Herbicide



CARDINAL 200 EC

Reg. No. L 9928 Act No. 36 of 1947 N-AR 1892 / W 1301116

3: 19/5/2022 - Nov2022



An emulsifiable concentrate herbicide for control of unwanted plants as indicated

ACTIVE INGREDIENT

fluroxypyr (pyridine acid) 200 a/e GROUP

HERBICIDE



Hazard Statements:

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

Causes serious eve damage. Toxic if inhaled.

Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Avoid breathing fumes, mists, vapours or spray. Wear impervious rubber gloves and

boots, protective clothing and chemical safety goggles. Avoid release to the environment.



Registration holder: VILLA CROP PROTECTION (PTY) LTD. Co. Reg. No. 1992/002474/07 P.O. 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)

CARDINAL 200 EC

Reg. No. L 9928 Act No. 36 of 1947 N-AR 1892 / W 1301116 HRAC HERBICIDE GROUP CODE: 4

ACTIVE INGREDIENT:

Registration holder:

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Co. Reg. No. 1992/002474/07 PO Box 10413, ASTON MANOR, 1630, Tel. (011) 396 2233

WARNINGS

Withholding periods:

The following minimum waiting period should lapse between application of TERMINAL 200 EC and the planting of follow-up crops:		
Broadleaf crops	120 days	

Hazard statements:

May be fatal if swallowed and enters airways.		
Causes mild skin irritation.		
Causes serious eye damage.		
Toxic if inhaled.		
Very toxic to aquatic life with long lasting effects.		

- <u>WITHHOLDING PERIOD</u> Allow three (3) days between last application and grazing of treated areas.
- Handle with care.
- Store in a cool, dry place under lock and key, away from food, feed, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.

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 weeds 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 the event of any uncertainty.

PRECAUTIONS

Precautionary statements:

Avoid breathing fumes, mists, vapours or spray.

Wash hands thoroughly after handling. Do not touch eyes.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

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

IF SWALLOWED: Get emergency medical help immediately.

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

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

Do NOT induce vomiting.

If skin irritation occurs: get medical help.

Collect spillage.

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

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Store locked up.

Dispose of content/container in accordance with local regulations.

- Wash with soap and water after use or accidental skin contact.
- Wash contaminated clothes daily after use.
- Do not eat, drink or smoke while applying, mixing or before washing hands and face or change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- TRIPLE RINSE empty containers by inverting 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). Where possible, recycling is preferred to disposal or incineration. If recycling is not
 practicable, dispose of in compliance with local regulations. Observe all labelled safeguards until container is
 destroyed.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Fluroxypyr-meptyl	29.4 %	
Sodium dodecylbenzene-sulfonate	<10 %	
Solvesso 150	<70 %	

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.
- <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. **CARDINAL 200 EC** causes mild skin irritation. **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. **Seek medical attention.**
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. **Seek medical advice immediately.**
- <u>Ingestion:</u> Have victim rinse mouth thoroughly with water. **Do not induce vomiting, due to the aromatic solvent. Seek medical advice immediately.** If the person is alert and respiration is not depressed, give large quantity of water to drink. Never give anything by mouth to an unconscious person. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen. Qualified medical personnel should perform administration of oxygen.

NOTE TO PHYSICIAN

Keep patient prone and quiet. Start artificial respiration immediately, if patient is not breathing. Treat symptomatically and supportively. No specific antidote known.

RESISTANCE WARNING

CARDINAL 200 EC is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **CARDINAL 200 EC** and other group code 4 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **CARDINAL 200 EC** or any other group code 4 herbicide.

To delay herbicide resistance:

- avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes,
- integrate other control methods (chemical, cultural, biological) into weed control programmes.

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

Mode of action:

CARDINAL 200 EC contains Fluroxypyr-meptyl, which is a pyridyloxycarboxylic acid compound and belongs to HRAC mode of action group 4. It is a selective and systematic herbicide that is primarily

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absorbed by the foliage. It is translocated acropetally and basipetally in the phloem and xylem to other plant parts. It induces characteristic auxin-type responses.

