Read the label before opening the container. For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

ENVIRO 2,4-D AMINE

South Africa Reg. No: L12010 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: 4

A selective hormone-type herbicide for the control of weeds in maize, grain sorghum, wheat and other cereals, sugarcane, lawns, golfcourses and grass pastures.

ACTIVE INGREDIENT:

2,4-D (Chlorophenoxy compound) (Dimethylamine salt of 2,4-D).....480g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Harmful if swallowed or inhaled
- May be harmful in contact with skin
- Causes severe skin burns and eye damage
- May cause an allergic skin reaction
- Very toxic to aquatic life
- Toxic to aquatic life with long lasting effects.



PRECAUTIONARY STATEMENTS

- Do not brethe vapours, spray.
- IF SWALLOWED: Call a doctor if you feel unwell, rinse mouth.
- Do NOT induce vomiting.
- IF ON SKIN: Wash with plenty of soap and water.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- IF IN EYES: Rinse cautiosly with water for several minutes.

enviro™ bio-chem

Registration holder: Genesis Chemicals (Pty) Ltd.
Co. Reg. No: CK 2013/200520/07
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Expiry Date:
Batch No:
Date of Manufacture:

UN No. 1760

WARNINGS:

- Harmful if swallowed or inhaled
- May be harmful in contact with skin
- Causes severe skin burns and eye damage.
- May cause an allergic skin reaction
- Very toxic to aquatic life.
- Toxic to aquatic life with long lasting effects.
- Do not graze treated areas within 7 days after application

Re-entry interval: Do not enter the treated field within 1 day after application unless wearing protective clothing.
Aerial application: Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings.
Do not spray over or allow drift to contaminate water or adjacent areas.

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 pest against the remedy concerned as well as by the method, time and accuracy of the 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 herbicide 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:

- **General:** If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.
- **Prevention:** Do not breathe vapours, spray. Wash hands, forearms and face thoroughly after handling. 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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
- **Response:** IF SWALLOWED: Call a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a doctor. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. Collect spillage.
- **Storage:** Store locked up.
- **Disposal:** Dispose of contents and container to an approved waste disposal plant.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator with a household ammonia solution (1%) before using it with other remedies. Let solution stand for several hours, preferably overnight.
- Rinse at least twice. The applicator should not be used for applying chemicals other than herbicides. Dispose of wash water where it will not contaminate crops, grazing, rivers, dams, etc.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- 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.
- Destroy the empty container by perforation and flattening and do not use for any other purpose.

RELEVANT SUBSTANCES:

2,4-D Acid TC 96% (Cas-No: 2008-39-1)
Dimethylamine >10%(Cas-No: 124-40-3)

Syptoms of human poisoning
Weakness and perhaps lethargy with cerebral depression, mental confusion and anorexia, diarrhoea, weight loss with hyper salivation, stomach cramps and vomiting.

FIRST AID TREATMENT:

INHALATION: Remove patient from exposure, keep warm and at rest. If necessary, administer artificial respiration and give oxygen until normal breathing is restored. Obtain medical attention.
SKIN CONTACT: Wash contaminated skin with cold water, followed by soap and water.
EYE CONTACT: Irrigate with eye wash solution or clean water for at least 25 minutes. Get medical attention.
INGESTION: If water diluted mixture has been swallowed, give copious quantities of either beaten egg white, starch solution or Milk of Magnesia before inducing vomiting. Repeat until vomit fluid is clear and free of smell of poison. Never give anything by mouth to an unconscious person. If breathing stops, start artificial respiration. Get medical help.

Note to physician
There is no specific antidote. Symptomatic and supportive therapy as indicated.

Resistance warning:
For resistance management, **ENVIRO 2,4-D AMINE** is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **ENVIRO 2,4-D AMINE** 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 **ENVIRO 2,4-D AMINE** or any other group code 4 herbicides.

To delay weed 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:

Synthetic auxin (acting like indolylacetic acid). Selective systemic herbicide. Salts are already absorbed by the roots, while esters are readily absorbed by the foliage. Translocation occurs, with accumulation principally at the meristematic regions of shoots and roots. Acts as a growth inhibitor.

WEEDS CONTROLLED

The following weeds are normally controlled by **ENVIRO 2,4-D AMINE** at the dosage rates indicated below.

Broadleaf weeds	Common name
Amaranthus deflexus	perennial pigweed
Arctotis leiocarpa	Karoo daisy
Bidens Rosa	blackjack
Chenopodium album	white goosefoot

Broadleaf weeds	Common name
Commelina benghalensis	Benghal wandering Jew
Cosmos bipinnatus	cosmos
Datura stramonium	thorn apple
Galinsoga parviflora	gallant soldier
Polygonum aviculare	prostrate knotweed
Raphanus raphanistrum	wild radish
Striga asiatica	common mealie-witchweed
Tagetes minuta	khaki weed
Tribulus terrestris	dubbeltjie
Vicia sativa	broad-leaved purple vetch
Xanthium strumarium	cocklebur
Grasses	
Eleusine indica (pre-emergence)	goose grass
Panicum schinzii (pre-emergence)	sweet buffalo grass

USE RESTRICTIONS:

To prevent damage, do not permit vapour or spray mist to come into contact with sensitive broadleaf crops, fruit or ornamentals. Apply the product strictly in accordance with the application directions.

