## Herbicide



# **ULTIMA 240 EC**

Reg. No. L 8234 Act No. 36 of 1947

7: 30/09/2024- Oct2024



An emulsifiable concentrate selective, systemic post-emergence herbicide for the control of annual grasses in wheat in the Western Cape, Eastern Cape and in dryland and irrigated areas of summer rainfall region as indicated.

#### **ACTIVE INGREDIENT**

clodinafop-propargyl (aryloxyphenoxypropionate)

240 g/ℓ

GROUP

1

**HERBICIDE** 



#### Hazard Statements:

May be harmful if swallowed.

May be fatal if swallowed and enters airways.

Causes mild skin irritation.

May cause an allergic skin reaction.
Causes serious eye damage.
Taxin if inhaled

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects

**Precautionary Statements:** 

Avoid release to the environment. 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.



**DANGER** 



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

Vebsite: 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) ULTIMA 240 EC Reg. No. L 8234 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 1

#### **ACTIVE INGREDIENT:**

Registration holder:
UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
65 Botes Road, KEMPTON PARK, 1619

Tel. (011) 396 2233

#### **WARNINGS**

### Hazard statements:

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Causes mild skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Toxic if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long-lasting effects.

- Store in a cool place.
- Store away from food, feed, fertilizer and other agricultural products.
- 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.
- ULTIMA 240 EC has been tested on the most important commercial cultivars without any phytotoxic effects.
   More susceptible cultivars may be released in future which need to be tested; for this apply ULTIMA 240 EC to a limited test area before commercial applications are made.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not apply over water bodies and ensure that spray drift will not contaminate areas not under treatment.

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 event of any uncertainty.

#### **PRECAUTIONS**

## Precautionary statements:

Avoid breathing dust, fumes, mists, gas, vapours or spray.

Wash hands and face 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 to the environment.

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.

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.

If skin irritation or rash occurs: get medical help.

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Collect spillage.	
Store in a well-ventilated place. Keep container tight	ntly closed.
Store locked up.	
Dispose of contents/containers in accordance with I	ocal regulations.

- · Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- · Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- 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.
- Destroy the container by perforation and flattening and dispose of it in a safe way.
- **Do not** reuse the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Clodinafop-propargyl	240 g/ℓ	
Cloquintocet-mexyl	< 70 g/ℓ	
Gamma butyrolactone	< 100 g/ℓ	
Phenylsulfonate CA	< 70 g/ℓ	
Solvent naphtha (petroleum), heavy arom	< 600 g/ℓ	

**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-hour Transport / Spill emergency number: +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

## SYMPTOMS OF HUMAN POISONING

Eyes: Causes serious eye damage.

Skin: Causes mild skin irritation. May cause an allergic skin reaction.

Ingestion: May be harmful if swallowed.

<u>Inhalation:</u> Toxic if inhaled. Symptoms may include listlessness, raspy breath, and lung injury. High concentrations may have an anaesthetic effect.

## FIRST AID TREATMENT

<u>Skin contact</u>: Immediately remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical and flush body and clothes with large amounts of water and non-abrasive soap for at least 15 to 20 minutes. Wash contaminated clothing before re-use. Persons who become sensitised may require specialised medical management with anti-inflammatory agents. **Get medical assistance immediately**.

<u>Eye contact:</u> Immediately rinse with water for at least 15 - 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Get emergency medical help immediately.** 

<u>Inhalation:</u> The airway must be kept clear in order to maintain respiration, especially when the patient is unconscious or has vomited. Do NOT induce vomiting due to aspiration hazard. Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and administer oxygen. **Get emergency medical help immediately.** 

<u>Ingestion:</u> Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. A glass of water may be given to sip. For advice, contact the Poisons Information Centre. **Seek medical assistance immediately.** 

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#### **NOTE TO PHYSICIAN**

No antidote is known. Treat symptomatically and supportively as and when needed. If the product is aspirated into the lungs during ingestion or vomiting, mild to severe chemical pneumonia may be caused. Gastric lavage or administration of activated charcoal with water may be indicated.

