

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



Herbicide

# METOLACHLOR 960 EC

Reg. No. L 7136 Act No. 36 of 1947  
W 130057 / N-AR 1362

3: 19/5/2022 – Nov2022

A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses and certain broad-leaved weeds in dry beans, groundnuts, soybeans, sunflowers, grain- and forage sorghum, sugarcane, potatoes and lupins, as well as early post emergence in maize.

## ACTIVE INGREDIENT

metolachlor ( $\alpha$  - chloroacetanilide) 960 g/l

GROUP

15

HERBICIDE



WARNING

### Hazard Statements:

Harmful if swallowed.  
Harmful if inhaled.  
May cause an allergic skin reaction.  
Causes mild skin irritation.  
Causes serious eye damage.  
Very toxic to aquatic life with long lasting effects.

### Precautionary Statements:

IF SWALLOWED: Get medical help.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Avoid release into the environment.

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**villa**



UN Number: 3082

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.  
Co. Reg. No. 1983/008184/07  
P.O. Box 801, Kempton Park 1620  
Tel. (011) 396 2233  
Website: [www.villacrop.co.za](http://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)

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

**METOLACHLOR 960 EC**

Reg. No. L 7136 / W 130057 / N-AR 1362 Act No. 36 of 1947

HRAC HERBICIDE GROUP: 15

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**WARNINGS****Hazard statements:**

Harmful if swallowed.
May be harmful if inhaled.
Causes mild skin irritation
Causes eye irritation.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Store in a cool place away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- **In case of poisoning call a doctor and make this label available to him/her.**
- **Re-entry:** Do not enter treated field within one (1) day after application unless wearing protective clothing.

**Aerial application:**

Notify all inhabitants in the immediate vicinity of the lands 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 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 against the remedy concerned, 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 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:**

Avoid breathing dust, fume, gas, mists, vapours or spray.
Wash hands thoroughly after handling. Do not touch eyes.
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 into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED: 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.
Get medical help.
Rinse mouth.
If skin irritation occurs: Get medical help.

Collect spillage.
Dispose of content/container to suitable landfill 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 spray drift and/or contamination onto susceptible crops, grazing, rivers, dams or any other areas not under treatment.
- Thoroughly clean 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 (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](http://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.
- Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.

<u>Relevant hazardous components</u>	
<b>Metolachlor TC</b>	960 g/l
Phenylsulphonate	<10 g/l
Ethoxylated phenols	<10 g/l

### **SYMPTOMS OF HUMAN POISONING**

Irritation effects on skin and mucous membranes are the most common reactions. May cause irritation to the eyes. Allergic skin reaction may occur. May cause skin sensitization. Large ingestions can cause nausea, vomiting, abdominal distress, and diarrhoea.

### **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.
- Skin contact:** 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.
- 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 five (5) minutes and continue rinsing. Seek medical attention immediately.
- Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. **Seek medical attention if irritation occurs or if patient feels unwell after inhalation.**
- Ingestion:** Seek medical attention or call a poison control centre for treatment advice. **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.

### **NOTE TO PHYSICIAN**

No specific antidote. Treat symptomatically and supportively. Keep patient under observation. Perform gastric lavage and catharsis if the victim is not unconscious. If less than 10 mg per kg body weight was ingested, administer 30 to 60 g activated charcoal in 150 to 300 ml water.

### **Mode of Action:**

**METOLACHLOR 960 EC** contains **Metolachlor**, a chloroacetamide compound which belongs to HRAC group 15. It is used as a pre-, early post-emergence and pre-plant incorporated herbicide for the control of annual grass and some broad leaf weeds. **Metolachlor** is a selective herbicide which is absorbed primarily by hypocotyls and shoots and in turn inhibits germination.

### **RESISTANCE WARNING**

**METOLACHLOR 960 EC** is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **METOLACHLOR 960 EC** and 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 **METOLACHLOR 960 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.

