

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



Insecticide

PRIME 50 EC

Reg. No. L 8660 Act No. 36 of 1947
N-AR 1230 / W1301424

4: 10/6/2022 – Feb2025

An emulsifiable concentrate contact and stomach insecticide for the control of insects on crops as listed.

ACTIVE INGREDIENT

lufenuron (benzamide) 50 g/l

GROUP

15

INSECTICIDE



WARNING

Hazard Statements:

Flammable liquid and vapour.
May be harmful if swallowed or in contact with skin.
May be harmful if swallowed and enters airways.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.

Suspected to cause cancer.

Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
Avoid release into the environment.

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villa



UN Number: 1993

Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

65 Botes Road, Glen Marais, Kempton Park, 1619

Tel. (011) 396 2233

Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:

Griffon Poison Information Centre (National): +27 82 446 8946

Poison Information Helpline (National): +27 861 555 777

24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

DIRECTIONS FOR USE ENCLOSED
Batch Number: _____
Expiry Date: _____
Date of Manufacture: _____

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

PRIME 50 EC

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N-AR 1230 / W 1301424

IRAC INSECTICIDE GROUP CODE: 15

ACTIVE INGREDIENT:

lufenuron (benzamide) 50 g/l

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

PO Box 10413, ASTON MANOR, 1630,

Tel. (011) 396 2233

WARNINGS**Withholding periods:**

Minimum number of days between the last application and harvest or grazing:	
Maize	30 days
Tobacco	66 days

NOTE

THE MAXIMUM RESIDUE LEVELS (MRL'S) WILL NOT BE EXCEEDED, PROVIDED APPLICATIONS ARE APPLIED AS HEREWITH PRESCRIBED. WHEN THE CROP IS DESTINED FOR THE EXPORT MARKET, THE INSTITUTION OF CONCERN MUST BE CONTACTED, PRIOR TO THE USE OF PRIME 50 EC IN A SPRAY PROGRAMME.

Hazard statements:

Flammable liquid and vapour.
May be harmful if swallowed.
May be harmful if swallowed and enters airways.
May be harmful in contact with skin.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
Suspected to cause cancer.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- **Highly toxic to crustaceans.** Avoid contamination of water bodies. Strictly use according to instructions to prevent damage to aquatic systems.
- Sensitive to freezing and warm storage conditions.
- Store away in a cool dry place away from food and feeds.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Aerial application:

Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow the 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 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 the application. The registration holder, furthermore, does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for the 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 uncertainty.

PRECAUTIONS**Precautionary statements:**

Obtain, read and follow all safety instructions before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid breathing mist, vapours and spray.
Wash hands thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED: Get emergency medical help immediately.
IF ON SKIN or skin irritation or rash occurs: Get medical help.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned, get medical advice.
Do NOT induce vomiting.
If eye irritation persists: Get medical help.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Avoid contact with eyes and skin.
- 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 or 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 THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler www.croplife.co.za. Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.
- **Do not** re-use the empty container for any other purpose.
- Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Relevant hazardous components	
Lufenuron	50 g/l
Isophorone	< 250 g/l
Fluidar 100	< 600 g/l
Toximul DL66	< 100 g/l
Toximul DM83	< 50 g/l

FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.
- **Skin contact:** 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 or rash occurs.**
- **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.**
- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. **Seek medical attention if you feel unwell after inhalation.**
- **Ingestion:** **Seek medical attention immediately** 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.

NOTE TO PHYSICIAN

Treat symptomatically and supportively. No specific antidote known.

RESISTANCE WARNING

PRIME 50 EC is a group code 15 insecticide. Any insect population may contain individuals naturally resistant to **PRIME 50 EC** and other group code 15 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly and exclusively in programs. These resistant insects may not be controlled by **PRIME 50 EC** or any other group code 15 insecticides.

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 programs.

For specific information on resistance management contact the registration holder of this product.

Mode of action:

PRIME 50 EC contains **Lufenuron**. **Lufenuron** is a benzoylurea, acting mostly by ingestion and belongs to IRAC mode of action group 15. It is a chitin biosynthesis inhibitor which results in larvae being unable to moult, and also result in cessation of feeding. It acts trans-ovarially and reduces fecundity and egg hatching. It is used against larvae of the orders Lepidoptera and Coleoptera.

DIRECTIONS FOR USE: Use only as directed.**Product information:**

- **Product properties:**
 - **PRIME 50 EC** is an effective alternative insecticide for the control of foliage feeding Lepidopteran pests (larvae of moths and butterflies) resistant to insecticides from other mode of action groups (e.g., pyrethroids or organophosphates).
 - The active ingredient of **PRIME 50 EC** inhibits the biosynthesis of chitin, causing interference with the development of the larva's cuticle.
 - **PRIME 50 EC** shows good stomach and medium contact activity.
 - **PRIME 50 EC** displays ovicidal activity.
 - **PRIME 50 EC** is not pH sensitive.
- **Crop and environmental properties:**
 - No unacceptable residue levels will be found in or on the crop at time of harvesting if **PRIME 50 EC** is used as directed.
 - **Honeybees:** **PRIME 50 EC** is safe for honeybees.
 - If applied at the dosage rates indicated below, **PRIME 50 EC** will be safe to adult stages of natural enemies. However, immature stages of certain predatory natural enemies can be affected adversely.
 - **PRIME 50 EC** will not harm predacious mite species.