USE RESTRICTIONS

- Do not allow spray mist to contaminate susceptible crops
- Treatment of woody species: It is very important to use **Summit Super** according to the label recommendations.
- Avoid post-emergence application of CARDINAL 200 EC to plants under stress, due to factors such as
 drought or flooding, nematode infestations, diseases, nutritional imbalances, or plants put under stress,
 due to prior use of other herbicides.

GENERAL INFORMATION

- It takes considerable time for target plants to die off completely (certain woody species can take up to 4 to 5 months to die-off completely). However, active growth of the target plants is terminated shortly after application, hence the requirement that the target plants must be growing actively at time of treatment.
- Certain target species may re-grow from the rootstocks (e.g., *Solanum elaeagnifolium*). In case of regrowth, apply as a spot treatment onto actively growing re-growth, and ensure that all leaves and stems are thoroughly wetted to just before the point of run-off.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- CARDINAL 200 EC is compatible with the adjuvant Summit Super.
- When CARDINAL 200 EC is used in conjunction with any other agricultural remedy, all WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE mentioned on that label, must be adhered to.

Mixing instructions:

- Half fill the spray tank with clean water.
- Ensure agitation of water in the spray/mixing tank.
- Measure out the required volume and add to the spray tank.
- Fill the spray/mixing tank with clean water to the required level, while maintaining agitation, to ensure thorough mixing of the spray mixture before commencement of application. Maintain agitation while spraying.
- The prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

Recommendations for application:

- Use accurately calibrated spray equipment, in good working order with appropriate nozzles and with an efficient agitation mechanism.
- Apply as a full cover spray to dry leaves and stems. Do not apply to wet foliage.
- Use a knapsack sprayer with a solid cone nozzle that will ensure an even coverage of the target area. Maintain a constant pressure of between 2 to 3 Bar.
- Once the spray deposit has dried on the target plants after application, rain will have no effect on efficacy.
- Avoid spray drift onto non-target plants.

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APPLICATION RATES IMPORTANT

Refer to "USE RESTRICTIONS" and "GENERAL INFORMATION" above before use.

Target species	Dosage rate	Remarks	
Black wattle	125 mℓ / 100 ℓ water		
Acacia mearnsii	PLUS	Foliar treatment: Seedling / young trees (maximum height of 1.0 m). Apply sufficient spray mixture to ensure thorough wetting of all leaves and stems of young actively growing plants.	
	500 mℓ / 100 ℓ water (0.5 %) Summit Super		
Blackwood Acacia	125 mℓ / 100 ℓ water		
melanoxylon	PLUS	Foliar treatment: Seedling / young trees (maximum height of 1.0 m).	
	500 mℓ / 100 ℓ water (0.5 %) Summit Super	Apply sufficient spray mixture, to ensure thorough wettir of all leaves and stems of young actively growing plants.	
Bug tree Solanum	125 mℓ / 100 ℓ water	Foliar treatment:	
mauritianum	PLUS	Young plants (maximum height of 1.0 m). Apply sufficient spray mixture, to ensure thorough wetting of all leaves and stems of actively growing plants. If	
	500 mℓ /100 ℓ water (0.5%) Summit Super	target plants exceed a height of 1.0 m, slash and allow to re-grow to a height of at least 0.5 m it before treatment.	
	1.0 ℓ / 100 ℓ diesel	Stem treatment: Apply by paintbrush or knapsack sprayer as a coarse, low-pressure spray using narrow angle solid cone nozzle. Apply all around the basal stem or trunk of the woody plant, from soil level to a height of 25 cm from the soil surface, as well as any exposed roots. Complete wetting of the indicated area is important for optimal results. Old or rough bark surfaces may require higher volumes of the mixture, compared to young or smooth bark. In the case of multi-stemmed plants, treat each stem separately.	

The following product mentioned in this label is equivalent to the product as listed below:

• SUMMIT SUPER (L 8539) = BENEFIT PLUS (L 8538).

SUMMIT SUPER and BENEFIT PLUS are registered products VILLA CROP PROTECTION (PTY) LTD.

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