Herbicide



RAMETREX 410 EC

Reg. No. L 10080 Act No. 36 of 1947

4: 26/7/2022 - Nov2022



A selective emulsifiable concentrate herbicide for the post-emergence control of annual broad-leaved weeds as listed in Wheat & Barley.

ACTIVE INGREDIENTS

bromoxynil as the octanoate ester (acid equivalent) dicamba as the sodium salt (acid equivalent) MCPA as the iso-octyl ester (acid equivalent)

145.5 g/*ℓ* 100 g ae/*ℓ* 33 g/*ℓ* 30 g ae/*ℓ* 436.6 g/*ℓ* 280 g ae/*ℓ*

GROUP

6:4

HERBICIDE



Combustible liquid. Harmful if swallowed. May be harmful if swallowed and enters airways. May be harmful in contact with skin.

Causes mild skin irritation.

May cause an allergic skin reaction.

Causes eye irritation.

May be harmful if inhaled. May cause respiratory irritation.

May cause drowsiness or dizziness Suspected of causing cancer. Suspected of damaging the unborn child.

May cause damage to organs (central nervous system) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Obtain, read and follow all safety instructions before use.
Wear impervious rubber gloves and chemical safety goggles.





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)

RAMETREX 410 EC

Reg. No. L 10080 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 6/4

ACTIVE INGREDIENTS:

| bromoxynil as the octanoate ester | 145.5 g/ℓ |
|-----------------------------------|--------------|
| (acid equivalent) | . 100 g ae/ℓ |
| dicamba as the sodium salt | . 33 g/ℓ |
| (acid equivalent) | 30 g ae/ℓ |
| MCPA as the iso-octyl ester | 436.6 g/e |
| (acid equivalent | 280 g ae/ℓ |

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

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

WARNINGS

Withholding period:

| Minimum time between the last application and harvest or feeding: | | | | |
|---|---------|--|--|--|
| Wheat & Barley | 40 days | | | |

Hazard statements

| Hazard statements: |
|---|
| Combustible liquid. |
| Harmful if swallowed. |
| May be harmful if swallowed and enters airways. |
| May be harmful in contact with skin. |
| Causes mild skin irritation. |
| May cause an allergic skin reaction. |
| Causes eye irritation. |
| May be harmful if inhaled. |
| May cause respiratory irritation. |
| May cause drowsiness or dizziness |
| Suspected of causing cancer. |
| Suspected of damaging the unborn child. |
| May cause damage to organs (central nervous system) through prolonged or repeated exposure. |
| Very toxic to aquatic life with long lasting effects. |

- Handle with care.
- Store under lock and key in a cool place.
- 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 within two (2) days 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, and 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.

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Do not breathe dust, fume, gas, mist, vapours and spray.

Wash hands thoroughly after handling. Do not touch eyes.

Do not eat, drink or smoke when using this product.

Use only outdoors 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 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: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

IF exposed or concerned, get medical advice.

Get medical help if you feel unwell.

Rinse mouth.

Do NOT induce vomiting.

If skin irritation or rash occurs: Get medical help.

If eye irritation persists: Get medical help.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local regulations.

- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Do not use close to fishponds, fish tanks or aquarium.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- Clean applicator with a household ammonia solution (1 %) before using with other herbicides. Let solution stand for several hours, preferably overnight. Rinse at least three times.
- This applicator should not be used for applying chemicals other than herbicides.
- Containers must be completely emptied before being disposed of.
- 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.
- When applying RAMETREX 410 EC in a tank mixture with Alterate 600 WDG, please consult the Alterate 600 WDG label for "Cleaning of Application Equipment" instructions.
- Do not re-use the container for any other purpose.

| Relevant hazardous components | | | |
|-------------------------------|------------|--|--|
| Bromoxynil as the octanoate | 100 g ae/ℓ | | |
| Dicamba | 30 g ae/ℓ | | |
| MCPA the iso-octyl ester | 280 g ae/ℓ | | |
| Ethoxylated castor oil | <10 % | | |
| Emulsifier | <5 % | | |
| Aromatic hydrocarbon | <40 % | | |

SYMPTOMS OF HUMAN POISONING

There are no known signs and symptoms of **Bromoxynil** poisoning. Over-exposure to, or swallowing of **MCPA** may cause nausea, vomiting, excessive sweating, headaches, muscle soreness, abdominal pain and loss of coordination. May cause burns of mouth, throat and oesophagus. Over-exposure or swallowing excessive amounts of **Dicamba** may cause irritation.

