Herbicide



ALKANOX 360 EC

Reg. No. L 9764 Act No. 36 of 1947

3: 19/07/2023- Aug2023



An emulsifiable concentrate herbicide for the selective control of various weeds in the crops as listed.

ACTIVE INGREDIENTS

fluroxypyr (fluroxypyr-meptyl ester) triclopyr (as triclopyr butoxy-ethyl ester) 240 g a.i/*l* 345.6 g ae/*l* 120 g a.i/*l* 166.9 g ae/*l* GROUP 4 HERBICIDE



Hazard Statements:

May be harmful if swallowed or in contact with skin. May be fatal if swallowed and enters airways. Causes mild skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Harmful if inhaled.

May cause damage to kidneys through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

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



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
Website: www.villacrop.oc.ac



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)

ALKANOX 360 EC

Reg. No. L 9764 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 4

ACTIVE INGREDIENTS:

fluroxypyr	Ū
triclopyr	J

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07 Mpy. Reg. Nr.
PO Box 801,
KEMPTON PARK, 1620, Tel. (011) 396 2233

WARNINGS

Withholding periods:

Allow the following minimum number of days between the last treatment and harvesting:	
Barley	100 days
Maize	100 days
Wheat	100 days

IMPORTANT:

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, UNIVERSAL CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

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- ALKANOX 360 EC may be used on wheat and Barley intended for commercial grain only.
- ALKANOX 360 EC has been tested on the most important commercial varieties without any phytotoxic effects. More susceptible cultivars may be released in future which will need to be tested; for this, apply ALKANOX 360 EC to a limited test area before commercial applications are made.
- · Handle with care.
- Store in the original container in a safe place away from food, feed, fertilizer and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- In case of poisoning, contact a doctor and show them this label.
- **Re-entry** Do not enter the treated area within 1 day after application unless wearing suitable 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 effective under all conditions. The activity 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 weed against the remedy, 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 by 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.

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PRECAUTIONS

Precautionary statements:

Do not breathe fumes, mist, vapours and spray.

Wash hands 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 into 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. 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.

Get medical help if you feel unwell.

Do NOT induce vomiting.

If skin irritation or rash occurs: Get medical help.

Collect spillage.

Store locked up.

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

- Do not smoke, eat or drink whilst handling this product.
- Prevent contamination of food, feed, drinking water as well as eating utensils.
- In the case of eye contact, flush the product out immediately. In the case of skin contact, wash the product off immediately with soap and water. Remove and wash contaminated clothing immediately.
- Wash contaminated clothing daily.
- 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.
- Whilst spraying, avoid contact with the spray as much as possible. Avoid spray drift onto other crops, grazing, rivers or dams.
- Clean the applicator thoroughly following use and dispose of the wash water where it will not contaminate crops, grazing, rivers and dams. Destroy the empty container and do not use it for any other purpose.

Relevant hazardous components		
Fluroxypyr	240 g/ℓ	
Triclopyr	120 g/ℓ	
Heavy aromatic solvent	< 400 g/ℓ	
Calcium dodecylbenzene sulfonate	< 50 g/ℓ	
Ethoxylated C9-11 alcohols	< 50 g/ℓ	

SYMPTOMS OF HUMAN POISONING

Irritation effects on skin and mucous membranes are common reactions. May cause skin and eye irritation. May cause asthma – like symptoms. Skin contact may aggravate any pre-existing dermatitis. Repeated excessive exposure may aggravate any pre-existing lung disease.

FIRST AID TREATMENT

- **General:** 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. Get medical help if you feel unwell.
- Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if you feel unwell after inhalation.
- **Skin contact:** Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation or rash occurs.**
- **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.**

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• Ingestion: Seek medical attention immediately or call a poison control centre for treatment advice. Do not induce vomiting due to the aromatic solvent. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

NOTE TO PHYSICIAN

Treat symptomatically and supportively. No specific antidote known.

RESISTANCE WARNING

ALKANOX 360 EC is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **ALKANOX 360 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 **ALKANOX 360 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 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 **ALKANOX 360 EC** not controlling resistant weeds. Do not apply **ALKANOX 360 EC** alone in situations where weed resistance has been confirmed. Sub-standard application of **ALKANOX 360 EC** will lead to inferior weed control and may assist in development of herbicide resistance.

MODE OF ACTION

After predominantly foliar uptake, **Fluroxypyr-meptyl** is hydrolysed to the parent acid (**Fluroxypyr**) (pyridinocarboxylic acid) and translocated to other parts of the plant. There it acts by inducing auxin type responses.

Triclopyr (pyridyloxy compound) is a selective systemic herbicide, rapidly absorbed by the foliage and roots and translocated throughout the plant. It accumulates in the meristematic tissue where it induces auxin-type responses.

