

READ THE LABEL BEFORE USE. 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 A 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.**

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

**Insecticide**



**CARBOFURAN 100 GR**

Reg. No. L 6945 Act No. 36 of 1947  
W 130131 / N-AR 1529

3: 15/01/2025 – Jan2025

A systemic granule insecticide and nematicide for the control  
of the pests mentioned on the crops listed.

**ACTIVE INGREDIENT**  
carbofuran (carbamate)

100 g/kg

GROUP	1A	INSECTICIDE
GROUP	N-1A	NEMATICIDE



**DANGER**

**Hazard Statements:**

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

**Precautionary Statements:**

Wash hands and face thoroughly  
after handling.  
Do not eat, drink or smoke when  
using this product.  
Avoid release into the environment.

**kg**

**villa**



**UN Number: 2757**

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.  
Co. Reg. No. 1983/008184/07  
65 Botes Road, Glen Marais, Kempton Park, 1619  
Tel. (011) 396 2233  
Website: [www.villacrop.co.za](http://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: \_\_\_\_\_

**CARBOFURAN 100 GR**

Reg. No. L 6945 Act No. 36 of 1947

W 130131 / N-AR 1529

IRAC INSECTICIDE GROUP CODE: 1A

NEMATOCIDE MODE OF ACTION GROUP CODE: N-1A

**ACTIVE INGREDIENT**

carbofuran (carbamate) ..... 100 g/kg

Registration holder:

**UNIVERSAL CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1983/008184/07

65 Botes Road, KEMPTON PARK, 1619

Tel. (011) 396 2233

**WARNINGS****Withholding periods:****Maize and Cabbage**

Apply only at planting time. Do not harvest cabbages within 11 weeks after application. Do not use on quick maturing cabbage cultivars. Do not allow animals to feed on treated maize plants within 8 weeks of application under normal rainfall conditions. Should drought conditions prevail after planting, consult your nearest Technical Adviser, before allowing animals to graze.

Control of Stalk borer and Diamond back moth larvae respectively, can be expected to decline from 7 to 8 weeks after application.

**Wheat**

Apply only at planting time. Do not harvest wheat within 120 days after application. Do not allow treated wheat to be grazed within 120 days after application.

**Sugarcane**

Apply only at planting time or within 120 days of harvesting the previous crop of sugarcane. Perform only one application per harvest at time of planting and allow 180 days between treatment of sugarcane and harvest. At planting, ensure that the sett placement is not less than 7.5 cm beneath the soil surface.

**Grain Sorghum**

Apply only at planting time. Do not allow animals to feed on treated sorghum plants within 10 weeks of application. Control of Stalk borer can be expected to decline from 7 to 8 weeks after application.

**Tobacco**

Apply only at planting time and not later than one week after planting in light sandy soil. Do not harvest within 80 days of treatment.

**CARBUFORAN 100 GR** should not be used on tobacco transplants, which originate from seed trays.

**Sunflowers**

Apply only at planting time, do not harvest within 11 weeks after application.

**Potatoes**

Apply only at planting time, do not harvest within 90 days after application.

**NOTE**

**THE MAXIMUM RESIDUE LEVELS (MRL'S) WILL NOT BE EXCEEDED PROVIDED APPLICATIONS ARE APPLIED AS PRESCRIBED. WHEN PRODUCTION IS DESTINED FOR THE EXPORT MARKET, THE EXPORT AGENCY OF CONCERN MUST BE CONTACTED, PRIOR TO THE USE OF CARBOFURAN 100 GR IN A SPRAY PROGRAMME.**

**Hazard statements:**

Fatal if swallowed.
Fatal if inhaled
Harmful if in contact with skin.
Hazardous to the aquatic environment.
Very toxic to aquatic life with long lasting.

- The efficacy of **CARBOFURAN 100 GR** may be adversely affected, when used in alkaline, brackish, or soils of high pH (above pH 7).

- Not to be used as a seed dressing.
- Handle with extreme care.
- To prevent bird poisoning, ensure that granules are covered immediately.
- Take special precautions at the end of the planting furrow where spillage may occur.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Ensure that no edible crop is planted on treated ground or within 10 meters of treated area within 100 days of application.
- Inform staff (labourers, wives and children) of the potential danger of the product and give full instructions on what to do in case of poisoning.
- Mark treated areas with appropriate danger signs.
- **Re-entry:** Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- **In 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, compatibility with other substances not indicated on the label and 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 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, fume, gas, mist, vapours, or spray.
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.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
Avoid release into the environment.
IF SWALLOWED: Immediately call a POISON CENTER.
IF SWALLOWED: Get emergency medical help immediately.
IF ON SKIN: Wash with plenty water and non-abrasive soap.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Get medical help.
Rinse mouth.
Take off contaminated clothing and wash it before reuse.
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 skin contact with the granules as well as inhalation of the dust.
- Wear protective clothing – overall, rubber gloves, rubber boots and a suitable respirator when handling and applying the product.
- Wash with soap and water after use and after accidental skin contact.
- Wash contaminated clothing after use.
- Keep unprotected persons away from operating/spraying area.
- Prevent contamination of other crops, grazing, springs, rivers, dams or any other area not under treatment.
- Clean applicator after use or before using with other remedies.
- Thoroughly clean the application 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](http://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.
- **CLEAN THE EMPTY PLASTIC BAG AS FOLLOWS:** Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces and dispose of *via* an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)). Do not bury, burn or donate the bag to any other parties that may use it as container for foodstuffs.
- Prevent contamination of food, feeds, drinking water and eating utensils.

