

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



Herbicide

LEAP 840 EC

Reg. No. L 8064 Act No. 36 of 1947
N-AR 1103 / W1301419

5: 19/5/2022 – Jan2023

A pre-emergence emulsifiable concentrate herbicide with benoxacor for the control of most annual grasses and certain broad-leaved weeds in crops as indicated.

ACTIVE INGREDIENTS

acetochlor (α - Chloroacetamide) 840 g/l
benoxacor (safener) 49 g/l

GROUP 15 HERBICIDE



ANGER

Hazard Statements:

May be harmful if swallowed.
May be harmful in contact with skin.
Harmful if inhaled.
Causes serious eye damage.
May cause an allergic skin reaction.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (kidney).
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 boots, protective clothing, and chemical safety goggles.
Avoid release into the environment.



UN Number: 3082

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)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:
Date of Manufacture:

LEAP 840 EC

Reg. No. L 8064 / N-AR 1103 / W1301419 Act/Wet No. 36 of 1947
 HRAC HERBICIDE GROUP CODE: 15

ACTIVE INGREDIENTS:

acetochlor (chloroacetanilide) 840 g/l
 benoxacor (safener)..... 49 g/l

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

P.O. Box 10413, Aston Manor, 1630,

Tel. (011) 396 2233

WARNINGS**Hazard statements:**

May be harmful if swallowed.
May be harmful in contact with skin.
Harmful if inhaled.
Causes serious eye damage.
May cause an allergic skin reaction.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (kidney).
Very toxic to aquatic life with long lasting effects

- Handle with care.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store 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 until spray deposit has dried, 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 adjacent areas or water.

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.
Avoid breathing dust, fumes, mists, gas, vapours, or spray.
Wash hands and face thoroughly after handling.
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 OR ON SKIN: Get medical help.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 you feel unwell.
If inhaled, 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 contents/container in accordance with local regulations.

- Do not eat, drink or smoke whilst mixing or applying the product 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.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- This applicator should not be used for applying chemicals other than herbicides.
- **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.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Acetochlor	840 g/l
Benoxacor	< 50 g/l
Calcium dodecylbenzene sulphonate	< 50 g/l

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. Immediately consult a doctor.
- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. **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. **Obtain 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 5 minutes and continue rinsing. **Seek medical attention if irritation persists.**
- **Ingestion:** Seek medical attention immediately. 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.

RESISTANCE WARNING

LEAP 840 EC is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **LEAP 840 EC** and any other group code 15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **LEAP 840 EC** or any other group code 15 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:

LEAP 840 EC contains acetochlor, a chloroacetamide compound which belongs to HRAC group 15. It is a selective, systemic herbicide which is primarily absorbed by shoots and secondarily by roots of germinating plants from where it is translocated acropetally in the xylem. Acetochlor is applied pre-emergence and pre-plant for the control of annual grass and certain annual broad leaf weeds.

USE RESTRICTIONS

- **Do not** apply **LEAP 840 EC** to seed-maize or inbred parent plants of maize hybrids, nor onto experimental or newly released cultivars, without referring to the registration holder or seed supplier before application.
- Take note of the restrictions on follow-up crops, and also any use restrictions and recommendations, as mentioned on the labels of other products used in tank mixture with **LEAP 840 EC**.
- If **Triazine** sensitive crops such as groundnuts, dry beans, soybeans, sunflowers, wheat, vegetables, cotton and tobacco are planted as follow-up crops, the application rates of **Agrizine 500 SC** and **Terbusien Super 600 SC** should not exceed 2.0 or 1.7 litres per hectare respectively. These low rates may still damage follow-up crops on the very sandy soils of the North-western Free State or on calcareous soils and weed control may not always be satisfactory.
- Do not apply **LEAP 840 EC** to poorly drained soils or soils with a compaction layer as the herbicide may cause crop injury in cases of waterlogging.
- Heavy rains (25 mm per day or 50 mm over a 3 to 7-day period) on sandy soils (< 15 % clay) and with low organic matter content (< 1 %), as well as flood irrigation, may affect weed control adversely.
- Do not apply **LEAP 840 EC** to sandy soils susceptible to wind erosion.

DIRECTIONS FOR USE: Only use as directed.

