Read the label before opening the container. For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

RESTRICTED USE AGRICULTURAL REMEDY

THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

OXAMYL 310 SL

South Africa Reg. No: L9246 Act No. 36 of 1947

IRAC INSECTICIDE GROUP CODE: 1A

A water-soluble liquid insect- and nematicide for the protection of groundnuts, potatoes, pineapples, sugarcane, tobacco and tomatoes against plant parasitic nematode species as listed and for the control of potato leaf miner and the reduction of aphids in potatoes and thrips in sugarcane and onions and snails in grapevines.

ACTIVE INGREDIENT:

Oxamyl (carbamate)..... 310g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946
Poison Centre: +27 861 555 777



DANGER

HAZARD STATEMENTS

- Highly flammable liquid and vapour.
- Fatal if swallowed.
- Toxic in contact with skin.
- Fatal if inhaled.
- Causes damage to organs.
- Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

- Do not eat, drink, or smoke when using this product.
- Do not breathe mist/spray.

enviro™ bio-chem

Registration holder: Erintrade cc t/a RT Chemicals
Co. Reg. No: CK2001/036403/23
44 Kerk street, Lichtenburg, 2740, North West, South Africa
Tel: +27 12 006 0063 | Fax: 086 461 2465
Web: www.envirobiochem.co.za

Expiry Date:
Batch No:
Date of Manufacture:

UN No. 2991

WARNINGS:

• **Withholding Period: Allow the following minimum number of days from the last spray to harvest or grazing.**

Groundnuts	80 days	Pineapples	120 days
Potatoes	40 days	Onions & Chives	35 days
Tomatoes	21 days	Sugarcane	120 days
Tobacco	42 days		

- Handle with extreme care.
- Highly flammable liquid and vapour.
- Fatal if swallowed.
- Toxic in contact with skin.
- Fatal if inhaled.
- Causes damage to organs.
- Toxic to aquatic life with long lasting effects.
- Toxic to fish, bees and wildlife.
- Keep out of reach of children, uninformed persons and animals.
- Store under lock and key away from food, feedstuffs, seed and fertiliser in a cool place (below 20°C).
- **In the case of poisoning, call a doctor and make this label available to him/her.**

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 pest 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.

- Re-entry period: Do not enter the treated field within 2 days after application unless wearing protective clothing.
- Aerial Application: Notify all inhabitants in the immediate vicinity and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

PRECAUTIONS:

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Do not breathe mist/spray.
- Wash hands, forearms, and face thoroughly after handling.
- Do not eat, drink, or smoke when using this product.
- Avoid release to the environment.
- Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
- In case of inadequate ventilation wear respiratory protection.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- IF exposed: Call a POISON CENTER or doctor/physician.
- Take off contaminated clothing and wash it before reuse.
- Collect spillage
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams and areas not under treatment.
- Triple rinse empty container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water

equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

RELEVANT SUBSTANCES:

Oxamyl 32 %
Methanol < 40 %

SYMPTOMS OF HUMAN POISONING

Headache, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, blurred vision, muscle twitching, unusually small pupils, respiratory distress, coma.

In case of poisoning, call the following number: +27 861 555 777

FIRST AID TREATMENT

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
If swallowed, drink 1 to 2 glasses of water and induce vomiting by tickling the back part of the throat.
Repeat until vomit is clear and free from the smell of poison.
Do not apply direct mouth to mouth respiration.
Never give anything by mouth to an unconscious person
IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

NOTE TO PHYSICIAN:

Administer Atropine Sulphate, intravenously (1.2 - 2 mg/adult) every 10 - 30 minutes until signs of atropinization (dry flushed skin and tachycardia) appear. Maintain atropinization until the patient recovers. Pralidoxime (2 PAM, Protopam) and other oximes are contra indicated for **OxaMyl 310 SL** exposure alone. However, for exposure to **OxaMyl 310 SL** and organophosphorus insecticides, 2 PAM may be used as required to supplement the atropine sulphate treatment. **Do not use morphine.**

RESISTANCE WARNING:

For resistance management, **OxaMyl 310 SL** is a **group code 1A** insecticide. Any insect population may contain individuals naturally resistant to **OxaMyl 310 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 **OxaMyl 310 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 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.

