DIRECTIONS FOR USE ENCLOSED

Insecticide



ARENA 206 EC

Reg. No. L 8532 Act No. 36 of 1947 N-AR 1102 / W1301474

5: 24/01/2023 - March2023

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

ACTIVE INGREDIENTS

benfuracarb (carbamate) lambda-cyhalothrin (pyrethroid)

200 g/e 6 g/e

GROUP

1A;3A INSECTICIDE



Hazard Statements:

Harmful if swallowed

May be fatal if swallowed and enters airways. Causes mild skin irritation.

Causes serious eve damage.

Toxic if inhaled

Suspected of damaging fertility or the unborn child

Very toxic to aquatic life with long lasting effects

Precautionary Statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Avoid release into the environment





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)

Date of Manufacture:

ARENA 206 EC

Reg. No. 8532 Act No. 36 of 1947 N-AR 1102 / W1301474

IRAC INSECTICIDE GROUP CODE: 1A & 3A

ACTIVE INGREDIENTS:

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 last application and harvest:		
Maize	Do not apply after tassel emergence	
Sorghum	28 days	

Hazard statements:

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May be fatal if swallowed and enters airways.	
Causes mild skin irritation.	
Causes serious eye damage.	
Toxic if inhaled.	
Suspected of damaging fertility or the unborn child.	
Very toxic to aquatic life with long lasting effects.	

- Handle with care.
- Very toxic to Bees and wildlife.
- Use the product according to directions for application to limit the risk towards Bees, beneficial pest parasites, beneficial predators and fish.
- Do not apply when bees are most active. Do not direct spray towards Beehives or allow spray drift in their vicinity.
- Do not spray over or allow drift to contaminate water bodies such as dams, ponds, rivers, streams or fish hatcheries.
- Store behind lock and key, in a cool, dry, well-ventilated place away from food, feedstuff, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within one (1) day after treatment unless wearing protective clothing.
- In case of poisoning, immediately call a doctor and make this label available to him/her.

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 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. 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 products not indicated on the label, the occurrence of resistance of the pest against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore 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 the event of any uncertainty.

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PRECAUTIONS

Precautionary statements:

Obtain, read and follow all safety instructions before use.

Avoid breathing fumes, mists, vapours or spray.

Wash hands thoroughly after handling. Do not touch eyes.

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

Use only outdoors or in a well-ventilated area.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

IF SWALLOWED OR INHALED: Get emergency medical help immediately.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.

IF exposed or concerned, get medical advice.

Rinse mouth.

Do NOT induce vomiting.

If skin irritation occurs: get medical help.

Collect spillage.

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

Store locked up.

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

- Avoid eye splashes, skin contact and inhalation of spray mist.
- Wash contaminated clothing after use.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Thoroughly clean 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 (3) 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.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Benfuracarb	200 g/ℓ	
Lambda-cyhalothrin	6 g/ℓ	
Calcium dodecylbenzene sulfonate	<50 g/ℓ	
Tristyryl phenol ethoxylate	<100 g/ℓ	
Aromatic hydrocarbon	<700 g/ℓ	

SYMPTOMS OF HUMAN POISONING

Headache, fatigue, faintness, giddiness, excessive sweating, lacrimation, salivation, nausea, abdominal pain, vomiting, diarrhoea, tightness of the chest, anxiety, blurred vision, ocular pain, muscle twitching beginning in the eyelids and tongue, small pupils or mydriasis, respiratory distress, confusion, convulsions and coma. **Benfuracarb** is a carbamate compound, which inhibits cholinesterase. Systemic effects may begin within a few minutes or after several hours of exposure.

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. IF exposed or concerned, get medical
 advice.
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. **Seek medical attention immediately.**

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- <u>Skin contact:</u> Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Seek medical attention if irritation occurs.**
- <u>Eye contact:</u> Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**
- <u>Swallowed:</u> **Do not induce vomiting due to the aromatic solvent.** Do not give anything by mouth to an unconscious person. **Obtain medical attention immediately** or call a poison control centre for treatment advice. If the person is alert and respiration is not depressed, rinse mouth thoroughly with water and give large quantity of water to drink. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen.

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, aminophylline, morphine, furosemide, ethacrynic acid, 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

ARENA 206 EC is a group code 1A and 3A insecticide. Any insect population may contain individuals naturally resistant to **ARENA 206 EC** and other group codes 1A and 3A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **ARENA 206 EC** or any other group codes 1A and 3A 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 programmes.