Compatibility:

LEAP 840 EC is compatible with the following products: **AMETRYN 500 SC** (L 7742), **Cantron® 480 SC**, **Acetochlor 900 EC**, **AGRIZINE 500 SC** (L 5387 / W 130121), **Diuron 800 SC**, **Diuron 800 WDG**, **EPTC PLUS 720 EC** (L 4505 / N-AR 1095), **Crux 425 SC**, **Brenno 700SC**, **SKOFFEL® 145 SL** (L 4347), **SKOFFEL® 200 SUPER** (L 6328 / W 130059 / N-AR 1097) and **TERBUSIEN SUPER 600 SC** (L 5435 / N-AR 1110).

- If tank mixtures with other products are made, first confirm compatibility by mixing small volumes of the products in the correct ratio with the appropriate quantity of water.
- Water quality and formulation properties of other products may influence compatibility.
- When **LEAP 840 EC** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE** mentioned on that label.

Mixing Instructions:

- Half fill the spray tank with clean water.
- Add the required amount of **LEAP 840 EC** to the water, while stirring.
- Fill the spray tank with water to the required level, while maintaining agitation, to ensure thorough mixing.
- If **LEAP 840 EC** is to be tank mixed with other herbicides, the following mixing procedure must be followed:
 - a) Fill the spray tank to three quarters with clean water. Add the required amount of complementary herbicide while agitating.
 - b) Fill the spray tank with clean water close to the final volume and then add the required amount of **LEAP 840 EC**. Thereafter add water to the final volume.
- Ensure continuous agitation of the spray mixture during mixing and application.
- Spray mixtures must be sprayed immediately and not allowed to stand over e.g. overnight.
- Spray equipment must be cleaned and rinsed immediately after spraying.

Application:

- Use accurately calibrated equipment with appropriate correctly spaced nozzles and with an efficient agitation mechanism.
- Prepare a fine, even and firm seedbed free of weeds, trash and clods. For optimal control of weeds, the seedbed must be prepared within 3 days before planting and application.
- Apply **LEAP 840 EC** or the tank mixture at planting or immediately following planting, but not later than 3 (three) days after planting.
- Use 100 to 300 litres spray mixture per hectare for overall ground application. Refer to “**Aerial application**” below for instructions regarding aerial application of **LEAP 840 EC**.
- For more reliable control, early in the season, shallow incorporation of **LEAP 840 EC** can be carried out using suitable equipment.
- **10 to 20 mm rain or irrigation within 7 to 10 days after application is required for best results.**
- Under dry conditions weed seedlings may emerge but they are normally stunted and can be controlled with a shallow cultivation, which will also incorporate the herbicide into the top 10 to 20 mm of soil.
- If soil crusting becomes a problem, apply a rotary harrow in the same direction the rows are planted, to assist crop emergence.
- Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows.
- **LEAP 840 EC** has no post-emergence activity and can be applied post-emergence to the crop after cultivation, when no weeds are present.
- To promote vigorous seedling growth, ensure that sufficient fertilizer is placed near the seed at planting.

Aerial Application:

Aerial application of **LEAP 840 EC** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). It is important to 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 litres per hectare 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.
- Droplet coverage: Droplet coverage of 20 to 30 droplets per cm² must be recovered at the target.
- Droplet size: A droplet spectrum with a VMD of 350 to 400 micron is recommended. Ensure that the production of fine droplets (less than 150 micron with high drift and evaporation potential) is restricted to a minimum.
- Flying height: The height of the spray boom should be maintained at 3 to 4 metres above the target. Do not spray when aircraft is in a climb, or during a dive, or when banking.
- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product either through endodrift (within target field) or exodrift (outside target field). The operator must use a setup that will produce a droplet spectrum with the lowest possible Relative Span. All nozzles/atomisers should be positioned within the inner 60 % to 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 per hour.
- Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.
- Also note that the application of this product 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 the movement of the suspended spray cloud away from the target field.
- Ensure that the fields are accurately marked and that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a spray log and kept for future reference.

APPLICATION RATES

A. **MAIZE AND SWEETCORN** (Single pre-emergence application)

Table 1: Pre-emergence application of **LEAP 840 EC** for the control of certain grass and broadleaved weeds.