AERIAL APPLICATION:

Aerial application of **OxaMyl 310 SL** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS 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 30ℓ 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 microns is recommended. Limit the production of fine droplets less than 150 microns (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 atomising 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 atomisers 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 15km/h.
- 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:
  - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
  - 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.

RESTRICTED USES: Use only as directed.
- Apply **OxaMyl 310 SL** to the foliage of actively growing crops. Ensure thorough wetting of the foliage.
- **OxaMyl 310 SL** must be applied in water with pH 5 to 6. Water with a pH over 7 must be buffered to pH 5 to 6.
- Only use phosphoric acid-based acidifiers or buffers. The use of acetic acid buffers are not recommended with OxaMyl 310 SL.
- Use spray mixture without delay and do not allow to stand for prolonged periods. Soils with a high pH (i.e. alkaline) will result in reduced efficacy.
- Optimal systemic activity of **OxaMyl 310 SL** depends on translocation of the active ingredients in the treated plant. Reduced efficacy may occur when the crop is under stress (drought, waterlogging, heat, etc.).

De-activation of OxaMyl 310 SL Solutions:
Excess **OxaMyl 310 SL** remaining in the spray tank after spraying is completed should be deactivated by adding 2.5kg sodium carbonate per 100ℓ **OxaMyl 310 SL** spray mixture remaining in the tank.

CROP/PEST	DOSAGE	REMARKS
GROUNDNUTS Groundnut Pod Nematode *(Ditylenchus Destructor)*	1.2ℓ/100ℓ water	Apply as a foliar spray, at least 250ℓ spray mixture per hectare at the commencement of peg formation (for the variety "Sellie" this is approximately 60 days after planting). Ensure thorough wetting of the foliage.

CROP/PEST	DOSAGE	REMARKS
PINEAPPLES Plant Parasitic Nematodes *(Meloidogyne Javanica)*	<u>First Application:</u> 640mℓ/100ℓ water <u>Follow-up Applications:</u> 320mℓ/100ℓ water	<u>Plant Crop:</u> Where heavy eelworm infestation occurred on previous crops, fumigate the soil with a registered fumigant before planting. Ensure that soil moisture is sufficient to sustain plant growth. For best results plants should be in a healthy condition at application. Apply the first foliar application as soon as root formation commences at the rate of 500ℓ spray mixture per hectare. Direct the spray on plant rows and ensure thorough wetting. Apply 5 repeat applications at 4 week intervals and gradually increase the spray volume up to 1 000ℓ per ha for mature plants.
	<u>Ratoon Crops:</u> 320mℓ/100ℓ water	<u>Ratoon Crops:</u> Only recommended if the previous crops were treated for eelworm. Commence the spray programme immediately after the plant crop is harvested. Apply 6 sprays at 4 week intervals at a rate of 1 000ℓ spray mixture per hectare.
POTATOES Root Knot Nematode *(Meloidogyne Species)* And the suppression of Aphids	<u>Ground Application:</u> 800mℓ/100ℓ water	Fumigate the soil before planting with a registered fumigant. Apply 250ℓ spray mixture per hectare one week after crop emergence. Repeat after 4 weeks at a rate of 600ℓ spray mixture per hectare. In the case of heavy infestations a further application of 600ℓ spray mixture per ha must be made 3 to 4 weeks after second spray.
	<u>Aerial application:</u> 4ℓ/ha	Fumigate the soil before planting with a registered fumigant. Apply in at least 30ℓ water per hectare. Apply the first application one week after crop emergence. Repeat after 4 weeks and in the case of heavy infestations, again after a further 3 to 4 weeks.
Potato leaf miner *(Liriomyza huidobrensis)*	<u>Foliar application:</u> 3ℓ/ha	Apply in 400-600L water per ha ensuring through coverage of the foliage. Apply in a programm commencing application at the first sign of infestation on the leaves and repeat at 7-14 day intervals. Use the shorter interval under conditions of continuous high infestation. It is recommended that a minimum of 2 consecutive applications (=block applications) of **OxaMyl 310 SL** be used, where-after it is alternated with insecticides with different mode of action if needed. Do not exceed 3 applications per season or a maximum of 12L of **OxaMyl 310 SL** per ha per season. Refer also to above instructions regarding root knot nematode control. If the spray water has a pH of above 7, it should be buffered at pH 5-6 with suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. Allow 30 days between last application and harvest.