### **USE RESTRICTIONS**

- Do not apply **METOLACHLOR 960 EC** to poorly drained soils or soils with a compaction layer, as waterlogging and herbicide injury may occur.
- Heavy rain (25 mm per day or 50 mm over a 3- to 7-day period) on very sandy soils (< 15 % clay) low in organic matter (< 1 %), as well as flood irrigation can reduce weed control performance.
- **METOLACHLOR 960 EC** may damage the following crops under conditions as mentioned: Dry beans on fields where monoculture is practiced and soilborne diseases are prevalent, also dry beans and sunflowers on shallow, sandy, waterlogged soils with an impermeable clay layer at less than 100 cm depth. **METOLACHLOR 960 EC** damage to dry beans is sometimes associated with hot, dry weather and a plough-sole in the soil.
- When **METOLACHLOR 960 EC** is applied to dry beans or grain sorghum the seed must be treated with effective fungicides to control seedling diseases, such as *Pythium* spp., *Rhizoctonia* spp., etc.
- Use restrictions for any herbicides used in combination with **METOLACHLOR 960 EC**, must be adhered to.

### **DIRECTIONS FOR USE: Use only as directed.**

#### **Compatibility:**

- If tank mixtures are made with other products, small quantities of the products in the correct ratio should be mixed with the appropriate quantity of water, to determine compatibility.
- Water quality and formulation of other products may influence compatibility.

#### **Mixing instructions:**

- Shake container well before use. Close container after use.
- Half fill the spray tank with clean water; add the required amount of **METOLACHLOR 960 EC**, while maintaining agitation. Then complete the filling operation.
- When mixing **METOLACHLOR 960 EC** with other herbicides, use the following procedure:
  1. fill the spray tank three quarters with clean water. Add the required amount of complementary herbicide to the water, agitating continuously,
  2. continue filling the spray tank with water and add the required amount of **METOLACHLOR 960 EC** just before the tank is filled, to its full level.
- Ensure thorough agitation of the mixture in the tank during mixing and spraying.
- Spray mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.
- Thoroughly flush out spraying equipment at the end of the spraying operation.

#### **Application recommendation:**

- Use accurately calibrated equipment with properly arranged suitable nozzles and an efficient agitation mechanism.
- Prepare a fine, even, and firm seedbed free of weeds, trash and clods.
- Apply **METOLACHLOR 960 EC** or its tank mixtures preferably at planting or immediately after planting, but not later than three days after planting. Use 200 litres spray mixture per hectare for overall ground application and 30 to 40 litres per hectare for aerial application.
- **METOLACHLOR 960 EC** can also be shallowly incorporated early in the season to improve reliability of weed control.
- **10 to 20 mm rain within 7 to 10 days after application is necessary for good results.**
- Under dry conditions, weed seedlings may emerge. These are usually stunted and can be controlled with a shallow cultivation, which also mixes the herbicide with the top 10 to 20 mm of soil.
- If soil crusting becomes a problem, rotary harrow in the same direction the rows are planted, to assist emergence.
- Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows.
- **METOLACHLOR 960 EC** has no post-emergence activity and can be applied post-emergence to the crop after a cultivation, when no weeds are present.
- Ensure that sufficient fertilizer is placed near the seed at planting, to promote vigorous seedling growth.

**Aerial Application:**

Aerial application of **METOLACHLOR 960 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:

- 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, at the top of, 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:
  - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
  - 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.

**• Pre-emergence aerial application:**

- 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 cm<sup>2</sup> 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 & evaporation potential) is restricted to a minimum.

**APPLICATION RATES****A. GROUNDNUTS, DRY BEANS, SUNFLOWERS, SOYBEANS AND LUPINS****Table 1: METOLACHLOR 960 EC** recommendations for use in broadleaf crops.

<b>Soil Type</b>	<b>% Clay</b>	<b>METOLACHLOR 960 EC l/ ha</b>
Sand / loamy sand / sandy loam	0 to 20	0.9 to 1.2
Sandy clay loam	21 to 30	1.2 to 1.5
Sandy clay loam / sandy clay	> 30 %	1.5 to 2.0

**NOTE**

- The higher application rates of **METOLACHLOR 960 EC** are recommended for control of Yellow nutsedge (*Cyperus esculentus*) and Crabfinger-grass (*Digitaria sanguinalis*) and also on soils with > 1.0 % organic matter.

## B. POTATOES

### Pre-emergence in respect of weeds:

Apply 1.9 litres per hectare, under dry land conditions, pre-emergence to potatoes and weeds, after the first summer rains.

### Early post-emergence in respect of weeds:

**METOLACHLOR 960 EC** is a pre-emergence herbicide. However, for early post weed emergence apply 1.9 litres per hectare under dry land conditions, after the first summer rains in a tank mixture with **SKOFFEL® 145 SL** (L 4347) at 1 to 2 litres per hectare.