THE WIND SPEED AND DIRECTION AT THE TIME OF APPLICATION WILL DETERMINE THE DISTANCE WHICH MUST SEPARATE THE CLOSEST EDGE OF THE AREA TO BE SPRAYED FROM SUSCEPTIBLE CROPS.

WIND SPEED (km/h)	AERIAL APPLICATION	GROUND APPLICATION
1,5 - 5	800 m downwind 800 m crosswind 15 m upwind	200 m downwind 200 m crosswind 6 m upwind
5 -10	1600 m downwind 800 m crosswind 15 m upwind	400 m downwind 200 m crosswind 15 m upwind
10 -15	3200 in downwind 800 m crosswind 15 m upwind	800 m downwind 400 m crosswind 15 m upwind
Above 15	Prohibited	Prohibited

GROUND APPLICATION:

- Avoid fine droplet size - use low pressure flat fan nozzles of 80° or equivalent anti-drift type, and do not exceed spray pressure of 200kPa.
- Spray volume must exceed 150L/ha.
- Do not exceed spray height of 50cm above target and ground speed of 10km/h.

- Do not apply if wind exceeds 15km/h (as measured by hand-held wind recorder approved by the Registrar: Act 36 of 1947)
- The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8°C.

AERIAL APPLICATION:

Do not apply this product by air in Kwazulu-Natal. Aerial application of **ENVIRO 2,4-D AMINE** may only be done by a registered Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 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:

- Volume: A spray mixture volume of 30-40 L/ha 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.
- Droplets coverage: 25-35 droplets/cm' must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 350-400 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3-4 m above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomising equipment that will produce the desired droplets 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 60-75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature 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/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (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 Aerial Spray Operator knows exactly which field to spray.
- Obtain an assurance from the Aerial Spray Operator that the above requirement will be met and that relevant data will be compiled in a logbook and kept for future reference.

DIRECTIONS FOR USE: Use only as directed.

- Do not apply to land adjacent to susceptible crops.
- May be applied by air, tractor or by hand sprayers on land in the vicinity of susceptible crops, provided adequate precautionary measures are taken to avoid spray drift.

Post-emergence application:

- Spraying should only be carried out when the crop is in a suitable stage of development as indicated below.
- For the best results, weeds should be sprayed when in the young stage and growing vigorously. As they mature the rate of application should be increased accordingly, but the prescribed rates must not be exceeded. When in flower, most weeds are resistant to normal application. Rainfall 12 hours after application will not reduce the effectiveness of the weed killer.

Mixing and application:

ENVIRO 2,4-D AMINE a selective herbicide must be diluted with water and applied as an evenly distributed fine spray. The exact amount of water to be used will be determined by the spraying apparatus, but the best results will be obtained when not less than 200 L of the mixture/ha is used. Always calibrate the spraying equipment before use in order to ascertain the exact quantity of fluid delivered / ha.

CROP/PEST	DOSAGE (e/ha)	REMARKS
Maize (post-emergence) after 460mm height	2ℓ	Grasses which have already emerged will not be controlled. NB: Drop arms must be used. The addition of a spreader/ sticker is recommended. Maize may become malformed and brittle after application, but this is usually of a temporary nature.
Grain sorghum (post- emergence)	2ℓ	Apply when plants are 150 mm high or about 3 weeks after emergence of the crop only. Spray may be applied later provided directed spraying using drop arms is practiced.
Wheat (post-emergence only)	1,35 – 2,7ℓ	Apply between growth stages 7 (centre double ridges enlarged) and 13 (awn of top spikelets elongated) according to the list of Growth stages of the ARC -Institute for Small Grains, Bethlehem.
Barley and rye	1,5 – 2,6ℓ	Apply in the 5-7 leaf stage of the barley and rye crop.
Grass pastures	3,3 – 4,4ℓ	Apply once grass is established and growing actively. Repeat if necessary.
Weeds in lawns and golf courses	3,3 – 4,4ℓ	Apply once the grass is established. For lawns repeat applications may be necessary. Application of nitrogenous fertilizer 2-3 weeks before spraying is recommended.
Sugarcane (post-emergence)	5,25 – 7,25ℓ	Apply in 300 – 400 ℓ water/ha. If the cane exceeds a height of 400 mm or has unfurled more than 5 leaves per shoot, directed spraying must be carried out or else the growth may be retarded.