% Clay	LEAP 840 EC ℓ / ha
0 to 10	0.75 to 1.0
11 to 15	1.0 to 1.15
16 to 20	1.15 to 1.3
21 to 30	1.3 to 1.65
31 to 40	1.65 to 1.8
More than 40 %	2.0

NOTE

- Use only low application rates of **LEAP 840 EC** on the sandy soils of the Northern and Western Free State and Northwest Province.
- Use the lower dosage rate if a shorter period of residual control is desired between application and a harrow cultivation and/or a follow-up application.
- Apply the higher dosage rate in case of high grass pressure, and/or the suppression of Yellow nutsedge.

B. **MAIZE** (Pre-emergence tank mixture)

Table 2: Pre-emergence application for the control of broad-leaved and grass weeds with a tank mixture of **LEAP 840 EC** plus a complimentary **Triazine** herbicide.

% Clay	LEAP 840 EC ℓ / ha	Plus one of the following complimentary herbicides:	
		Agrazine 500 SC ℓ / ha	OR Terbusien Super 600 SC ℓ / ha
0 to 10	0.75 to 1.0	2.5	2.1
11 to 15	1.0 to 1.15	3.25	2.7
16 to 20	1.15 to 1.3	3.25	2.7
21 to 30	1.3 to 1.65	4.0	3.3
31 to 40	1.65 to 1.8	4.75	3.9
More than 40 %	2.0	5.0	4.2

NOTE

- Use only low application rates of **LEAP 840 EC** on the sandy soils of the Northern and Western Free State and Northwest Province.

C. **MAIZE** (Split application)

Table 3: **LEAP 840 EC** applied pre-emergence followed by a tank mixture of **Acetochlor 900 EC** plus **Terbusien Super 600 SC** early post-emergence after a shallow harrow cultivation.

% Clay	LEAP 840 EC ℓ / ha Post planting, pre-emergence	Early post-emergence tank mixture	
		Acetochlor 900 EC ℓ / ha	Terbusien Super 600 SC ℓ / ha
0 to 10	0.5 to 0.8	0.42	1.9
11 to 20	0.8 to 1.0	0.49	2.2
21 to 30	1.0 to 1.5	0.56	2.5
More than 30 %	1.0 to 1.5	0.8	3.75

NOTE

- Use only low application rates of **LEAP 840 EC** on the sandy soils of the Northern and Western Free State and Northwest Province.

D. MAIZE (Only North, Western Free State and Northwest Province):**Table 4:** Control of broadleaved and grass weeds with a tank mixture of **LEAP 840 EC** and a complimentary **Triazine** herbicide.

% Clay	LEAP 840 EC ℓ / ha	Plus one of the following complimentary herbicides:	
		Agrazine 500 SC ℓ / ha	OR Terbusien Super 600 SC ℓ / ha
0 to 10	0.6	2.25	1.9
11 to 15	0.8	2.25	1.9
16 to 20	0.9	2.5	2.1
21 to 30	1.2	2.75	2.3

NOTE

- Yellow nutsedge (*Cyperus esculentus*) will not be controlled satisfactory. Khaki weed (*Tagetes minuta*) may not be controlled throughout the season.
- Sometimes it is preferred to pre-plant incorporate a **Thiocarbamate** herbicide (e.g. **EPTC**) and thereafter apply, post-emergence to the crop, tank mixtures. The tank mixtures of **LEAP 840 EC** mentioned above may be used in such cases provided that **LEAP 840 EC** is only applied pre-emergence to the weeds as it does not possess post-emergence herbicidal activity.
- It is recommended not to make such an application later than the 5 leaf-stage of the maize as the crop foliage may prevent the spray mixture from reaching the soil.
- Consult the **Agrazine 500 SC** and **Terbusien Super 600 SC** labels for more particulars.
- If heavy rain occurs on light, sandy soils (< 15 % clay and < 0.5 % organic matter) poor weed control may result and a split application is preferred.

