## HERBICIDE

# GARNIVORE®420 EC



2: 2/9/2022 - Aug2025



A selective post-emergence emulsifiable concentrate herbicide for the control of perennial and annual broadleaf weeds.

## **ACTIVE INGREDIENTS**

**GROUP** 

**HERBICIDE** 

MCPA (iso-octyl ester) (acid equivalent) bromoxynil as the octanoate ester (acid equivalent) fluroxypyr 1-methylheptyl ester (acid equivalent)

273 g/ℓ 175 g ae/ℓ 254.8 a/l 175 g ae/ℓ 100.8 q/l 70 g ae/ℓ

Rea. No. L 11291 Act No. 36 of 1947

#### **Hazard Statements:**

Harmful if swallowed. May be fatal if swallowed and enters airways. May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction. Causes serious eve damage. Harmful if inhaled

Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

Avoid release into the environment. Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles



#### 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)



UN Number: 3082

#### Registration Holder:

WinField Solutions Registration Holdings (Pty) Ltd. Co. Reg. No. 2015/312008/07

P.O. Box 10413, Aston Manor, 1630, South Africa Tel. (011) 396 2233

Website: www.villacrop.co.za



#### CARNIVORE® 420 EC

Reg. No. L 11291 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 6/4

#### **ACTIVE INGREDIENTS:**

MCPA (iso-octyl ester)	273 g/ℓ
(acid equivalent)	_
bromoxynil as the octanoate ester	254.8 g/ℓ
(acid equivalent)	175 g ae/ℓ
fluroxypyr 1-methylheptyl ester	100.8 g/ℓ
(acid equivalent)	70 g ae/ℓ

#### Registration holder:

WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

Co. Reg. No. 2015/312008/07

P.O. Box 10413, ASTON MANOR, 1630 Tel. (011) 396 2233

#### **WARNINGS**

#### Withholding periods:

Minimum time between the last application and harvest, feeding or grazing:	
Barley& Wheat	56 days

#### **Hazard Statements:**

Harmful if swallowed.	
May be fatal 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 damage.	
Harmful if inhaled.	
Suspected of damaging fertility or the unborn child.	
Toxic to aquatic life with long lasting effects.	

- Store in a cool place, away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uniformed persons and animals.
- Avoid spray drift onto susceptible crops, e.g., all broadleaf crops, as well as all grain varieties in a susceptible stage of growth.
- Re-entry: Do not enter treated field within one (1) day after application, unless wearing protective clothing.

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 effected 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 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 event of any uncertainty.

#### **PRECAUTIONS**

#### **Precautionary statements:**

Avoid release into the environment.

Obtain, read and follow all safety instructions before use.	
Avoid breathing dust, 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.	
Contaminated work clothing should not be allowed out of the workplace.	

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

IF SWALLOWED: Get emergency medical help immediately.

IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.

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

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 or rash occurs: Get medical help.

Collect spillage.

Store locked up.

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

- Avoid spray drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Clean applicator with a household ammonia solution (1 %) or **Protank**® **Liquid Cleaner** before using with other pesticides. Let solution stand for several hours, preferably overnight. Rinse at least twice.
- This applicator should not be used for applying chemicals other than herbicides.
- 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 (<a href="www.croplife.co.za">www.croplife.co.za</a>). 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	
MCPA iso-octyl ester	273 g/ℓ
Fluroxypyr-1-methyl- heptyl ester	254.8 g/ℓ
Bromoxynil Octanoate	100.8 g/ℓ
Emulsogen Cal 70	<70 g/ℓ
Aromatic Solvent	<320 g/ℓ

#### FIRST AID TREATMENT

- **General advice**; 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. Immediately consult a doctor.
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. **Seek** medical attention.
- <u>Skin:</u> 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.**
- **Eyes:** Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Get medical help**.
- <u>Ingestion:</u> Get emergency medical help immediately or call a poison control centre for treatment advice. Do not induce vomiting. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

#### **NOTE TO PHYSICIAN**

Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Treat symptomatically and supportively. No specific antidote.

#### **RESISTANCE WARNING**

CARNIVORE® 420 EC is both a group code 6 and 4 herbicide. Any weed population may contain individuals naturally resistant to CARNIVORE® 420 EC and other group code 6 and 4 herbicides. The resistant

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individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **CARNIVORE® 420 EC** or any other group code 6 and 4 herbicides. 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.
- monitoring treated weed populations for loss of efficacy

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

#### **MODE OF ACTION:**

**CARNIVORE 420 EC** is a selective post-emergence emulsifiable concentrate herbicide containing three active ingredients namely, **MCPA** (iso-octyl ester), **Fluroxypyr** and **Bromoxynil**. **MCPA** is a selective, systemic, hormone-type herbicide, absorbed by leaves and roots, translocated acropetally and basipetally in the phloem and xylem accumulating in the meristematic regions. Inhibits growth.

**Fluroxypyr** is a selective, systemic herbicide, absorbed primarily by foliage, translocated acropetally and basipetally in the phloem and xylem to other parts of the plants. Induces characteristic auxin-type responses, e.g., leaf curling.

**Bromoxynil** is a selective, contact herbicide, absorbed by foliage, limited translocation. It inhibits photosynthetic electron transport by binding at the Q<sub>B</sub> site on the D1 protein of the photosystem II complex, resulting information of reactive chemical species that oxidise and degrade lipids and proteins. Also uncouples oxidative phosphorylation in the mitochondria resulting in disruption of ATP production.