Crop recommendations:**1. Potatoes:**

- Potatoes remaining in the soil for a longer period will receive protection against Tuber moth larvae only when **PRIME 50 EC** is applied as directed.
- **PRIME 50 EC** applications must follow on a preceding maintenance programme using insecticides, with non-related mode of action, during the early stages of crop development.
- Ridge at least twice during the season.
- Acceptable control will only be achieved by applying multiple successive applications of **PRIME 50 EC**. The number of applications depends on the intensity of re-infestations.
- **Do not** apply more than six (6) consecutive treatments per crop season.

Compatibility:

- **PRIME 50 EC** is compatible with **Judo 50EC**, **Judo Secure 106 CS** and a Villa approved buffer + surfactant adjuvant.
- The compatibility of **PRIME 50 EC** may be influenced by several factors. As factors influencing compatibility may vary, a physical compatibility test must always be performed before such tank mixture is sprayed. In the case of uncertainty, contact the supplier or the registration holder.
- **Do not** use **PRIME 50 EC** in tank mixtures with alkaline products (e.g., Bordeaux mixture), **Sulphur**, **Captab**, **Mancozeb**, **Endosulfan**, Carbamates, and compounds containing copper.
- When **PRIME 50 EC** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on these labels, must be adhered to.

Mixing instructions:

- Fill the spray tank to at least half of the required volume with clean water. Ensure sufficient agitation and then add the required measured volume of **PRIME 50 EC** to the water.
- Maintain agitation during the mixing process.
- Apply the prepared spray mixture as soon as possible (recommended within 4 hours). Ensure agitation during application.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

Application instructions:General:

- Do not apply during the heat of the day or if rain is pending.
- All applications must be performed with correctly calibrated spray equipment, which is in good working order, to give the desired coverage for that particular method of application.
- Ensure that thorough penetration and wetting is obtained.

Ground application:

- **PRIME 50 EC** can be applied by means of chemigation (only potatoes), ground spraying equipment such as tractor mounted boom and nozzle sprayers or mist blowers, standard knapsack sprayers or motorised mist blowers.

Aerial application:

Aerial application of **PRIME 50 EC** 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 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 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 Larvae of the potato Tuber moth (<i>Phthorimaea operculella</i>)	800 ml / ha	<u>Ground application:</u> Apply in a minimum of 500 litres water per hectare. <u>Aerial application:</u> Apply in 30 litres water per hectare. Commence application after flowering at the start of senescence (leaves start colouring), or when tubers start to fill (bulking stage). If necessary, repeat at two weekly intervals until leaves stop growing. Thereafter, until the crop is lifted, apply at 7-to-10-day intervals.
Tobacco Larvae of the potato tuber moth (<i>Phthorimaea operculella</i>) (Tobacco leaf miner)	100 ml / 100 l water	<u>Before transplanting:</u> A single application 7 days prior to transplanting can be performed on seedlings in seed beds, to protect them just after transplanting. <u>After Transplanting:</u> First application must be performed 2 to 3 days after transplant as a directed spray in a 30 cm wide band over the row. Follow up with a second application 7 days after the first. Apply two (2) more sprays at 14-day intervals.

NOTE

- A minimum of two (2) consecutive applications of **PRIME 50 EC** are required to obtain acceptable control.
- Apply at least four (4) treatments in the fields.
- Ensure complete coverage of the plants when applying **PRIME 50 EC**. Increase the spray volume as the plants' size increase.
- Young transplants: Apply in a 30 cm wide band over the rows. **PRIME 50 EC** applied onto the soil on both sides of the rows will also kill freshly laid Tuber moth eggs.
- Older transplants: (3rd & 4th applications) – Ensure that the lower half of the plants are thoroughly covered. If necessary, rows must be sprayed from both sides.

Crop / Pest	Dosage rate	Remarks
Maize Sorghum stem borer, <i>Chilo partellus</i> (First and second generation)	7 ml / 100 m row PLUS 1.2 ml / 100 m row Judo 50 EC OR 0.6 ml / 100 m row Judo Secure 106 CS	<u>Ground application:</u> Apply as soon as 10 % plants show shot-hole damage and direct spray into the funnel area of the plants. If necessary, apply a follow-up treatment shortly before tasseling. A minimum of 3 litres spray mixture must be applied per 100 m row. In tank mixtures with Judo 50 EC or Judo Secure 106 CS add Buffernat at 0.05% (50 ml per 100 litres) to the spray mixture.
Maize stalk borer, <i>Busseola fusca</i> (First and second generation)	7 ml / 100 m row PLUS 1.2 ml / 100 m row Judo 50 EC OR 0.6 ml / 100 m row Judo Secure 106 CS	Apply as soon as eggs are found on 5 % of the plants or 10 % plants show shot-hole damage. A second application may be required 10 to 14 days later. Direct sprays into plant funnel area. Use at least 3 litres water per 100 m row. In tank mixtures with Judo 50 EC or Judo Secure 106 CS add Buffernat at 0.05% (50 ml per 100 litres) to the spray mixture.

The following products mentioned in this label may be replaced with equivalent products:

- **JUDO 50 EC** (L 7785 / N-AR 1104 / W 1301413) = **LAMBDA 50 EC** (L 7787) = **LAMBDA-CYTHRIN 50 EC** (L 8343) and
- **JUDO SECURE 106 CS** (L 8938) = **LAMBDA SECURE 106 CS** (L 8939)

JUDO 50 EC and **JUDO SECURE 106 CS** are registered products of
VILLA CROP PROTECTION (PTY) LTD.

LAMBDA 50 EC and **LAMBDA SECURE 106 CS** are registered products of
UNIVERSAL CROP PROTECTION (PTY) LTD.

LAMBDA-CYTHRIN 50 EC is a registered product of **CROPASURE (PTY) LTD.**