#### **RESISTANCE WARNING**

For resistance management, **ULTIMA 240 EC** is a group code 1 herbicide. Any weed population may contain individuals naturally resistant to **ULTIMA 240 EC** and other group code 1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by **ULTIMA 240 EC** or any other group code 1 herbicide.

#### To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered 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.

The presence of resistant weeds is difficult to detect prior to use and therefore neither the Registration Holder nor the Distributor can accept responsibility for any losses as a result of **ULTIMA 240 EC** not controlling resistant weeds. Do not apply **ULTIMA 240 EC** in situations where weed resistance has been confirmed. Substandard application of **ULTIMA 240 EC** or other acetyl CoA carboxylase inhibitor herbicides will lead to inferior weed control and may assist in development of herbicide resistance.

#### Mode of action

**ULTIMA 240 EC** is a selective, systemic herbicide that is translocated acropetally and basipetally in the phloem and xylem to meristems. It is a fatty acid biosynthesis inhibitor, by inhibiting acetyl CoA carboxylase (ACCase). Clodinafop inhibits the incorporation of acetate into fatty acids and blocks the production of phospholipids used in building new membranes.

## **USE RESTRICTIONS**

- **ULTIMA 240 EC** breaks down quickly in the soil and should not pose a threat to follow-up crops but maize, sorghum, wheat or any other grass crop should not be planted on treated soil or a period of three (3) months after application.
- Rain or irrigation within one (1) hour of **ULTIMA 240 EC** application may result in reduced efficacy on emerged weeds necessitating a follow-up spray.
- Do not apply to crops and weeds stressed by abnormal weather or growing conditions, drought, waterlogged soil, insect damage, nematode infections, diseases, nutritional deficiencies or crops under stress through prior use of other agrochemicals.
- Do not use **ULTIMA 240 EC** on crops which already show symptoms of soil-borne diseases as the combination of disease and **ULTIMA 240 EC** application may result in stand loss.
- Temporary chlorotic spots may occasionally appear on crop leaves, especially if application is followed by very cold/unseasonal weather conditions. Under favourable growing conditions, the crop will recover quickly, and yield and quality should not be affected.
- Do not apply ULTIMA 240 EC to any crop or situation not mentioned in this instruction leaflet.
- Only apply ULTIMA 240 EC using an accurate and safe application technique.
- The crop may be treated at any time when the weeds are in the correct stage, providing that the withholding periods are adhered to.
- Grass weeds must be actively growing and not under drought stress during application as this can limit
  uptake and translocation. For annual grasses, best results are obtained when they are at the 2 to 6-leaf
  stage.
- Do not apply by aerial application if the neighbouring crops are grain crops or grass pastures.

#### **DIRECTIONS FOR 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 to the directions on the label.

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### Compatibility:

The compatibility of **ULTIMA 240 EC** with other products depends on the formulations of the respective products

as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **ULTIMA 240 EC** is compatible with most other agrochemicals used in wheat.

#### Mixing instructions:

- Half-fill the spray tank with suitable water.
- ULTIMA 240 EC is most effective when spray water is buffered to a pH of 4.5 to 5.5.
- The volume of buffer used must be included in the total water volume prior to adding the ULTIMA 240 EC.
- Then add the required volume of **ULTIMA 240 EC** to the water in the tank while agitating followed by the required quantity of adjuvant.
- Finally, add the partner remedy as appropriate. Fill the spray tank to the desired volume. Agitate the mixture to ensure good mixing prior to application.
- Should tank mixtures with other agrochemicals be made, follow the respective manufacturers' label recommendations.
- Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight. Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

#### **APPLICATION INSTRUCTIONS**

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.

### Ground application:

Knapsack sprayers or tractor-mounted boom sprayers may be used. A spray volume of 200 to 400 litres per hectare should be used for ground application and can be applied via solid- or hollow cone nozzles. **Constant agitation throughout the spray operation is essential**. Only clean water should be used. Prevent overdosing by avoiding overlapping of swaths and closing the nozzles while starting, slow movement, turning and stopping.

#### Aerial application:

Aerial application of **ULTIMA 240 EC** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS 0118 (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.
- Droplet coverage: 30 to 40 droplets per cm² must be recovered at the target area.
- <u>Droplet size</u>: A droplet spectrum with a VMD of 300 to 350 microns is recommended. Limit the production of fine droplets less than 150 microns (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 wind speed 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 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.