E. MAIZE (Pre-emergence application of LEAP 840 EC plus Cantron® 480 SC):**NOTES**

- Follow this pre-emergence application after approximately 35 to 42 days with a post-emergence application of registered mixtures of **Cantron® 480 SC** plus **Terbusien Super 600 SC**, as indicated on the relevant labels.
- Control of Yellow nutsedge (*Cyperus esculentus*): The dosage rates of **LEAP 840 EC** plus **Cantron® 480 SC** as indicated below may provide insufficient control of Yellow nutsedge. Refer to **Control of Yellow nutsedge** below.

Table 5.1: Pre-emergence application of **LEAP 840 EC** plus **Cantron® 480 SC**.

LEAP 840 EC 950 to 1200 ml / ha	PLUS Cantron® 480 SC 210 ml / ha
WEEDS CONTROLLED Above-mentioned plus:	
Botanical name	Common name
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Amaranthus hybridus</i>	Common pigweed
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Cleome monophylla</i>	Spindlepod
<i>Commelina benghalensis</i>	Benghal wandering Jew
<i>Datura ferox</i>	Large thorn apple
<i>Digitaria sanguinalis</i>	Crab fingergrass
<i>Echinochloa colona</i>	Marsh grass
<i>Eleusine indica</i>	Goose grass
<i>Eragrostis curvula</i>	Weeping love grass
<i>Hibiscus cannabinus</i>	Kenaf
<i>Hibiscus trionum</i>	Bladder weed
<i>Nicandra physaloides</i>	Apple-of-Peru
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Physalis angulata</i>	Wild gooseberry
<i>Polygonum aviculare</i>	Prostrate knotweed
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Tagetes minuta</i>	Tall Khaki weed
<i>Triumfetta pilosa</i>	-

Table 5.2: Pre-emergence application of **LEAP 840 EC** plus **Cantron® 480 SC**.

LEAP 840 EC 1200 ml / ha	PLUS Cantron® 480 SC 260 ml / ha
WEEDS CONTROLLED Above-mentioned plus:	
Botanical name	Common name
<i>Urochloa panicoides</i>	Herringbone grass
<i>Xanthium strumarium</i>	Cocklebur

F. MAIZE (Pre Plant Incorporated application of LEAP 840 EC plus Cantron® 480 SC plus EPTC Plus 720 EC for improved control of Yellow nutsedge):

LEAP 840 EC 950 to 1200 ml / ha	PLUS Cantron® 480 SC 200 ml / ha	PLUS EPTC Plus 720 EC 2.0 to 4.0 l / ha
<p>Overall application: Refer to the EPTC Plus EC label for the dosage rate according to the soil clay %. Sowing can take place immediately after application, as soon as possible, in order to obtain the maximum period of weed control. If it is necessary to cultivate following application and incorporation, do not work the soil deeper than the depth to which the herbicide was incorporated.</p> <p>Note:</p> <ul style="list-style-type: none"> • Use the higher dosage rate of LEAP 840 EC where clay % is higher or higher weed pressure is expected. • The spectrum of weeds controlled, as well as the period of weed control normally obtained with LEAP 840 EC plus Cantron® 480 SC may be reduced as the active ingredients are placed deeper into the soil compared to normal pre-emergence application where the active ingredients are washed into the top soil layer by rain or irrigation. • Due to above-mentioned this application is NOT THE OPTIMAL recommendation especially in situations of high pressure of grass weeds. • A full early post emergence herbicide spray program should still be adhered to. <p>Refer to the Cantron® 480 SC and EPTC Plus 720 EC labels for complete list of weeds that are controlled pre-emergence by these products.</p>		

G. MAIZE (Pre-emergence application of LEAP 840 EC plus Crux 425 SC):

Table 6: LEAP 840 EC plus Crux 425 SC dosage rates applied pre-emergence.

LEAP 840 EC (l / ha)	PLUS Crux 425 SC (l / ha)
0.75 to 1.0	0.8 to 1.2 l / ha

- Use the higher dosage rates on soils with higher clay/organic matter content, or where weed pressure is higher and/or extended residual action is required.
- Refer to **Crux 425 SC** label for an indication of weeds that will be controlled at different dosage rates in tank mixtures with **LEAP 840 EC**.
- Refer to the **Crux 425 SC** label for complete information.