USE RESTRICTIONS

- Do not apply **ALKANOX 360 EC** to any crop or situation not mentioned in this instruction leaflet.
- Only apply ALKANOX 360 EC using an accurate and safe application technique.
- If **ALKANOX 360 EC** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.
- Do not allow spray drift to contact susceptible broad leaf crops such as sunflowers and potatoes.
- Do not spray directly into the funnel of maize plants.
- Target plants must be actively growing.
- Do not apply **ALKANOX 360 EC** to seed maize, Sweetcorn or popcorn. Should there be any doubt as to the safety of the treatment to specific varieties, please consult your nearest representative.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Universal Crop Protection (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Villa Crop Protection (Pty) Ltd representative was consulted beforehand.

DIRECTIONS FOR USE: Use only as directed.

MIXING INSTRUCTIONS

- Half-fill the spray tank with suitable water.
- If necessary, the pH of the spray water can be corrected to pH 5 to 7 with a suitable buffering agent.
- Then add the required amount of ALKANOX 360 EC to the water in the tank while agitating.
- Fill the spray tank to the desired volume with water.
- Just before the tank is full, add the mineral oil adjuvant according to the recommended rate on the respective product's label.
- Agitate well to ensure mixing prior to the application of the mixture.
- 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.

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Post Spray Equipment Cleaning

It is essential to 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.

Compatibility:

- The compatibility of **ALKANOX 360 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.
- ALKANOX 360 EC is compatible with CYCLONE ELITE (L 8881 / N-AR 1633), SOLITAIRE (L 6962) and H&R CROP OIL (L 6491).
- If **ALKANOX 360 EC** is used in a tank mix with other recommended products, consideration should be given to the restrictions and instructions of those respective products.

APPLICATION METHODS

- Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.
- Knapsack sprayers, tractor mounted boom sprayers or similar suitable applicators which are fitted with solid
 cone nozzles and can distribute the spray mixture evenly over the target may be used.
- A spray volume of 200 to 300 litres per hectare should be used in order to ensure thorough coverage of target plants. Use nozzles such as TG1 or equivalent to ensure good coverage.
- Constant agitation throughout the spray operation is essential.
- Only clean water should be used.
- <u>DO NOT</u>, under any circumstances, allow spray or drift to contact any part of desirable vegetation or severe injury or destruction may result.

Foliar application:

- Apply only to young and actively growing weeds with full leaf cover.
- Do not spray while weeds are wet, dormant, under stress or covered in a layer of dust or silt or when damaged by frost.
- Rain or irrigation on sprayed plants may result in reduced efficacy if it occurs within two (2) hours of application.
- Ensure thorough coverage of all the target weeds.
- Do not apply ALKANOX 360 EC if rain is expected within two (2) hours.
- ALKANOX 360 EC can be applied by ground equipment.
- · Use only clean water.

Ground application:

- Apply **ALKANOX 360 EC** in a minimum of 200 litres water per hectare.
- Use flat fan or hollow cone nozzles and a minimum spray pressure of 150 kPa.
- Ensure that spray mixture is evenly distributed to give good coverage of all target weeds.

RECOMMENDATIONS

Crop	Dosage rate per hectare	Remarks
Maize	500 mℓ ALKANOX 360 EC	Application should be made when the weeds are at the correct growth stages as indicated.
	PLUS	See weed tables below.
	1.0 ℓ Cyclone Elite	The addition of an adjuvant such as Solitaire or H&R crop oil is recommended.
Wheat	750 mℓ ALKANOX 360 EC	Apply once the wheat has reached the 3-leaf stage. The addition of an adjuvant such as Solitaire or H&R crop oil is recommended.

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Crop	Dosage rate per hectare	Remarks
Barley	750 mℓ ALKANOX 360 EC	Apply once the barley has reached the 5 leaves unfolded stage. The addition of an adjuvant such as Solitaire or H&R crop oil is recommended.

WEEDS NORMALLY CONTROLLED

THE FOLLOWING WEEDS SHOULD BE CONTROLLED BY ALKANOX 360 EC AT 500 ml per hectare PLUS Cyclone Elite AT 1.0 litres per hectare		
Common name	Scientific name	Growth stage
Common pigweed	Amaranthus hybridus	2 to 8 leaf stage
Khaki weed	Tagetes minuta	2 to 8 leaf stage
Large Thornapple	Datura ferox	4 to 8 leaf stage
White goosefoot	Chenopodium album	2 to 10 leaf stage

Variable control: Commelina benghalensis

THE FOLLOWING WEEDS SHOULD BE CONTROLLED BY ALKANOX 360 EC AT 750 mℓ per hectare		
Common name	Scientific name	Growth stage
Khaki weed	Tagetes minuta	Up to the 4-leaf stage
Cape marigold	Arctotheca calendula	Up to the 4-leaf stage
Spiny emex	Emex australis	Up to the 4-leaf stage

Variable control: Chenopodium album

- Weed species that were not present during the development trials of the product could possibly also be controlled to a greater or lesser degree.
- The registration holder does not accept any responsibility for unlisted weeds.

CYCLONE ELITE is a registered product of MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD.

H&R CROP OIL is a registered product of H&R GLOBAL SPECIAL PRODUCTS SALES (PTY) LTD.

SOLITAIRE is a registered product of **SAFAGRIC (PTY) LTD.**

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