**METOLACHLOR 960 EC / Skoffel® 145 SL** mixtures **must not** be applied after 10 % potato emergence.

A rate of 1.5 litres per hectare **METOLACHLOR 960 EC** can be applied under irrigation.

**METOLACHLOR 960 EC** can also be applied post-emergence to the potatoes after ridging.

## C. SUGARCANE

### Pre-emergence application:

**Table 2: METOLACHLOR 960 EC** can be applied pre-emergence as follows.

<i>Application rates and mixtures</i>	<i>Comments</i>
<b>METOLACHLOR 960 EC</b> 1.5 to 2.4 ℓ / ha	Apply higher rates if clay content > 35 %, to improve control of <i>Panicum maximum</i> and <i>Cyperus esculentus</i> and for longer residual control.
<b>METOLACHLOR 960 EC</b> 3.0 ℓ / ha	Apply on soils with > 35 % clay and > 1 % organic matter.
<b>METOLACHLOR 960 EC</b> As above <b>PLUS</b> 1.5 ℓ / ha <b>Skoffel® 145 SL</b>	If weeds have started to emerge.
<b>METOLACHLOR 960 EC</b> As above <b>PLUS</b> 2.0 to 3.0 ℓ / ha <b>Ametryn 500 SC</b>	For improved broadleaf control use the low rate of <b>AMETRYN 500 SC</b> (L 7742) on light to medium soils and the high rate on medium to heavy soils.
<b>METOLACHLOR 960 EC</b> As above followed post-emergence by <b>MCPA 400 SL</b> <b>OR</b> <b>2,4-D Amine 480 SL</b>	Consult <b>MCPA 400 SL</b> or <b>2,4-D AMINE 480 SL</b> (L 4505 / W 130459 / N-AR 1096) labels for the complete particulars.

**Post-emergence application (Sugarcane):**

**Table 3:** **METOLACHLOR 960 EC** can be applied post-emergence, if it is applied in a tank mixture with a herbicide with post-emergence activity as recommended below.

<b>Application rates and mixtures</b>	<b>Comments</b>
<b>METOLACHLOR 960 EC</b> As for pre-emergence <b>PLUS</b> <b>Ametryn 500 SC</b> at 2.0 to 3.0 ℓ / ha <b>PLUS</b> <b>Skoffel® 145 SL</b> at 1.5 ℓ / ha	<b>Skoffel® 145 SL</b> can only be applied up to the 3-leaf stage of the sugarcane. Do not use any surfactant.
<b>METOLACHLOR 960 EC</b> As for pre-emergence <b>PLUS</b> <b>Ametryn 500 SC</b> at 6.0 ℓ / ha <b>PLUS</b> 0.2 % non-ionic surfactant	Apply overall up to 5-leaf stage of sugarcane and as a directed spray later. <i>Panicum maximum</i> control with this treatment may be variable.
<b>METOLACHLOR 960 EC</b> As for pre-emergence <b>PLUS</b> <b>Ametryn 500 SC</b> at 4.0 to 5.0 ℓ / ha <b>PLUS</b> <b>MCPA 400 SL</b> at 3.5 ℓ / ha <b>OR</b> <b>2,4-D Amine 480 SL</b> at 3.0 ℓ / ha <b>PLUS</b> 0.2 % non-ionic surfactant	Direct spray between cane rows especially after the 5-leaf stage. Use higher <b>Ametryn 500 SC</b> rate for severe grass infestations. <i>Panicum maximum</i> control with this treatment may be variable.
<b>METOLACHLOR 960 EC</b> As for pre-emergence <b>PLUS</b> <b>Diuron 800 SC</b> at 2.0 to 2.5 ℓ / ha <b>PLUS</b> <b>Skoffel® 145 SL</b> at 1.5 ℓ / ha	<b>Skoffel® 145 SL</b> can only be applied up to the 3-leaf stage of the sugarcane. Do not use any surfactant. Use the higher rate of <b>Diuron 800 SC</b> to improve residual control.
<b>METOLACHLOR 960 EC</b> As for pre-emergence <b>PLUS</b> <b>Metribuzin 480 SC</b> at 2.0 ℓ / ha <b>PLUS</b> <b>Skoffel® 145 SL</b> at 1.5 ℓ / ha	<b>Skoffel® 145 SL</b> can only be applied up to the 3-leaf stage of the sugarcane. Do not use any surfactant. Do not apply <b>Metribuzin 480 SC</b> (L 4374) on soils with < 6 % clay.