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FIRST AID TREATMENT

- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. Treat symptomatically and supportively. Single exposure to vapours is not likely to be hazardous.
- <u>Skin contact:</u> Remove contaminated clothing and shoes. Gently wipe of excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Seek medical advice if necessary. Persons who become sensitised may require specialised medical management with anti-inflammatory agents.
- Eye contact 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. If eye irritation persists, get medical advice.
- <u>Ingestion:</u> Unlikely to occur under occupational conditions. In case of deliberate ingestion, have victim rinse mouth thoroughly with water. **Do not induce vomiting.** Give plenty of water to drink (1 to 2 glasses). **Seek medical advice immediately.**

ADVICE TO PHYSICIAN

This product contains a phenoxy herbicide. There is no antidote available. Treat symptomatically and supportively. Gastric lavage with activated charcoal is advised.

Mode of Action:

RAMETREX 410 EC contains Bromoxynil, Dicamba and MCPA. Bromoxynil is a hydroxybenzonitrile compound which belongs to HRAC group code 6. It is used for post-emergence control of annual broad leaf weeds. Bromoxynil acts by inhibiting photosynthetic electron transport and is a selective, contact herbicide, absorbed by the foliage, and has limited translocation abilities. Dicamba is a benzoic acid (Auxin-like growth regulator) compound which belongs to HRAC group code 4. It is used as a selective, systemic herbicide that is absorbed by leaves and roots that is then translocated throughout the plant via both the symplast and apoplast. Dicamba can be used as a pre- or post-emergence herbicide for the control of annual and perennial broad-leaf weeds and brush species. MCPA is a phenoxyacetic acid (Auxin-like growth regulator) compound which belongs to HRAC group code 4. It is a selective, systemic, hormone-type herbicide, which is absorbed by the leaves and roots from where it is translocated acropetally and basipetally in the phloem and xylem. MCPA accumulates in the meristematic regions, where it inhibits growth. This herbicide is used for post-emergence control of annual and perennial broad-leaf weeds.

RESISTANCE WARNING

RAMETREX 410 EC is a group codes 6 and 4 herbicide. Any weed population may contain individuals naturally resistant to **RAMETREX 410 EC** and other group codes 6 or 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 **RAMETREX 410 EC** or any other group codes 6 or 4 herbicide.

To delay herbicide resistance:

- avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate 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.

USE RESTRICTIONS

• Re-cropping intervals:

| Wheat | 1 month |
|----------------|--|
| Barley & Oats | 6 months |
| Any other crop | 10 months, preceded by a test planting |

(* pre-plant interval = time period between the last application of **RAMETREX 410 EC** and the anticipated date of planting of a follow-up crop).

Notes on re-cropping intervals:

- It is not recommended to use **RAMETREX 410 EC** on soils with a pH (KCI) of 6.5 or higher, and/or on soils containing free lime. The residual effect of **RAMETREX 410 EC** can be extended, adversely affecting crop rotation strategies beyond normally indicated intervals.
- The above-mentioned re-cropping waiting periods also depend on normal or above average rainfall during, and following, the growing season when the application was performed. Low concentrations of **RAMETREX 410 EC** in the soil may cause injury to crops, other than wheat, oats or barley. Therefore, careful planning should take place regarding crop rotation, prior to the application of **RAMETREX 410 EC**.

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- DO NOT APPLY RAMETREX 410 EC AERIALLY.
- RAMETREX 410 EC application to wheat must be between growth stages 7 and 13 according to the list of growth stages issued by the ARC-Small Grain Centre, Bethlehem. Barley should be sprayed when the crop is in the 5- to 6-leaf stage.
- Do not use **RAMETREX 410 EC** solo or in a tank mixture with **Alliante 600 WDG** in combination with surfactants as this may cause serious crop damage.
- Do not apply RAMETREX 410 EC to weeds under drought or nutrient stress conditions.
- Weeds that have not germinated at the time of application will not be controlled.
- Do not apply when rain is expected within the following 12 hours.
- Irrigation should be withheld for 48 hours after **RAMETREX 410 EC** application.
- Weeds that are shaded off by other weeds or the crop may not be controlled, due to insufficient coverage. This aspect must be considered in the timing of application.
- Erratic control/re-growth of weeds may occur if one or more of the following conditions exist:
 - Light sandy acid soils that tend to leach or become waterlogged. *
 - Excessive stones covering the soil surface. *
 - Should application be performed later than 6 weeks after planting in the Western, Southern and Eastern Cape.
 - A low plant density.
- (* Under these conditions application of the herbicide should take place not later than two (2) weeks postemergence of the weeds).
- When applying RAMETREX 410 EC in a tank mixture with Alliante 600 WDG, please consult the Alliante 600 WDG label for other "USE RESTRICTIONS".

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

The compatibility of RAMETREX 410 EC with other products has not been tested.