#### **USE RESTRICTIONS**

- DO NOT APPLY CARNIVORE® 420 EC AERIALLY.
- Do not apply more than 2.8 litres per hectare of this product per growing season.
- This product should not be applied through any type of irrigation system.
- CARNIVORE® 420 EC application to Wheat must be between growth stages 7 and 13 according to the list of growth stages issued by the ARC-Small Grain Centre, Bethlehem.
- <u>Barley</u> should be sprayed when the crop is in the **5- to 6-leaf stage**.
- Weeds that have not germinated at the time of application will NOT be controlled.
- **DO NOT** apply when rain is expected within the following twelve (12) hours.
- Irrigation should be withheld for 48 hours after CARNIVORE® 420 EC application.
- **DO NOT** apply **CARNIVORE® 420 EC** to weeds under drought or any stress conditions as this will result in reduced control. Apply during favourable growing conditions for optimal results.
- DO NOT apply when weeds are covered with heavy dew or during windy conditions.
- Weeds that are shaded off by other weeds or the crop may not be controlled, due to insufficient coverage. This aspect must be considered in the timing of application.

## **DIRECTIONS FOR USE:** Use only as directed.

#### Re-cropping intervals \*:

The following waiting periods should lapse between application of CARNIVORE® 420 EC solo and the	
planting of follow-up crops so as to prevent damage:	
Cucurbits and Bean crops	3 months
Broad-leaf crops	4 months

When **CARNIVORE® 420 EC** is used in a tank mixture with other herbicides, the relevant labels should be consulted and the **RE-CROPPING INTERVALS** on the respective labels should be adhered to. The recropping intervals refers to the waiting period that should lapse between application of **CARNIVORE® 420 EC** in a tank mixture with different herbicides and the planting of follow-up crops, to prevent damage to the next crop.

#### Compatibility:

CARNIVORE® 420 EC is compatible with Villa 51/Wen 51 and INTERLOCK® (L 10254 / W 130875 / N-AR 1856).

#### Mixing instructions:

- Half fill the spray tank with clean water and ensure agitation.
- Pour the required amount of CARNIVORE® 420 EC into the spray tank while agitation is maintained.

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- Fill the tank with water to the final required volume.
- Ensure thorough agitation of the mixture in the tank during mixing and spraying.
- The spray mixture must be sprayed out immediately and not allowed to stand in the spray tank.

#### **Application instructions:**

Apply CARNIVORE® 420 EC only to young, actively growing weeds, i.e., weeds growing in moist soil.
Thorough coverage of all parts of the weeds by the herbicide spray (particularly the growing points in the leaf axils) is essential to ensure effective control.

#### **Ground application:**

- Avoid fine droplet size use low-pressure flat fan nozzles of 80 degrees or equivalent anti-drift type and do not exceed spray pressure of 200 kPa.
- Spray volume must exceed 200 litres per hectare.
- Do not exceed spray height of 50 cm above target and ground speed of 10 km per hour.
- Do not apply if wind velocity exceeds 15 km per hour.
- The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.
- Do not apply under high pressure.

#### **Post Spray Equipment Cleaning**

Rinse the spray tank and all hoses with a 0.1 % solution of either calcium chloride or ammonium hydroxide or the recommended rate of **Protank**® **liquid cleaner** according to the product label. Allow this solution to stand in the spray equipment for 15 minutes; empty the spray equipment; repeat the rinsing with a 0.1 % solution of calcium chloride or ammonium hydroxide for 15 minutes; rinse all equipment with water. Nozzles and fitters must be cleaned individually. Rinse water and solution should be drained in a cesspool or drain where it will not contaminate any water source.

### **APPLICATION RATES**

**Important:** Refer to **USE RESTRICTIONS**" above and "**IMPORTANT NOTES**" below.

## WHEAT & BARLEY

## Post-emergence application of CARNIVORE® 420 EC for the control of broad-leaf weeds in wheat and barley.

#### **NOTES**

- Apply post-emergence when wheat is between growth stage 7 to 13.
- Apply post-emergence when barley is between 5 to 6 leaf stage.
- Under certain climatic conditions CARNIVORE® 420 EC may cause some leaf scorch to grain crops.
   However, yield will not be affected.
- Apply when the weeds are fully germinated but not later than the 4-leaf stage.

CARNIVORE® 420 EC 1500 mℓ/ ha	PLUS Interlock® 250 mℓ/ ha	PLUS Villa 51 0.1 %
Weeds controlled		
Ammi majus	Bishop's weed	
Arctotheca calendula	Cape marigold	
Bidens spp.	/	
Brassica tournefortii	Asian mustard	
Cenia turbinata*	Goose daisy	
Chenopodium album	White goosefoot	
Emex australis	Spiny emex	
Erodium moschatum*	Musk heron's bill	
Galinsoga parviflora	Gallant soldier	
Hibiscus trionum	Bladderweed	

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Lepidium didymum	Lesser swine-cress
Lupinus angustifolius	Volunteer lupins
Malva parviflora*	Small mellow
Medicago sativa*	Volunteer lucerne
Medicago truncatula	Barrel clover
Oenothera laciniata*	Cutleaf evening primrose
Peucedanum gallicum	/
Raphanus raphanistrum*	Wild radish
Senecio consanguineus	Starvation senecio
Stellaria media*	Chickweed
Spergula arvensis	Corn spurry
Urtica urens	Small stinging nettle

<sup>\*</sup> Apply at higher dosage rates

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

• VILLA 51 (L 8050 / W130454 / N-AR 1090) = WEN 51 (L 8315),

VILLA 51 and WEN 51 are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

INTERLOCK® and PROTANK® LIQUID CLEANER are registered trademarks of WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

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