CROP/PEST	DOSAGE	REMARKS
GRAPEVINES Snails *(Brown snail, Helix aspersa and dune snail, Theba pisana)*	<u>Dormant spray:</u> 2.5ℓ/ha	Apply as a single dormant spray to vines before bud burst when snails are first noticed. For optimum efficacy apply **OxaMyl 310 SL** early in the morning or under cool, overcast conditions when snails are active. Apply as a directed spray 200-500L water per ha. If the spray water has pH of above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. **NB: Prior to application of OxaMyl 310 SL drive out or remove birds (e.g. ducks etc) mammals and other wild life (e.g. tortoises) from the area where OxaMyl 310 SL will be applied.**
ONIONS & CHIVES Thrips *(Thrips tabaci)*	<u>Foliar application:</u> 3ℓ/ha	Apply preventively or early correctively at first signs of the adult and/or nymphal stages in 500-700L water per ha at spray intervals of 7 to maximum of 14 days. Use the shorter spray interval of 7 days when **OxaMyl 310 SL** is applied early correctively, under favourable environmental conditions for pest development or under high infestation levels of thrips. Do not exceed a maximum of 4 **OxaMyl 310 SL** applications per planting. Apply **OxaMyl 310 SL** as part of a spray programme consisting of at least two consecutive applications (=block application). Alternate the **OxaMyl 310 SL** block applications with registered thripicides with a different mode of action. The O**xaMyl 310 SL** applications indicated above will reduce the thrip numbers by 60-90% taking into consideration the crop stage, crop growth conditions, pest infestation levels and prevailing environmental conditions. If the spray water has a pH of above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. Allow 35 days between las application and harvest.

CROP/PEST	DOSAGE	REMARKS
SUGARCANE Ratoon crops only Root knot nematodes *(Meloidogyne species),* Lesion nematodes *(Pratylenchus species)*	<u>Foliar application:</u> 7.2 -9.6ℓ/ha in 300ℓ water (86-115mℓ in 3.6ℓ water per 100m linear row length at 1,2 row spacing)	Spray **OxaMyl 310 SL** solution onto the can foliage by means of knapsack or low pressure tractor mounted boom sprayer. Apply **OxaMyl 310 SL** at the 6-8 leaf stage, usually at about 6-8 weeks after the previous harvest, provided good tillering has taken place. Winter cut fields may take longer to reach the 6-8 leaf stage. The use of **OxaMyl 310 SL** is only recommended when plants are growing actively. Use the 9.6ℓ per ha dosage rate in very weak sand (less than 5% clay) and in areas where high population of nematodes may occur. If the spray water has pH above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution.
Plant and Rantoon crops: Reduction of thrips *(Fulmekiola serrata)*	<u>Foliar application:</u> 60mℓ per 100m linear row length in 2 to 2.5ℓ water (5ℓ/ha in 150-200ℓ water based on a 1,2m row spacing)	The application of **OxaMyl 310 SL** according to the label instructions below results in a 60-90% reduction of thrips in sugarcane depending on the crop condition, pest infestation level and climatic conditions. Spray **OxaMyl 310 SL** solution by means of knapsack or low pressure tractor mounted boom sprayer as a foliar application with a single hollow or preferably full cone nozzle directed over each plant row. Apply **OxaMyl 310 SL** as an early corrective application at first signs of thrips infestation or mottling between the 2 leaf but not later than 6 leaf stage (at maximum plant height of 0,5m) of the crop. The application timing for **OxaMyl 310 SL** is critical for the effective control of thrips. **OxaMyl 310 SL** applied before the 2 leaf and later than the 8 leaf stage of the crop is significantly less effective against thrips. A follow up **OxaMyl 310 SL** application may be required 21-28 days after the first application based on scouting of live thrips under conditions of continues thrip re-infesation. If the spray water has a pH of above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. The use of **OxaMyl 310 SL** is only recommended when plants are growing actively. Do not apply more than two **OxaMyl 310 SL** applications per season against thrips Do not exceed a maximum of 10L of **OxaMyl 310 SL** per season in cane. Allow a period of 120 days between application and harvest.