**D. MAIZE**

Post-emergence applications of **METOLACHLOR 960 EC** that can be used after a pre-emergence application of **Metolachlor 800 EC** are given in Table 4. (Consult the **Metolachlor 800 EC** label.)

**Table 4:** **Metolachlor 800 EC** applied pre-emergence followed by **METOLACHLOR 960 EC** plus **TERBUSIEN SUPER 600 SC** (L 5435 / N-AR 1110 / W 130958) early post-emergence.

<b>Soil Type</b>	<b>% Clay</b>	<b>Metolachlor 800 EC ℓ / ha</b>	<b>METOLACHLOR 960 EC ℓ / ha</b>	<b>PLUS</b>	<b>Terbusien Super 600 SC ℓ / ha</b>
Sand	0 to 10	0.55 to 0.65	0.45 to 0.55	+	2.2
Loamy sand / sandy loam	11 to 20	0.9 to 1.1	0.4	+	2.5
Sandy clay loam	21 to 30	1.1 to 1.4	0.5	+	3.0
Sandy clay loam / sandy clay	31 to 40	1.3 to 1.6	0.5 to 0.7	+	3.0
Sandy clay / turf	41 to 50	1.4 to 1.75	0.5 to 0.7	+	3.0

**NOTE**

- Use the higher application rates of **Metolachlor 800 EC** for improved control of *Cyperus esculentus* (Yellow nutsedge), or for improved control of heavy infestations of *Digitaria sanguinalis* (Crabfinger-grass), or where **Metolachlor 800 EC** is pre-plant incorporated, or where organic matter in the soil exceeds 1.0 %.
- Apply **METOLACHLOR 960 EC + Terbusien Super 600 SC** (Table 4) early post-emergence, after the first cultivation.
- Early post-emergence treatments give more effective broadleaf weed control on soils with > 30 % clay.
- Under adverse weather conditions or with poor initial control, on soils with 31 to 40 % and 41 to 50 % clay the application rates of **Terbusien Super 600 SC** can be increased to 4.0 and 5.0 litres per hectare, respectively.



- 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** (L 5387 / W 130121) and **Terbusien Super 600 SC** should not exceed 2.0 litres per hectare. 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.
- 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.
- Use a suitable penetrant with all post-emergence applications, with the exception of mixtures containing **2,4-D Amine 480 SL**.
- Consult the **Terbusien Super 600 SC**, **Agrizine 500 SC** and **2,4-D Amine 480 SL** labels for more particulars.

**METOLACHLOR 960 EC plus Terbusien Super 600 SC preceded by EPTC PLUS 720 EC:**

Apply **EPTC PLUS 720 EC** at normal recommended rates on soils up to 30 % clay and follow up early post-emergence with a tank mixture containing **METOLACHLOR 960 EC** and **Terbusien Super 600 SC** (Table 5).

**Table 5: METOLACHLOR 960 EC plus Terbusien Super 600 SC applied early post-emergence as a tank mixture after initial application of EPTC PLUS 720 EC.**

Soil Type	% Clay	METOLACHLOR 960 EC €/ ha	PLUS	Terbusien Super 600 SC €/ ha
Sand	0 to 10	0.9	+	2.2
Loamy sand / sandy loam	11 to 20	1.2	+	2.5
Sandy clay loam	21 to 30	1.4	+	3.0

**E. GRAIN- AND FORAGE SORGHUM**

**METOLACHLOR 960 EC** can be used in sorghum provided the seed has been pre-treated, as prescribed, with a suitable, registered seed treatment to prevent phytotoxicity by **METOLACHLOR 960 EC**.

