 200 SL** and other group code 1A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **METHOMATE 200 SL** or any other group code 1A 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.

DIRECTIONS FOR USE: Use only as directed.**Mixing instructions:**

- Half fill the spray tank with clean water.
- First add the required quantity of **METHOMATE 200 SL** to a small quantity of water in a mixing tank. Agitate thoroughly, to ensure that the product is completely in suspension.
- Add the premixed **METHOMATE 200 SL** suspension to the water in the spray tank. Use mechanical or hydraulic agitation, to ensure thorough mixing, while the spray tank is slowly filled with water to the required level.
- Continue agitating the spray mixture constantly during mixing and spraying. Ensure thorough mixing.
- Spray the mixture immediately after mixing and do not allow to stand for long periods or do not leave overnight in the mixing tank.

Aerial application:

Aerial application of **METHOMATE 200 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: 30 to 40 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 250 to 280 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
Barley African bollworm	900 ml / ha OR 225 ml / 100 ℓ water	Start application as soon as an infestation is noticed after flowering in the soft dough stage of the ears. Ground application: Apply in up to 400 litres spray mixture per hectare, and ensure complete coverage of the crop.
Cruciferae African bollworm, Aphids, Larvae of the Diamond-back moth & Greater cabbage moth	225 ml / 100 ℓ water	Ground application: Apply when larvae first appear on the leaves. Use up to 500 litres spray mixture per hectare. Repeat the applications with 10-day intervals. During hot weather and peak infestation, shorten the spray intervals to 3 to 5 days. Ensure thorough wetting of the plants.
African bollworm	1125 ml / ha	Ground application: Apply in sufficient water, to ensure thorough coverage. Aerial application: Apply in 30 litres water per hectare as soon as larvae appear. Repeat if necessary.
Citrus African bollworm & Aphids	90 ml / 100 ℓ water	Apply as a light cover spray when aphids and/or larvae appear. Repeat when necessary.
Mealybug	90 ml / 100 ℓ water	Apply as a full cover spray with a high-pressure sprayer as soon as young nymphs appear on the fruit. Repeat if necessary.
Orange dog caterpillar	115 ml / 100 ℓ water	Apply as a light cover spray as soon as larvae are noticed.
Red Scale	450 ml PLUS 500 ml light narrow range mineral oil / 100 ℓ water	Corrective treatment: Apply when 25 to 40 % of the fruit is infested with one or more live nymphs or adult Scales. WARNING <u>Fruit bearing trees:</u> Only one application must be performed between December and March for late cultivars. <u>Early cultivars:</u> Apply only one spray in December or January but not later than January. Do not apply with conventional citrus spray equipment.
Soft green scale	90 ml PLUS 500 ml narrow range mineral oil / 100 ℓ water	Apply as a full cover spray with a high-pressure sprayer when the first visible signs of infestation are noticed. Do not use less than 500 ml mineral oil per 100 litres water.
Waxy scale	115 ml / 100 ℓ water	Apply as a full cover spray with a high-pressure pump as young nymphs of a new generation move from the leaves to the twigs. This treatment will not be successful against adult Waxy scale.

Crop / Pest	Dosage Rate	Remarks
Beans African bollworm	1125 ml / ha	Aerial application: Apply in 30 litres water per hectare as soon as infestation appears. Repeat as necessary.
	225 ml / 100 l water	Ground application: Apply the first application as soon as infestation is noticed. Repeat as necessary. Ensure good coverage of the plants and apply up to 500 litres spray mixture per hectare.
Carnations Carnation worm	450 ml / 100 l water	Ensure good coverage of the whole plant. Repeat weekly.
Maize African bollworm	900 ml / ha	Aerial application: Apply in 30 litres water per hectare as soon as larvae are observed on the silks. METHOMATE 200 SL will not control larvae, which have already entered the cob.
	900 ml / ha	Ground application: Low volume. Apply in 100 to 200 litres water per hectare.
	225 ml / 100 l water	Ground application: Apply in up to 400 litres spray mixture per hectare.
Peaches False codling moth	225 ml / 100 l water	Early cultivars: Apply two sprays, ensuring that trees are thoroughly wetted. Apply the first spray 4 weeks before harvest and the second 10 days later. Also apply a registered product for Fruit fly control.
		Late cultivars: Apply three sprays beginning 6 weeks before harvest and repeat at 10-day intervals. Ensure good coverage of the trees. Also apply a registered product for Fruit fly control.
Potatoes Potato tuber moth & African bollworm	For Tuber moth, begin application as soon as the plants are one month old or sooner with early infestations and repeat applications weekly throughout the growing season. Covering of tubers by ridging is important particularly against Tuber moth. During the growth season potatoes must be ridged at least twice. For African bollworm one application is adequate to control a single outbreak. If further outbreaks occur, repeat application as necessary.	
	1350 to 2250 ml / ha	Aerial application: Apply in 30 litres water per hectare. Use the higher dosage if the spray intervals exceed one week.
	225 ml / 100 l water	Ground application: Ensure a good coverage and wetting of the plants. Apply up to 1000 litres spray mixture per hectare.
Tomatoes Leafminer, African bollworm, Semi- (Plusia) looper, Aphids & Thrips	225 ml / 100 l water	Apply as a full cover spray as soon as fruit begin to set or earlier if necessary and repeat at 7 to 10 day intervals, during the growing season.
Tobacco Leafminer, African bollworm, Tobacco slug & Stinkbugs	225 ml / 100 l water	Ground application: Apply when pests are noticed. For Leafminer, spray weekly and ensure thorough wetting of the plants. Apply up to 500 litres spray mixture per hectare.
	1125 ml / ha	Aerial application: Apply in 30 litres water per hectare when pests are noticed. Repeat when necessary.

Crop / Pest	Dosage Rate	Remarks
<u>Grain Sorghum,</u> <u>Wheat, Lupins &</u> <u>Lucerne</u> African bollworm	900 ml / ha	Aerial application: Apply in 30 litres water per hectare as soon as the pest is observed. Repeat as necessary.
	900 ml / ha	Ground application: Low volume. Apply in 100 to 200 litres water per hectare.
	225 ml / 100 l water	Ground application: Apply in up to 400 litres spray mixture per hectare.
<u>Roses</u> Aphids	115 ml / 100 l water	Apply as a full cover spray. Repeat as necessary. Apply up to 500 litres spray mixture per hectare.
<u>Veldt, Grazing</u> <u>Cotton, Maize &</u> <u>Grain Sorghum</u> Army worms Fall army worm <i>Spodoptera</i> <i>frugiperda</i>	225 ml / ha	Ground application: Apply in 400 litres water as soon as pest is observed and repeat as necessary. Ensure thorough coverage of the target area. Do not exceed two (2) applications of METHOMATE 200 SL per season.