Insecticide



METHOMYL 90 SP

Reg. No. L 7189 Act No. 36 of 1947 N-AR 1084 / W 1301326 5: 24/5/2022 - Nov2022

A water-soluble powder insecticide for the control of pests on crops as indicated

ACTIVE INGREDIENT

methomyl (carbamate)

900 g/kg

GROUP

1A

INSECTICIDE



Hazard Statements:

Fatal if swallowed.

May be harmful in contact with skin.

Fatal if inhaled.

Very toxic to aquatic life with long

lasting effects.

Precautionary Statements:

Do not breathe dust or spray mist. Avoid release into the environment.



UN Number: 2757

Registration holder: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel. (011) 396 2233

Website: www.villacrop.co.za 24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

METHOMYL 90 SP

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IRAC INSECTICIDE GROUP CODE: 1A

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WARNINGS

Withholding periods:

Minimum time which should be allowed between last the application and harvest or grazing (feeding):		
Cruciferae	4 days	
Potatoes	3 days	
Grain sorghum, Maize, Pastures, Wheat, Lupins, Lucerne and Flue-cured tobacco	7 days	
Air-cured tobacco	14 days	
Citrus (20 g per 100 ℓ dosage)	2 days	
Citrus (higher than 20 g per 100 ℓ dosage)	28 days	
Tomatoes	2 days	
Green Beans	14 days	
Peaches	16 days	

NOTE

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.

METHOMYL 90 SP MAY CAUSE YELLOWING OF LEAF TIPS USED ON CERTAIN CARNATION VARIETIES.

DO NOT USE METHOMYL 90 SP IN COMBINATION WITH G49 WETTING AGENT ON TOBACCO SEEDBEDS OR ON CITRUS.

Hazard statements:

Fatal if swallowed.	
May be harmful in contact with skin.	
Fatal if inhaled.	
Very toxic to aquatic life with long lasting effects.	

- Handle with extreme care.
- Toxic to fish, bees and wildlife.
- 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 two (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.

METHOMYL 90 SP

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

Precautionary statements:

Do not breathe dust or spray mist.

Wash hands and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release into the environment.

In case of inadequate ventilation, wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER.

IF ON SKIN: Get medical help.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately.

Rinse mouth.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

- 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.
- Wash immediately with soap and water after use.
- Do not eat, drink or smoke whilst applying or mixing or before washing hands and face and change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean the applicator after use and before using it for other remedies.
- Invert the empty container over the spray or mixing tank to make sure container is empty before destroying the container.
- Rinse the empty container and container used for measurement three times with a volume of water equal
 to a minimum of a third of that of the container. Dispose of wash water where it will not contaminate
 crops, grazing, rivers, dams, etc.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Methomyl	900 g/kg	

SYMPTOMS OF HUMAN POISONING

Headache, 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

 Remove the patient from the source of poisoning to a well-ventilated area and keep him/her calm and reassured.

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- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. **Get emergency medical help immediately.**
- <u>Skin contact:</u> Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.
- Eye contact: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Obtain medical attention if irritation persists.
- If swallowed: Immediately seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.
- Never give anything by mouth to an unconscious person.
- Take the patient to the nearest physician immediately.

NOTE TO PHYSICIAN

Administer 2 to 4 mg (adult) atropine sulphate, intravenously and repeat at 10 minutes intervals until signs of atropinisation (dry, flushed skin and tachycardea) occur. Pralidoxime (2-PAM, Protopam) and other oximes are contra-indicated.

RESISTANCE WARNING

METHOMYL 90 SP is a group code 1A insecticide. Any insect population may contain individuals naturally resistant to **METHOMYL 90 SP** 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 **METHOMYL 90 SP** 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.

Mode of action:

Methomyl is an oxime carbamate compound and belongs to IRAC mode of action group 1A. It is a systemic insecticide and acaracide which is active through contact and ingestion. It is translocated acropetally through the plant in the xylem.

DIRECTIONS FOR USE: Use only as directed.

Mixing instructions:

- Add the required quantity of METHOMYL 90 SP to a half-full spray tank and mix thoroughly and fill up slowly while agitating (mechanical or hydraulic).
- Commence agitating mixture a few minutes before starting to spray.
- Agitation is necessary to completely dissolve the insecticide.
- Spraying should be carried out preferably on dry, windless days and the crops should be thoroughly wetted.

