

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. SHAKE THE BOTTLE WELL BEFORE USE



Herbicide

ORION 240 EC

Reg. No. L 7432 Act No. 36 of 1947

5. 17/01/2023 – Nov2023

A selective contact herbicide for use in citrus, wine grapes, onions, garlic and brassicae crops for the control of annual broad-leaved weeds and grasses as indicated.

ACTIVE INGREDIENT

oxyfluorfen (diphenyl ether) 240 g/l

GROUP 14 HERBICIDE



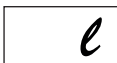
DANGER

Hazard Statements:

Flammable liquid and vapour.
May be harmful if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
Causes serious eye damage.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

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



UN Number: 1993

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
P.O. Box 801, Kempton Park, 1620
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)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

ORION 240 EC

Reg. No. L 7432 Act No. 36 of 1947
 HRAC HERBICIDE GROUP CODE: 14

ACTIVE INGREDIENT:

oxyfluorfen (diphenyl ether)240 g/l

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WARNINGS**Hazard statements:**

Flammable liquid and vapour.
May be harmful if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
Causes serious eye damage.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

- Do not induce vomiting if swallowed, since the product contains an aromatic solvent.
- Store in a cool, dry, well-ventilated area.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- 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.

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:**

Obtain, read and follow all safety instructions before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Wash hands thoroughly after handling. Do not touch eyes.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing, and chemical safety goggles.
IF SWALLOWED: Get medical help.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower]. 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.
See specific treatment on this label.
If skin irritation or rash occurs: Get medical help.

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.

- Do not inhale spray fumes or spray mist.
- Avoid contact with skin, eyes and clothes.
- Do not eat, drink or smoke while mixing, applying or before washing hands and face or change of clothing.
- Prevent drift on to other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Clean the applicator after use and dispose of wash water where it will not contaminate food, grazing, 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	
Oxyfluorfen	240 g/l
Light aroma (xylene)	<500 g/l
Dimethyl formamide	<200 g/l
Ethoxylated tristylphenol	<50 g/l
Phenylsulphonate salt	<50 g/l

FIRST AID MEASURES

- **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 and if symptoms persist, consult a doctor. If exposed or concerned, get medical advice.
- **Inhalation:** If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. Obtain medical attention if irritation occurs.
- **Skin:** Remove contaminated clothing, shoes, and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. **Obtain medical attention if irritation or rash occurs.**
- **Eyes:** 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.**
- **Ingestion: Seek medical attention** 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

RESISTANCE WARNING

ORION 240 EC is a group code 14 herbicide. Any weed population may contain individuals naturally resistant to **ORION 240 EC** and other group code 14 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **ORION 240 EC** or any other group code 14 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:

Oxyfluorfen is a selective contact herbicide involved in inhibition of protoporphyrinogen oxidase (PPO) resulting in accumulation of photosensitizing porphyrins; these react with oxygen, in light, to form reactive species that cause lipid peroxidation and membrane disruption.

USE RESTRICTIONS

- The application of **ORION 240 EC** is crop specific and recommendations as per crop should be adhered to.
- ORION 240 EC** should be applied on a clean soil surface, without any plant residues that could impair activity. It is therefore not suitable for use in minimum tillage systems.
- Soil disturbance after application will affect weed control detrimentally.
- ORION 240 EC** should be applied to moist soil and the soil must remain moist as long as possible, to enhance residual activity. Uneven irrigation may result in variable weed control.
- ORION 240 EC** should not be mixed or used in conjunction with any other herbicide, unless recommended.
- Thorough and deep ploughing is recommended before planting a follow-up crop on an **ORION 240 EC** treated field. A waiting period of at least two months for each litre of **ORION 240 EC** sprayed per hectare is recommended before planting a follow-up crop.
- Direct seeded crops into soil that has been treated within 18 months with **ORION 240 EC**, should not be treated with any acetamide herbicide.
- Do not** use on the onion cultivar Texas Grano in the winter rainfall region.
- Slight scorching and pigtailling of leaves may occur shortly after application in onions, but it disappears soon and has no long-term effect.
- Do not use on onions in the Northern Province.** Use only in winter rainfall region on onions.

DIRECTIONS FOR USE: Use only as directed.

- Add the required quantity of **ORION 240 EC** to the water in the spray tank. Ensure thorough agitation of the mixture in the spray tank during mixing and spraying.
- Apply **ORION 240 EC** with a properly calibrated sprayer with flat fan spray nozzles, ensuring even distribution of the spray mixture.