**Table 6: METOLACHLOR 960 EC applied pre-emergence in sorghum after seed treatment.**

Soil Type	% Clay	METOLACHLOR 960 EC €/ ha
Sand / loamy sand / sandy loam	0 to 20	Not recommended
Sandy clay loam	21 to 30	1.2
Sandy clay loam / sandy clay	31 to 40	1.5
Turf	> 40	1.5 to 2.0

**NOTE**

- An application rate of 2.0 litres per hectare is recommended on turf soils, for improved control of Sweet signal grass and Yellow nutsedge.
- Prevent the formation of a soil crust, through a shallow cultivation as soon as possible.
- Very wet conditions during the first 4 to 6 weeks after **METOLACHLOR 960 EC** application may damage the sorghum, but it is normally outgrown.
- The presence of seedling diseases may result in **METOLACHLOR 960 EC** damage to the sorghum.
- Post emergence applications of **Agrizine 500 SC** or **Terbusien Super 600 SC** can be applied in tank mixture with **2,4-D Amine 480 SL** for broad leaf control in sorghum. Consult the **Agrizine 500 SC** or **Terbusien Super 600 SC** labels for details.

**F. TOBACCO (Summer rainfall region only).**

Apply **METOLACHLOR 960 EC** within three (3) days after transplanting while the plants are still wilted. When the tobacco is turgid, the spray must be directed to prevent it from entering the funnel, where the growing point may be damaged. If actively growing leaves are sprayed, scorching may occur. If **METOLACHLOR 960 EC** is sprayed on gravelly or soils with less than 10 % clay, the spray should be directed at least 10 cm on both sides away from the plant row, to prevent leaching to the root zone of the tobacco.

The **METOLACHLOR 960 EC** can be activated by applying overhead irrigation of 10 to 15 mm within 2 to 3 days after application, on soils with less than 35 % clay and 20 to 30 mm on soils with more than 35 % clay.

**Table 7: METOLACHLOR 960 EC application rates in tobacco.**

<b>Soil Type</b>	<b>% Clay</b>	<b>METOLACHLOR 960 EC l / ha</b>
Sand	0 to 10	0.77
Loamy sand / sandy loam	11 to 20	1.08
Sandy clay loam	21 to 35	1.5
Sandy clay	> 35	2.15

**NOTE**

- Only strong and healthy plants should be transplanted.
- Tobacco should be properly transplanted. Roots that are exposed to **METOLACHLOR 960 EC** at application will result in adversely affected plants.

**WEEDS CONTROLLED BY METOLACHLOR 960 EC:**

<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgata</i>	Feather-top Chloris
<i>Dactyloctenium aegyptium</i>	Crowfoot
<i>Digitaria sanguinalis</i>	Crabfinger-grass
<i>Echinochloa crusgalli</i>	Barnyard grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Pseudobrachiaria deflexa</i>	False signal grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Bur bristle grass
<i>Tragus berteronianus</i>	Small carrotseed grass
<i>Tragus racemosus</i>	Large carrotseed grass
<i>Urochloa mosambicensis</i>	Bushveld herringbone grass
<i>Urochloa panicoides</i>	Herringbone grass

**WEEDS VARIABLY CONTROLLED BY METOLACHLOR 960 EC:**

<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Cleome monophylla</i>	Spindlepod
<i>Commelina benghalensis</i>	Wandering Jew
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Datura ferox</i>	Large thorn apple
<i>Datura stramonium</i>	Thorn apple
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Nicandra physaloides</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane

**NOTE**

- The control of Yellow nutsedge (*Cyperus esculentus*) is dependent on a thorough ploughing immediately before planting, application 1 to 2 days after planting, which is followed by about 10 to 20 mm rain within 7 to 10 days after ploughing. More rain is required on heavy soils.

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

- **METOLACHLOR 800 EC** (L 7137) = **METOLACHLOR 800 EC** (L 7433),
- **MCPA 400 SL** (L 5795 / W 130452) = **MCPA 400 SL** (L 5793 / N-AR 1092 / W1301410) and
- **EPTC PLUS 720 EC** (L 4504 / N-AR 1095 / W1301417) = **ESCULENTUS 720 EC** (L 8033).

**TERBUSIEN SUPER 600 SC, METOLACHLOR 800 EC, AMETRYN 500 SC, and MCPA 400 SL** are registered products of **VILLA CROP PROTECTION (PTY) LTD.**

**SKOFFEL® 145 SL** is a registered trademark of **UNIVERSAL CROP PROTECTION (PTY) LTD.**

**2,4-D AMINE 480 SL, MCPA 400 SL, AGRIZINE 500 SC, METOLACHLOR 800 EC, ESCULENTUS 720 EC** and **EPTC PLUS 720 EC** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**