### **SYMPTOMS OF HUMAN POISONING**

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

### **FIRST AID TREATMENT**

- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- **Skin:** 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.
- **Eyes:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**
- **Ingestion:** **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. If person is fully conscious, immediately give large quantities of water to drink and get medical help.

### **NOTE TO PHYSICIAN**

Atropine sulfate 2 to 4 mg (adult) intravenously, repeated at 10 minute intervals until atropinization (dry flushed skin and tachycardia) appears. Pralidoxime (2-PAM Protopam) and other oximes are contra-indicated.

<b>Relevant hazardous components</b>	
carbofuran	10.21 %

**NOTE:** The ingredients listed above contribute to the overall GHS classification, the remaining ingredients do not have to be listed according to the South African Regulations for Hazardous Chemical Agents 2021, Regulation 14(b).

**In case of poisoning, call the following number:** +27 82 446 8946 (Griffon Poison Information Centre) or +27 861 555 777 (Poison Information Helpline).

**In case of a chemical spill call the following 24 Hr Transport / Spill emergency number:** +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

### **RESISTANCE WARNING**

**CARBOFURAN 100 GR** is a group code 1A insecticide and nematocide N-1A. Any insect population may contain individuals naturally resistant to **CARBOFURAN 100 GR** and other group code 1A insecticides and nematocide N-1A. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **CARBOFURAN 100 GR** or any other group code 1A insecticide and nematocide N-1A.

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**

**CARBOFURAN 100 GR** is a systemic insecticide active by contact and ingestion that causes the inhibition of acetylcholinesterase (AChE) by covalent (irreversible) reaction with the enzyme at the acetylcholine binding site, blocking hydrolysis of acetylcholine and resulting in hyperexcitation.

**RESTRICTED USE:** Use only as directed.

**NOTICE TO USER:**

Read the entire label before application. This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under the Act to use this agricultural remedy for any purpose in a manner contrary with the directions on the label.

- An accurate, properly calibrated granule-applicator must be used. Downpipes from the applicator into the seeding furrow should be set at a sufficiently steep angle, to ensure even steady flow of granules. Regular checks are advised to prevent blockages. Ensure an even distribution of the granules.
- As with all soil-applied insecticides, sufficient moisture is necessary for the release of the active ingredient.
- It is recommended that producers apply suitable Cutworm bait as recommended for Cutworm control, after planting and before germination, to ensure an optimal stand.

**Compatibility:**

**CARBOFURAN 100 GR** should not be mixed and applied simultaneously with a fertilizer from a single granule applicator.

**APPLICATION RATES**

<b>Crop / Pest</b>	<b>Dosage rate</b>	<b>Remarks</b>
<b><u>Cabbage</u></b> Diamond back moth larvae ( <i>Plutella xylostella</i> )	200 g / 100 m linear in furrow at planting	Apply immediately prior to transplanting. Ensure that the granule applicator is properly calibrated and that the stream of granules into the plant furrow is regular at all times, below the soil surface.
<b><u>Grain sorghum</u></b> False wireworms	100 g / 100 m linear in furrow at planting	Will also suppress Nematodes.
Nematodes	150 g / 100 m linear in furrow at planting	Will also suppress Stalk borer and Black maize beetle.
Stalk borer ( <i>Busseola fusca</i> ), <i>Astylus</i> larvae, Black maize beetle ( <i>Heteronychus</i> spp.) & Shoot fly ( <i>Anatrichus erinaceus</i> )	200 g / 100 m linear in furrow at planting	
<b><u>NOTE</u></b> Refer “ <b>NOTES</b> ” under Maize.		