Mixing instructions:

- Half fill the spray tank with clean water and ensure agitation.
- Pour the required amount of RAMETREX 410 EC into the spray tank while agitation is maintained.
- Fill the tank with water to the final required volume.
- Ensure thorough agitation of the mixture in the tank during mixing and spraying.
- The spray mixture must be sprayed out immediately and not allowed to stand in the spray tank.

Application instructions:

Apply RAMETREX 410 EC only to young, actively growing weeds, i.e., weeds growing in moist soil.
 Thorough coverage of all parts of the weeds by the herbicide spray (particularly the growing points in the leaf axils) is essential to ensure effective control.

Ground Application:

- Apply RAMETREX 410 EC using any calibrated high or medium volume sprayer, which is in good working order and equipped with an efficient agitation mechanism. Ensure that the sprayer will provide adequate coverage and even distribution.
- Apply a medium droplet spray, spraying at a medium pressure of at least 200 kPa.
- Do not apply under high pressure.
- Use at least 350 litres per hectare of spray mixture to ensure thorough coverage of the weeds.

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APPLICATION RATES

Important: Refer to USE RESTRICTIONS" above and "IMPORTANT NOTES" below.

<u>Table 1.</u> Application rate of **RAMETREX 410 EC** for the post-emergence control of annual broad-leaved weeds in wheat and barley.

| weeds in wheat and baney. | | | | |
|---|--------------------|--|--|--|
| Dosage rate: 1.4 ℓ / ha | | | | |
| BROAD-LEAVED WEED SPECIES CONTROLLED | | | | |
| Arctotheca calendula | Cape marigold | | | |
| Chenopodium album | White goosefoot | | | |
| Emex australis* | Spiny Emex | | | |
| Fumaria officinalis* | Fumitory | | | |
| Galium aparine | Cleavers | | | |
| Medicago spp. | Clover | | | |
| Oncosiphon grandiflorum = Pentzia grandiflora | Large stinkweed | | | |
| Polygonum aviculare* | Prostrate knotweed | | | |
| Laphangium luteoalbum = Pseudognaphalium luteoalbum | Jersey cudweed | | | |
| Raphanus raphanistrum | Wild radish | | | |
| Veronica persica* | Field speedwell | | | |

^{* -} Cotyledon to 3-leaf stage only.

IMPORTANT NOTES

- 1. Apply **RAMETREX 410 EC** in the cotyledon 3 leaf stage to control *Emex australis*, *F. officinalis Polygonum aviculare* and *V. persica* and not later than the 6-leaf stage for the other weeds.
- Application of RAMETREX 410 EC when the weeds are older than as specified, will result in poor weed control.
- 3. Avoid application when the weeds are covered with heavy dew or when the wind is blowing strongly.
- 4. Ensure thorough coverage of weeds.
- 5. Poor weed control may result if **RAMETREX 410 EC** is applied when the weeds are under moisture or other stress. Apply only during favourable climatic conditions when the weeds are actively growing.
- 6. Under certain climatic conditions **RAMETREX 410 EC** may cause some leaf scorch to grain crops. However, yields will not be affected.

<u>Table 2.</u> Application rate of **RAMETREX 410 EC** plus **Alliante 600 WDG** for the post-emergence control of weeds in wheat and barley.

| weeds in wheat and baney | | | | | |
|---|------------------|------------------------|-------------|--|--|
| RAMETREX 410 EC | PLUS | | PLUS | | |
| | Alliante 600 WDG | | Interlock® | | |
| 1.4 011a | 4.0 g/ha | | 250 mℓ/ha | | |
| WEEDS CONTROLLED | | | | | |
| Botanical name | | | Common name | | |
| Arctotheca calendula | | Cape marigold | | | |
| Cotula turbinata | Cotula turbinata | | Goose daisy | | |
| Erodium moschatum | | Musk heron's bill | | | |
| Malva parviflora | | Small mallow | | | |
| Oncosiphon grandiflorum = Pentzia grandiflora | | Large stinkweed | | | |
| Raphanus raphanistrum* | | Wild radish | | | |
| Senecio consanguineus | | Ragwort | | | |
| Sonchus oleraceus | | Sow-thistle | | | |
| Cenia turbinata | | Goose daisy (Gansogie) | | | |
| * Suppression of <i>Raphanus raphanistrum</i> (Wild radish) was observed, but more constant control may be expected if the application is made before the true five (5) leaf stage. | | | | | |

The following product mentioned in this label may be replaced with an equivalent product:

ALTERATE 600 WDG (L 9915) = ALLIANTE 600 WDG (L 9917) (Metsulfuron-methyl).

ALLIANTE 600 WDG is a registered product of VILLA CROP PROTECTION (PTY) LTD.

ALTERATE 600 WDG is a registered product of UNIVERSAL CROP PROTECTION (PTY) LTD.

INTERLOCK® is a registered trademark WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

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