H. MAIZE (Pre-emergence application of LEAP 840 plus Cantron® 480 SC plus Brenno 700 SC/Gatling 700 SC in maize):

NOTES

- Follow this pre-emergence application after approximately 35 to 42 days with a post-emergence application of registered mixtures of **Cantron® 480 SC** plus **Terbusien Super 600 SC**, as indicated on the relevant labels.
- Control of Yellow nutsedge (*Cyperus esculentus*): The dosage rates of **LEAP 840 EC** plus **Cantron® 480 SC** plus **Brenno 700 SC/Gatling 700 SC**, as indicated below, may provide insufficient control of Yellow nutsedge.
- Refer to Point F above for improved control of Yellow nutsedge by means of pre-plant incorporation of **LEAP 840 EC** with **Cantron® 480 SC** and **EPTC Plus 720 EC**.
- Refer to the **Cantron® 480 SC**, **Brenno 700 SC/Gatling 700 SC** and **EPTC Plus 720 EC** labels for a list of weeds controlled by these products and also refer to the **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

Table 7: LEAP 840 EC plus Cantron® 480 SC plus Brenno 700 SC/Gatling 700 SC in maize.

% Clay	LEAP 840 EC €/ ha	Cantron® 480 SC m/ ha	Brenno 700 SC/ Gatling 700 SC €/ ha
0 to 10	0.8	210 to 260	2.25
11 to 15			2.75
16 to 20			3.50
21 to 30			4.25
31 to 40			5.00
>40		Not recommended	Not recommended

I. GROUNDNUTS**Table 8: LEAP 840 EC recommendations for use in groundnuts.**

% Clay	LEAP 840 EC €/ ha
0 to 10	0.8 to 1.7
11 to 20	1.2 to 2.2
21 to 30	1.7 to 3.4

NOTE

- Apply after planting but before emergence of the crop or germination of the weeds.
- Use the higher dosage rate for extended control of broadleaved weeds and/or the suppression of Yellow nutsedge.

J. SUGARCANE**TAKE NOTE**

LEAP 840 EC will not damage the foliage of sugarcane plants. Other herbicides in tank mixture with LEAP 840 EC, however, may cause phytotoxicity on sugarcane. Carefully study other products' labels and use restrictions before using it in tank mixture with LEAP 840 EC on sugarcane.

Sugarcane pre-emergence application:**Table 9: LEAP 840 EC tank mixture for pre-emergence application in sugarcane.**

LEAP 840 EC €/ ha		Plus one of the following complimentary herbicides:			
		Ametryn 500 SC €/ ha	<u>OR</u> Diuron 800 SC €/ ha	<u>OR</u> Agrazine 500 SC €/ ha	
< 30% clay	> 30% clay	2.0 to 3.0	3.0	< 35% clay	> 35% clay
1.8 to 2.6	2.3 to 3.0			2.0 to 5.0	3.0 to 5.0

NOTE

- Apply higher dosage rate of LEAP 840 EC on soils with more than 30% clay, or where a longer residual action, and/or better control of Yellow nutsedge is required. Use the lower dosage on lighter soils.
- Apply the lower Ametryn 500 SC dosage on light to medium soils. Use the higher dosage on medium to heavy soils.
- Use the higher Agrazine 500 SC dosage on soils where a longer residual action is required.

Sugarcane post-emergence application:**Table 10:** LEAP 840 EC tank mixture for post-emergence application in sugarcane.

LEAP 840 EC ℓ / ha		Plus one of the following complimentary herbicides:				
		Ametryn 500 SC ℓ / ha		OR Diuron 800 SC ℓ / ha	OR Agrazine 500 SC ℓ / ha	
< 30% clay	> 30% clay	6.0 PLUS suitable wetter. See NOTES 1 and 7 below.	3.0 to 5.0 PLUS 1.5 ℓ / ha	2.5 to 3.0 PLUS 1.5 ℓ / ha Skoffel® 145 SL OR Skoffel® 200 Super , See NOTES 2, 4 and 7 below.	< 35% clay	> 35% clay
1.8 to 2.6	2.3 to 3.0		3.0 to 5.0 PLUS 1.5 ℓ / ha		2.0 to 5.0	3.0 to 5.0
			See NOTES 5 and 6 below.			