APPLICATION RATES**ANNUAL CROPS**

<i>Crop</i>	<i>Dosage per hectare</i>	<i>Remarks</i>
Garlic	3.0 ℓ / 350 ℓ water	Apply ORION 240 EC immediately after planting. Leaf scorch and/or pigtailling may occur, especially under cold, wet and windless conditions. High soil temperatures may delay emergence and cause leaf scorch.
Onions (Winter rainfall region only) Transplanted	3.0 ℓ / 350 ℓ water	Apply ORION 240 EC when plants have reached the 2 to 3 true leaf growth stage. Apply directly after transplanting, followed by irrigation. Weak plants may be susceptible to damage.
	OR 1.5 ℓ AND 1.5 ℓ	Apply immediately after transplanting and follow up with a further application at the same rate after a month.
Seed production (Hybrids)	3.0 ℓ / 350 ℓ water	Apply ORION 240 EC immediately after planting the female bulbs.
	OR 1.5 ℓ AND 1.5 ℓ	Apply immediately after planting and follow up with a further application at the same rate after a month.
Seeded directly	Karoo region 3.0 ℓ / 240 ℓ water	Apply ORION 240 EC to Golden Globe and Australian Brown cultivars in the 3 to 4 leaf growth stage only (2 to 3 months after sowing). Application may be delayed for up to a month, if weed development is slow.

Crop	Dosage per hectare	Remarks
<u>Brassicae crops</u>	2.0 to 3.0 ℓ / 350 ℓ water	Apply ORION 240 EC as an overall broadcast treatment. Transplant seedlings 7 to 10 days later. Irrigate immediately after transplanting. Temporary slight leaf scorch may occur. Use the lower rate for broadleaf weed control only or where only two (2) months weed control is required. The soil surface should be free of clods and organic material. Do not apply ORION 240 EC after transplanting the crops, as this will cause severe crop injury. Do not use when planting by machine. Soil disturbance after application will reduce weed control efficacy. Do not use this product during cool periods in autumn; winter and early spring as cool, wet and windless conditions may result in injury.

NOTE

Use **ORION 240 EC** on the following Brassicae cultivars.

Cauliflower	Couchamp, Igloo, Snowcap, Snowcrown, Snow February, Snowking.
Cabbage	Bonanza, Cape Spitz, Drumhead, Gloria Osená, Glory of Enkhuizen, Green Coronette, Hercules, NS Cross, Rodelle, Rolan, Shamrock.
Brussels sprouts	Jade Cross, Long Island.
Broccoli	Green Sprouting, Calabrese, Late Corona.

PERENNIAL CROPS

- Avoid direct application of **ORION 240 EC** directly on to citrus trees or wine grape leaves, for this will lead to localized leaf damage.
- Under cold, wet and moist conditions **ORION 240 EC** vapours may cause scorching of the lower leaves (especially in young trees). This localized scorching will not influence further growth under normal conditions.
- Sensitive nearby growing crops or crops in between the vines and rows, may be damaged by the vapour action of **ORION 240 EC**.
- **ORION 240 EC** must be applied to a clean soil surface. To achieve this effect all weeds present, should be removed either by hand or by using a suitable contact herbicide.

Crop	Dosage per hectare	Remarks
<u>Citrus</u>	3.0 to 4.0 ℓ / 500 ℓ water	Apply to citrus trees of all ages as well as citrus nurseries. Application of ORION 240 EC on citrus bearing orchards should be at least 3 weeks before blossoming or three (3) weeks after fruit set. Avoid application during periods of foliar growth. Only apply when foliar growth is completed, and foliage is totally expanded and mature. For broadleaved weed control, use lower dosage rate.
<u>Wine grapes</u>	3.0 to 4.0 ℓ / 500 ℓ water	Apply only in well-established trellised vines. Application period is from the beginning of July until the end of July. Do not apply later than one month before budding.

WEEDS CONTROLLED BY ORION 240 EC:	
Annual Broadleaf Weeds	
Botanical name	Common name
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus deflexus</i>	Perennial pigweed
<i>Anagallis arvensis</i>	Pimpernel
<i>Arctotheca calendula</i>	Cape marigold
<i>Argemone subfusiformis</i>	White flowered Mexican poppy
<i>Capsella bursa-pastoris</i>	Shepherd's purse
<i>Chenopodium album</i>	White goosefoot
<i>Datura stramonium</i>	Thorn apple
<i>Emex australis</i>	Spiny emex
<i>Fumaria muralis</i>	Fumitory
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Oenothera stricta</i> -	Evening primrose
<i>Plantago lanceolata</i>	Narrow leaved ribwort
<i>Polygonum aviculare</i>	Prostrate knotweed
<i>Portulaca oleracea</i>	Purslane
<i>Raphanus raphanistrum</i>	Common wild radish
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Silene gallica</i>	Gunpowder weed
<i>Sisymbrium thellungii</i>	Common wild mustard
<i>Sonchus oleraceus</i>	Sowthistle
<i>Spergula arvensis</i>	Com spurry
<i>Stellaria media</i>	Chickweed
<i>Tagetes minuta</i>	Khaki weed
Annual Grass Weeds	
<i>Avena fatua</i>	Common wild oats
<i>Digitaria sanguinalis</i>	Crab fingergrass
<i>Echinochloa crusgalli</i>	Barnyard grass
<i>Eleusine indica</i>	Goose grass
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Poa annua</i>	Winter grass

WEEDS CONTROLLED BY ORION 240 EC:	
POST-EMERGENCE AT 1.0 to 1.5 litres per hectare	
<i>Amaranthus deflexus</i>	Perennial pigweed
<i>Argemone subfusiformis</i>	White flowered Mexican poppy
<i>Capsella bursa-pastoris</i>	Shepherd's purse
<i>Portulaca oleracea</i>	Purslane