Herbicide



2,4-D ESTER 500 EC

Reg. No. L 5792 Act No. 36 of 1947

7: 8/7/2022 - July2023



An emulsifiable concentrate herbicide with selective hormone action for the control of broad-leaved weeds in crops as indicated.

ACTIVE INGREDIENT

octyl (2,4-dichlorophenox)acetate (as the 2,4-D-iso-octyl ester)

500 g/ℓ a.e. 757.46 g/ℓ

GROUP

4

HERBICIDE



Hazard Statements:

Combustible liquid.
Harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Very toxic to aquatic life.

Precautionary Statements:

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

DANGER



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)

2,4-D ESTER 500 EC

Reg. No. L 5792 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 4

ACTIVE INGREDIENT:

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

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

WARNINGS

Hazard Statements:

Combustible liquid.

Harmful if swallowed.

May be fatal if swallowed and enters airways.

May be harmful in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects

- Withholding period: Allow one week between the last application and harvest or grazing.
- Handle with care.
- Moderate eye irritant.
- Toxic to bees and fish.
- Store in a cool place, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within one (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, 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:

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

Avoid breathing dust, fumes, mists, gas, vapours, or spray. (Respiratory sensitization).

Wash hands and face thoroughly after handling. Do not touch eyes.

Avoid release to the environment.

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

IF SWALLOWED: Get medical help.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical help.

Rinse mouth.

Collect spillage.

Store in a well-ventilated place.

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

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- Avoid inhalation of the spray mist and vapour while mixing or applying.
- Wash contaminated clothing after use.
- Wash with soap and water immediately after use, handling or after accidental skin contact.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Clean the applicator with a household ammonia solution (1 %) before using other pesticides. Let the solution stand for several hours, preferably overnight. Rinse at least twice. This applicator should not be used for applying chemicals other than herbicides.
- Thoroughly clean the spraying 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. 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.

SYMPTOMS OF HUMAN POISONING

Harmful. Over-exposure to or swallowing of product may cause nausea, vomiting, excessive sweating, headache, muscle soreness, abdominal pain and loss of coordination. May cause burns of mouth, throat and oesophagus.

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 and consult a doctor.
- Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if you feel unwell after inhalation)
- **Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Immediately seek medical attention if irritation persists.**
- 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. Seek medical attention immediately.
- **Ingestion:** Seek medical attention or call a poison control centre for treatment advice. May cause gastrointestinal irritation or ulceration. Due to the solvent, this product is classified as an aspiration hazard. Mild to severe pulmonary injury could be caused due to the aspiration of small amounts of product during vomiting or ingestion. 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. **Seek medical attention immediately.**

NOTE TO PHYSICIAN

This product contains a phenoxy herbicide. There is no antidote available. Treat symptomatically and supportively. Gastric lavage with activated charcoal is advised. Follow up with saline cathartic laxative. Avoid oily laxatives.

RESISTANCE WARNING

2,4-D ESTER 500 EC is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **2,4-D ESTER 500 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 **2,4-D ESTER 500 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: Selective systemic herbicide. Salts are readily absorbed by the roots, whilst esters are readily absorbed by the foliage. Translocation occurs, with accumulation principally at the meristematic regions of shoots and roots. Act as a growth inhibitor.

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Relevant hazardous components		
2,4-D Iso-octyl Ester	757 g/ℓ	
Burtimul SI	<5 g/ℓ	
Burtimul FI	<2 g/ℓ	
Kerosene	< 30 g/ℓ	

USE RESTRICTIONS

- Hazardous to use in the vicinity of any broadleaf crop.
- Do not, under any circumstances, use in the vicinity of sensitive crops, fruit trees or ornamental plants.
- Application under humid, wind still or warm, windy (more than 15 km per hour) conditions is extremely hazardous.
- Phytotoxicity to sensitive crops some distance away, is a distinct possibility.
- Apply the product strictly in accordance with the "DIRECTIONS FOR USE" application directions.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

2,4-D ESTER 500 EC is compatible with **EXPRESS® SUPER** (L 8212) for use in wheat in the summer rainfall wheat production areas (Free State).

Ground application:

- Avoid fine droplet size. Use low-pressure flat fan nozzles of 80 degrees or equivalent anti-drift type nozzles. **Do not** exceed spray pressure of 200 kPa.
- Spray volume must exceed 150 litres per hectare.
- Do not exceed a spray height of 50 cm above the target and a 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.

Post-emergence application:

- Dilute the required amount of **2,4-D ESTER 500 EC** in not less than 150 litres water per hectare for overall application.
- Spray when the crop is at a suitable stage of development as indicated below, when the weeds are in a
 young stage and soil is moist.
- Do not spray under cold conditions.

Mixing and application:

- Mix the required amount of 2,4-D ESTER 500 EC with water and apply evenly as a medium spray.
- The exact amount of water to be used will depend on the spray apparatus but should be within 150 to 400 litres per hectare for ground application.

APPLICATION RATES

Crop	Dosage / ha	Remarks
Wheat (post-emergence)	0.7 to 1.7 ℓ	Apply between growth stages 7 (centre of double ridges enlarged) and 13 (awn of top spikelets elongated), according to the list of growth stages for wheat drawn up by the ARC-Small Grain Institute, Bethlehem. Use the lower dosage if the weeds have not progressed beyond the 4-leaf stage. Use is restricted to dry land wheat planted from April to August in the summer rainfall area.

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Crop	Dosage / ha	Remarks
Sugarcane – Plant and ratoon: (post-emergence)	4.7 to 6.7 ℓ	The weeds should still be young. The treatment can cause cane damage, but the danger of this occurring will be minimised, if the applications are directed to avoid as far as possible the wetting of the cane leaves. If the cane exceeds a height of 45 cm or has unfurled more than 5 leaves per shoot, directed spraying on the weeds must be carried out or else the growth may be retarded. Use the higher rate for severe weed infestation or for less susceptible weed stages. Use 300 to 400 litres of water per hectare.
Grass pastures (established)	2.0 to 3.0 ℓ	Application of nitrogenous fertilizer 2 to 3 weeks before spraying established pastures is recommended. Use the higher rate for severe weed infestation or less susceptible weed stages.

SOME WEED SPECIES NORMALLY CONTROLLED			
Post-emergence:			
Botanical name	Common name		
Amaranthus deflexus	Pigweed		
Amaranthus hybridus	Cape pigweed		
Amaranthus spinosus	Thorny pigweed		
Amaranthus thunbergii	Red pigweed		
Bidens pilosa	Common blackjack		
Chenopodium album	White goosefoot		
Commelina benghalensis	Wandering Jew		
Datura ferox*	Large thorn apple		
Datura stramonium*	Thorn apple		
Polygonum aviculare	Prostrate knotweed		
Portulaca oleracea	Purslane		
Tagetes minuta	Tall khaki weed		
Xanthium strumarium	Cocklebur		

^{* -} In the 2 to 3 leaf stage.

EXPRESS® SUPER is a registered product of **DuPont De Nemours Int SA**.

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