NOTE

1. Direct spray between the rows from the 5-leaf stage of the sugarcane.
2. Only apply up to the 2 to 3-leaf stage of sugarcane.
3. Apply the lower **Ametryn 500 SC** dosage on light to medium soils. Use the higher dosage on medium to heavy soils.
4. The **Diuron 800 SC** can be replaced with 2.5 to 3.0 kg **Diuron 800 WDG** formulation.
5. Apply before emergence of the weeds.
6. Use the higher **Agrazine 500 SC** dosage on soils where a longer residual action is required.
7. Apply before the tillering stage of annual grasses.

K. POTATOES**Table 11:** Pre-emergence application of LEAP 840 EC in potatoes.

% Clay	LEAP 840 EC ℓ / ha
0 to 10	0.8
11 to 20	1.6
21 to 30	1.8
30+	3.3

NOTE

- Apply before emergence of the crop and weeds.

WEEDS CONTROLLED BY LEAP 840 EC:	
Grass weeds:	
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgata</i>	Feathertop chloris
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Urochloa panicoides</i>	Herringbone grass
Other annual grasses, not mentioned in this list, may also be controlled to a certain extent by LEAP 840 EC . The registration holder, however, cannot accept responsibility regarding weeds not listed here.	

WEEDS CONTROLLED BY LEAP 840 EC:	
Broadleaved weeds:	
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Chenopodium album</i>	White goosefoot
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Portulaca oleracea</i>	Purslane

WEEDS VARIABLY CONTROLLED BY LEAP 840 EC:	
<i>Bidens pilosa</i>	Common blackjack
<i>Cleome monophylla</i>	Spindlepod
<i>Commelina benghalensis</i>	Wandering jew
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Tagetes minuta</i>	Khaki weed (early germinating only)

Control of Yellow nutsedge:

- Control is dependent on a deep mouldboard ploughing just before planting and by application 1 to 2 days after planting, followed by soaking rain or irrigation (minimum of 15 mm on light soils, 25 mm on heavy soils) within 7 to 10 days after application.
- Application and rainfall or irrigation must occur before the Yellow nutsedge plants start to germinate and develop.

Consult the **Ametryn 500 SC, Cantron® 480 SC, Agrazine 500 SC, Diuron 800 SC, Diuron 800 WDG, Skoffel® 145 SL, Skoffel® 200 Super, Terbusien Super 600 SC, Acetochlor 900 EC, Crux 425 SC, Brenno 700SC** and **EPTC Plus 720 EC** labels for **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE**.

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

- CANTRON® 480 SC** (L 8365 / N-AR 1323 / W 130604) = **ASTRON® 480 SC** (L 8366) = **CANONNE 480 SC** (L 8735) (**Mesotrione**),
- CRUX 425 SC** (L 8325) = **CORVETTE 425 SC** (L 8323 / N-AR 1322 / W 130663) (**Sulcotrione + Atrazine**),
- ACETOCHLOR 900 EC** (L 7633 / N-AR 1101 / W 1301407) = **PREMIUM 900 EC** (L 7637),
- BRENNO 700SC** (L 8391) = **GATLING 700 SC** (L 8349) (**Acetochlor + Atrazine + Terbutylazine**) and
- EPTC PLUS 720 EC** (L 4505 / N-AR 1095) = **ESCULENTUS 720 EC** (L 8033).

CANONNE 480 SC is a registered product of
CROPASURE (PTY) LTD.

CANTRON® 480 SC, ACETOCHLOR 900 EC, CRUX 425 SC, ESCULENTUS 720 EC, BRENNO 700SC, AMETRYN 500 SC and **TERBUSIEN SUPER 600 SC** are registered products of
VILLA CROP PROTECTION (PTY) LTD.

ASTRON® 480 SC, CORVETTE 425 SC, EPTC PLUS 720 EC, SKOFFEL® 145 SL, SKOFFEL® 200 SUPER, GATLING 700 SC and **PREMIUM 900 EC** are registered products of
UNIVERSAL CROP PROTECTION (PTY) LTD.

SKOFFEL® is a registered trademark of
UNIVERSAL CROP PROTECTION (PTY) LTD.

CANTRON® and **ASTRON®** are registered trademarks of
VILLA CROP PROTECTION (PTY) LTD.