<b>Crop / Pest</b>	<b>Dosage rate</b>	<b>Remarks</b>
<b>Maize and Sweetcorn</b> False wireworms & Maize rootworm ( <i>Buphonella murina</i> )	100 g / 100 m linear in furrow at planting	Will also suppress Nematodes and Leafhoppers.
Leafhoppers (vectors of streak disease), Nematodes & Groundweevils ( <i>Protoctrophus</i> spp.)	150 g / 100 m linear in furrow at planting	Will also suppress Stalk borers and Black maize beetles. Refer “ <b>NOTE 4</b> ” below for remarks regarding Leafhoppers.
<i>Astylus</i> larvae, Stalk borer ( <i>Busseola fusca</i> ) & Black maize beetle ( <i>Heteronychus</i> spp.)	200 g / 100 m linear in furrow at planting	Under known high infection pressure of <i>Astylus</i> larvae, it is recommended to treat seed with an appropriate seed dressing product, specifically registered for this purpose. Refer the label applicable for “ <b>DIRECTIONS FOR USE</b> ”. Refer “ <b>NOTE 3</b> ” below for remarks regarding Black maize beetle.
<b>NOTES</b> 1. Ensure that the granule-applicator is regularly calibrated and that the stream of granules into the plant furrow is regular at all times. 2. The granules should be applied directly onto the seed in the furrow. 3. Application of products for the control of Black maize beetle is extremely critical. <b>Ensure that application equipment is properly calibrated. The dosage rate must be checked several times each day.</b> Notwithstanding the use of this product, Black maize beetle damage should still be expected. Under conditions of high population pressure up to 20 % or more of the maize crop may be damaged or destroyed, even though being treated. 4. There may not be adequate control of Leafhoppers (vectors of Streak disease) on maize, and the incidence of Streak may still occur, especially on very susceptible cultivars, particularly sweetcorn varieties and parent breeding lines, used in seed maize. This is particularly apparent: A. When the infestation pressure is high, as a result of: i) close proximity of host plants, such as wheat or sugarcane; ii) mid-summer planting, when naturally occurring populations of Leafhoppers are very high. B. When <b>CARBOFURAN 100 GR</b> is used in soils of high pH (refer “ <b>WARNINGS</b> ”).		
<b>Potatoes</b> Black maize beetle ( <i>Heteronychus</i> spp.) & Millipedes	200 g / 100 m linear in furrow at planting	Limited control of Black maize beetles and Millipedes, with <b>CARBOFURAN 100 GR</b> applied at planting, can be expected for a limited period. <b>CARBOFURAN 100 GR</b> to be applied at planting to both sides of the planting to furrows, to ensure thorough mixing of the granules with the soil above the seed. Spraying of a registered product is recommended for control later in the season. Notwithstanding the use of the <b>CARBOFURAN 100 GR</b> damage by Black maize beetles should still be expected.
<b>Oriental tobacco (Western Cape)</b> Thrips (Vectors of Spotted wilt disease)	200 g / 100 m linear in furrow at planting	Apply in the planting furrow at planting or in a band $\pm$ 8 cm wide over the plant-row, immediately after planting. In case of light, sandy soils preference should be given to the application over the plant-row, but with this method it is necessary that the compound be leached immediately into the soil either through rain or sprinkler irrigation ( $\pm$ 10 mm). Will also suppress Nematodes ( <i>Meloidogyne</i> spp.).

<b>Crop / Pest</b>	<b>Dosage rate</b>	<b>Remarks</b>
<b>Sugarcane</b> <b>Plant cane</b> Nematodes	30 kg / ha applied as a row treatment at planting <u>Apply:</u> <ul style="list-style-type: none"> <li>• 3.0 g/m of row for 1 m spacing;</li> <li>• 3.6 g/m of row for 1.2 m spacing;</li> <li>• 4.2 g/m of row for 1.4 m spacing;</li> <li>• 4.8 g/m of row for 1.6 m spacing</li> </ul>	Rate per linear metre depends on row spacing.  Apply by means of a suitable calibrated granule applicator into the planting furrow, prior to planting and cover the furrow immediately after planting.
<b>Ratoon cane</b> Nematodes	25 kg / ha applied to one or both sides of the cane furrow <u>Apply:</u> <ul style="list-style-type: none"> <li>• 2.5 g/m of row for 1 m spacing;</li> <li>• 3.0 g/m of row for 1.2 m spacing;</li> <li>• 3.5 g / m of row for 1.4 m spacing;</li> <li>• 4.0 g/m of row for 1.6 m spacing</li> </ul>	Rate per linear metre depends on row spacing.  Apply with a mechanical applicator to moist soils not later than 120 days after cutting the previous crop. Crops cut in summer should be treated immediately. Crops cut between May and August may be treated after the first spring rains. Apply the <b>CARBOFURAN 100 GR</b> in a shallow furrow (5 to 10 cm deep) close to the cane row, (but avoid excessive mechanical damage to the stools and roots) and cover immediately.
<b>Sunflowers</b> Nematodes	100 g / 100 m linear in furrow at planting	Apply at planting. Refer “ <b>NOTES 1 and 2</b> ” under maize.
<b>Tobacco</b> African bollworm ( <i>Helicoverpa armigera</i> )	200 g / 100 m linear in furrow at planting	Apply in the planting furrow at planting. Will control bollworm for a period of 6 to 7 weeks after planting.
<b>Wheat</b> <b>Irrigated and Dryland</b> Nematodes	30 g / 100 m linear in furrow at planting	Apply under the seed in planting furrow at planting. Ensure that the granule applicator is properly calibrated and that the stream of granules into the plant furrow is regular and even at all times, below the soil surface.
	10 kg / ha	Apply at planting or immediately thereafter with a properly calibrated “ <b>GANDY RHO BANDER</b> ” granular applicator and incorporate immediately either by sufficient irrigation or by shallow mechanical incorporation e.g. harrows.