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

Mode of Action:

ARENA 206 EC contains Benfuracarb and Lambda-cyhalothrin. Benfuracarb is a carbamate that belongs to IRAC mode of action group 1A. It is a systemic insecticide that is active by contact and ingestion and has a rapid knockdown effect. It inhibits the acetylcholinesterase through covalent reaction with the enzyme, which block hydrolysis of acetylcholine and results in hyperexcitation. Lambda-cyhalothrin Is a pyrethroid that belongs to IRAC mode of action group 3A. It is a non-systemic insecticide that is active through contact and ingestion. It causes modulation of voltage-gated sodium channels, which prevents the channels from closing and results in hyperexcitation.

USE RESTRICTIONS

For optimal control, larvae should not exceed 10 mm in length at the time of application.

<u>DIRECTIONS FOR USE</u>: Use only as directed. Compatibility:

- ARENA 206 EC is compatible with adjuvants like Break-Thru® S240 and SOLITAIRE™ (L 6962).
- Do not mix with seaweed extracts, Amitraz, Chinomethionat and Prothiophos.
- The compatibility of ARENA 206 EC with other products may be influenced by several factors. As
 changing factors may vary, a physical compatibility test must always be performed before such a tank
 mixture is sprayed.
- When ARENA 206 EC is used in conjunction with any other agricultural remedy, adhere to all WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE mentioned on the relevant labels.

Mixing instructions:

- Half fill the spray tank with clean water.
- Shake the ARENA 206 EC container well before use.
- Effectiveness of ARENA 206 EC can be affected by very hard water (> 1000 ppm solutes), and/or water exceeding a pH value of 7.
- Use Commodobuff/Aquabuff buffer at the registered rate to adjust the pH of the water if not in the ideal range.

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- Commodobuff/Aquabuff buffer must be mixed with the water prior to the addition of ARENA 206 EC.
- Take approximately 10 liters of the pH-corrected water from the mixing tank and mix thoroughly with the required volume of **ARENA 206 EC**.
- Fill the spray tank with water to the required level while maintaining agitation to ensure thorough mixing.
- Maintain agitation while spraying.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

Application instructions:

- All applications must be carried out with equipment that is in good working order and correctly calibrated, to ensure that the required droplet coverage on the target area for that method of application will be obtained.
- Ensure thorough penetration and coverage of the target crop.

Ground application:

- Use hollow cone nozzles that produce a medium to fine droplet size with conventional high-volume sprayers.
- Calibrate spray equipment prior to application.
- Apply in at least 200 litres of water per hectare.

Aerial application:

Aerial application of **ARENA 206 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:

- <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.
- <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 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.

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APPLICATION RATES

Refer to "IMPORTANT NOTES" listed below.

Crop / Pest	Dosage rate / ha	Remarks
Chile stemborer	The use of an organosilicone adjuvant like Break-Thru [®] S240 at 100 mℓ per hectare or Solitaire [™] at 0.05 % is recommended to increase spreading of spray droplets.	
		Ground application: Apply preventatively if a severe infestation is expected. Alternatively, spray correctively before or up to a maximum of not more than 5 % of plants showing very early stage "shot hole" damage.
	1000 mℓ / ha	Direct the application into the funnel area of the plants. A follow-up application may be required 10 to 12 days later, especially if the larvae are larger than 10 mm in length or a re-infestation occurs.
	Aerial application: Apply as an early corrective treatment, as above in 30 to 40 litres water per hectare.	

IMPORTANT NOTES

- Application must be based on scouting results. Poor control can be expected if application is done when the threshold levels, as indicated above, are exceeded.
- Due to a decrease in systemic activity in plants that are nearing maturity, application must only be carried out on plants that are growing actively before the tassels are enclosed by the flag leaf.
- Poor systemic activity, and therefore control, can be expected if the crop is under stress conditions, e.g., drought or flood stress.
- Poor control may be obtained if the larvae have already penetrated into the plant at the time of application.

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

- COMMODOBUFF (L 5390 / N-AR 1107) = AQUABUFF (L 5451 / W 130060) and
- BREAK-THRU® S240 (L 6764) = CHARGE (L 9100 / W 130953) = TECHNIWET SUPER (L 9239).

COMMODOBUFF, AQUABUFF, CHARGE and TECHNIWET SUPER are registered products of VILLA CROP PROTECTION (PTY) LTD.

BREAK-THRU® S240 is a registered product of EVONIK DEGUSSA AFRICA (PTY) LTD.

SOLITAIRE™ is a registered product of **SAFAGRIC (PTY) LTD**.

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