General directions:

• Use at all times correctly calibrated and suitable equipment in good working condition, to ensure wetting of all parts of the plant thoroughly.

Aerial application:

Aerial application of **METHOMYL 90 SP** 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:

- <u>Volume</u>: 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.
- <u>Droplet coverage</u>: 30 to 40 droplets per cm² must be recovered at the target area.

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- <u>Droplet size</u>: 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.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when the aircraft dives, is in a climb or when banking.
- Use suitable <u>atomising equipment</u> 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 atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the <u>wind speed</u> exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high humidity conditions</u> (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
Cruciferae Larvae of the Diamond-back moth, Greater cabbage moth and Aphids	50 g / 100 <i>ℓ</i> water	Apply when larvae first appear on the leaves. Use up to 500 litres spray mixture per hectare. During hot weather and peak infestation, shorten the spray intervals to 3 to 5 days. Ensure thorough wetting of the plants.
African bollworm	250 g / ha	Aerial application: Apply in 30 litres water per hectare as soon as larvae appear. Repeat if necessary. Ground application: Apply in sufficient water and ensure good coverage.
Carnations Carnation worm	100 g / 100 ℓ water	Ensure good coverage of the whole plant. Repeat weekly.
Beans African bollworm	250 g / ha	Aerial application: Apply in 30 litres water per hectare as soon as infestation appears. Repeat as necessary.
	50 g / 100 ℓ water	Ground application: Ensure good coverage of the plants and apply up to 500 litres spray mixture per hectare.
Tomatoes Leafminer, African bollworm, Semi looper, Aphids & Thrips	50 g / 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.

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Crop / Pest	Dosage Rate	Remarks
Citrus Aphids & African bollworm	20 g / 100 ℓ water	Apply as a light cover spray when Aphids and/or larvae appear. Repeat when necessary.
Mealybug	20 g / 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	25 g / 100 ℓ water	Apply as a light cover spray as soon as larvae are noticed.
Red scale	100 g PLUS 3 ℓ 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 Fruit bearing trees: Only one application must be made between December and March for late cultivars. Early cultivars: May only be sprayed once in December or January and not later than January. Application must be performed with high-pressure compressor type handguns. Do not apply with conventional citrus spray equipment.
Soft green scale	20 g 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 seen. Do not use less than 500 m/ mineral oil per 100 litres water.
Waxy scale	25 g / 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.
Roses Aphids	25 g / 100 ℓ water	Apply as a full cover spray. Repeat as necessary. Apply up to 500 litres spray mixture per hectare.
Peaches False codling moth	50 g / 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.
Tobacco Leafminer, African bollworm, Tobacco slug & Stinkbug	50 g / 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.
African bollworm, Tobacco slug & Stinkbug	250 g / ha	Aerial application: Apply in 30 litres water per hectare when pests are noticed. Repeat when necessary.

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Crop / Pest	Dosage Rate	Remarks
Potatoes Potato tuber moth & African bollworm	300 to 500 g / ha	Aerial application: Apply in 30 litres water per hectare. Use the higher dosage if the spray intervals exceed 1 week. For tuber moth, begin application as soon as the plants are 1 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. For African bollworm one application is adequate to control a single outbreak. If further outbreaks occur, repeat application.
	50 g / 100 ℓ water	Ground application: Ensure a good coverage and wetting of the plants. Apply up to 1000 litres spray mixture per hectare.
Veld and Grazing Army worms	50 g / ha	Ground application: Apply in 400 litres water as soon as the pest is observed.
Grain sorghum, Wheat, Lupins and Lucerne African bollworm	200 g / ha	Aerial application: Apply in 30 litres water per hectare as soon as the pest is observed. Repeat as necessary.
	200 g / ha	Ground application: Low volume. Apply in 100 to 200 litres water per hectare.
	50 g / 100 ℓ water	Apply up to 400 litres spray mixture per hectare.
Maize African bollworm	200 g / ha	Aerial application: Apply in 30 litres water per hectare as soon as larvae are observed on the silks. METHOMYL 90 SP will not control larvae, which have already entered the cob.
	200 g / ha	Ground application: Low volume. Apply in 100 to 200 litres water per hectare.
	50 g / 100 ℓ water	Apply up to 400 litres spray mixture per hectare.

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