CROP/PEST	DOSAGE	REMARKS
TOBACCO Root knot nematodes *(Meloidogyne species* excluding *M. chitwoodi* and *M. fallax)*	Seedbed:** 80mℓ/10ℓ water	**Fumigate soil before planting with a registered fumigant.** Implement the full recommended programme to ensure effective protection against nematode (eelworm) infestation. Drench the seedbeds 48 - 24 hours prior to transplanting with 2ℓ of the spray solution per square meter of seedbed surface. Do not use the solution as transplant water or for dipping.
	Foliar application after transplanting 800mℓ/100ℓ water	Where no or inadequate control nematodes occurred during the preceding planting season, or where severe nematode infestation may occur-apply 250L spray solution per ha as a foliar application 2 weeks after transplanting. Repeat after 3 week with 500L spray solution per ha. Where light nematode infestation normally occurs and where effective nematode control was applied during the preceding planting season – apply 500L spray solution per ha as a foliar application 5 weeks after transplanting. If the spray water has a pH of above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. Allow 42 days between last application and harvest. **IMPORTANT: REFER TO NOTES APPLICABLE ON THE CONTROL OF ROOT KNOT NEMATODES IN TOBACCO AND TOMMATOES WITH OXAMYL 310 SL.**
TOMATOES: Root knot nematodes *(Meloidogyne species* excluding *M. eloidogyne, M. chitwoodi* and *M. fallax)*	Seedbed:** 40mℓ/10ℓ water Seed trays:** 40mℓ/10ℓ water Foliar application after transplanting: 800mℓ/100ℓ water	Fumigate soil before planting with a registered fumigant. Implement the full programme to ensure effective protection against nematode (eelworm) infestation. Drench seedbeds 48-24 hours prior to transplanting with 2L of the spray solution per square meter of the seedbed surface. Spray seedling trays 48 -24 hours prior to transplanting with 0.5L of the spray mixture per square meter of the total seed tray surface. Apply 250L spray solution per ha as foliar application 2 weeks after transplanting. Repeat after 3 weeks with 500L spray solution per ha. If the spray water has a pH of above 7, it should be buffered at a pH of 5-6 with a suitable buffer agent. However do not add any other adjuvant types to the **OxaMyl 310 SL** spray solution. Allow 21 days between last application and harvest. **IMPORTANT: REFER TO NOTES APPLICABLE ON THE CONTROL OF ROOT KNOT NEMATODES IN TOBACCO AND TOMATOES WITH OXAMYL 310 SL.**

IMPORTANT; NOTES APPLICABLE TO ROOT KNOT NEMATODE CONTROL WITH OXAMYL 310 SL IN TOBACCO AND TOMATOES:

1. The nematicidal, systemic and/or residual activity of **OxaMyl 310 SL** are strongly influenced by factors beyond the manufacturers control for example ineffective and/or to shallow fumigation of the soil prior to planting, soil type (very sandy soils that leaches easily) high soil pH, or stress conditions (especially drought) on the crop. Some root knot nematode damage in tobacco and tomatoes must be expected under above-mentioned conditions or when nematode infested seedlings are planted.
2. If excessively high root knot nematode levels are present in the soil due to combination of the abovementioned factors and/or when abnormal cultural practices e.g. the continuous planting of nematode susceptible crops on the same fields are followed, crop losses due to root knot nematode damage may occur in spite of the chemical control measures applied. If last mentioned factors occur the desired control of root knot nematodes may not be achieved with **OxaMyl 310 SL** in tobacco and tomatoes not even when used in combination with other nematicides.

Soil of seedbeds or seed trays must be fumigated with a **registered fumigant as usual against nematodes prior to sowing.