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• 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.

## **RECOMMENDATIONS**

#### APPLICATION RATE OF ULTIMA 240 EC IN THE WESTERN CAPE AND EASTERN CAPE.

Weeds	Weed Stage	Rate of ULTIMA 240 EC (m// ha)	
		Ground	Air
Avena fatua (Common wild oats)	3 to 4 leaf	150	165*
Avena fatua (Common wild oats) Phalaris minor (Little seeded canary grass)	3 to 4 leaf	200	220
Avena fatua (Common wild oats)	3 to 4 leaf		
Phalaris minor (Little seeded canary grass)		250	275
Lolium multiflorum (Italian ryegrass)	2 to 3 leaf		

<sup>\*</sup> The Wild oats biotype with hairy leaves in the Eendekuil/Wellington Districts will not be controlled at this low rate.

## REMARKS

- Add a non-ionic surfactant such as **Zap OR Solitaire** to the spray mixture at the recommended rate. Crop and weeds must be actively growing and in suitable growth stages at the time of application.
- The application of **ULTIMA 240 EC** prior to the 3 to 4-leaf stage of Wild oats and Little seeded canary grass may result in re-germination.
- Although **ULTIMA 240 EC** will control Wild oats up to the flag leaf stage, a delay in application until after the 3 to 4-leaf stage of the weed may result in severe yield losses due to weed competition.
- Inferior control of Italian ryegrass may be expected when the weed stage exceeds the 2 to 3-leaf stage at the time of application.
- If **ULTIMA 240 EC** is applied at 150 mℓ per hectare for the control of Wild oats, tank mixtures with **MCPA** may lead to antagonism under certain conditions.

## APPLICATION RATE OF ULTIMA 240 EC IN IRRIGATED WHEAT IN THE SUMMER RAINFALL REGION.

Weeds	Weed Stage	Rate of ULTIMA 240 EC (m// ha)	
		Ground	Air
Avena fatua (Common wild oats)	3 to 4 leaf	250	275

## REMARKS

- Add a non-ionic surfactant such as **Zap OR Solitaire** to the spray mixture at the recommended rate. Crop and weeds must be actively growing (preferably 1 to 2 days following irrigation) and in suitable growth stages at the time of application.
- The control of Wild oats after the 3 to 4-leaf stage of the weed may be too late and result in yield losses due to weed competition.

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# APPLICATION RATE OF ULTIMA 240 EC 240 EC IN DRYLAND WHEAT IN THE SUMMER RAINFALL REGION.

Weeds	Weed Stage	Rate of ULTIMA 240 EC (m// ha)	
	Ground	Air	
Avena fatua (Common wild oats) Zea mays (Volunteer maize)	3 to 4 leaf	335	380
Panicum schinzii (Sweet buffalo grass)	3 to 4 leaf	200	225

## REMARKS

- Add a non-ionic surfactant such as **Zap OR Solitaire** to the spray mixture at the recommended rate. Crop and weeds must be actively growing and in suitable growth stages at the time of application.
- Application should take place from early September following good spring rains, provided that the mean temperature over a 24-hour period is not less than 10 °C for 3 consecutive days.
- If Wild Oats has reached the 4 to 5-leaf stage before the abovementioned requirements can be met, **ULTIMA 240 EC** should be applied in an effort to minimise yield losses due to weed competition. Weed control may not be satisfactory. In such a case apply **ULTIMA 240 EC** as a follow-up spray at 250 mℓ per hectare plus a surfactant.
- The control of Wild oats after the 3 to 4-leaf stage of the weed may be too late and result in yield losses due to weed competition.

#### **NOTES**

- Weeds which have not germinated at the time of application will not be controlled.
- Ensure adequate coverage of weed foliage.
- Exceptionally cold weather following application of ULTIMA 240 EC may influence weed control.
- The visible herbicidal effects following application of **ULTIMA 240 EC** may only be evident 1 to 3 weeks after application, depending on growing conditions and weed susceptibility.
- **ULTIMA 240 EC** is selective to wheat and can be applied to any wheat variety provided it has reached the 3-leaf stage.

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