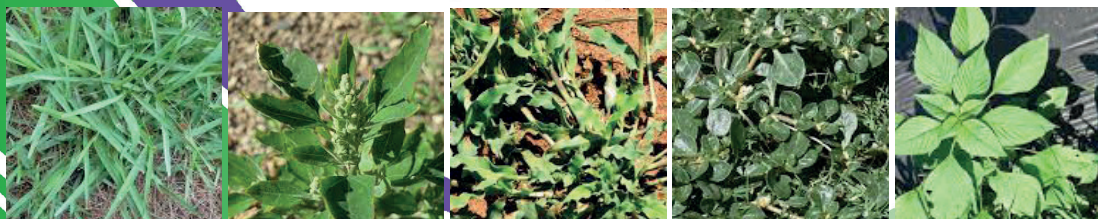


HARVEST ACETOCHLOR 700 EC

Distributed by: Harvest Chemicals
 Registration Holder/Registrasiehouer Harvest Crop Solutions (Pty)Ltd.
 Reg.No. 2014/187205/07
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 Poison Helpline: 085 155 5777

HARVEST
CHEMICALS



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

'n Emulgeerbare konsentraat vooropkomsonkruidodder vir die beheer van meeste eenjarige grasse en sekere breëblaaronkruid in gewasse soos aangedui.

UN No./Nr.: 3082

Batch No	Reg. No. L XXXX, Act No 36 of 1947.	Reg Nr LXXX, Wet Nr. 36 van 1947.	Lot Nr
	HERBICIDE GROUP CODE	K3	ONKRUIDODDER GROEPKODE
Expires	Active Ingredient	700g/ℓ	AktieweBestanddeel:
	Acetochlor (chloroacetanilide)	80g/ℓ	Asetochloor
Date of manufacture	Dichlormid		(chloorasetanilied)
	Nett Volume	ℓ	Dichlormied
			Netto Volume



HARMFUL
SKADELIK



WARNINGS:

- Harmful when swallowed, inhaled or absorbed through the skin.
- May cause eye irritation.
- In the case of poisoning call a doctor and show this label to him/her.
- Toxic to fish and other aquatic organisms.
- Keep out of reach of children, uninformed persons and animals.
- Store in a cool, dry, well-ventilated place in the original container, tightly sealed.
- Store under lock and key away from food and feedstuffs, seed and other agricultural chemicals.
- Re-entry: Only enter treated area once the spray deposit has dried, unless wearing protective clothing.
- Aerial application: Notify all the 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 sources 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 actions and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions; quality of dilution water; compatibility with other substance not indicated on the label and occurrence of resistance against the remedy concerned as well by the method, time and accuracy of application. The registration holder furthermore 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.

FIRST AID

Symptoms of Human Poisoning: Irritation of mucous membrane, eyes, skin and respiratory tract. Possible central nervous system depression, anaesthetic-like effects, dizziness and fatigue with prolonged exposure or overdose.

Skin: After use or in case of accidental skin contact, wash thoroughly with soap and water.

Eyes: In the case of accidental eye contact thoroughly rinse with clean, cold water for at least 15 minutes. Get medical attention immediately.

Inhalation: Remove the patient to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion: Get immediate medical attention. Do not induce vomiting unless directed by a physician or medical person. Never give anything by mouth to an unconscious person.

Note to Physician: Treat symptomatically. There is no known antidote.

RESISTANCE WARNING:

HARVEST ACETOCHLOR 700 EC is a group code K3 herbicide. Any weed population may contain individuals naturally resistant to **HARVEST ACETOCHLOR 700 EC** and other group code K3 herbicides. The resistant individuals can eventually dominate the weed population if the herbicides are repeatedly used. **HARVEST ACETOCHLOR 700 EC** or any other group code K3 herbicide may not control these resistant weeds.

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

- Refer to the manufacturer and seed suppliers before applying **HARVEST ACETOCHLOR 700 EC** to inbred parent plants of maize hybrids, seed maize or onto experimental or newly released cultivars.
- When using **HARVEST ACETOCHLOR 700 EC** in combination with any other agricultural remedy the Warnings, Precautions, Recommendations and Use Restrictions on the labels must be complied with.
- Do not use **HARVEST ACETOCHLOR 700 EC** on 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 over 50 mm in 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.
- **HARVEST ACETOCHLOR 700 EC** must not be applied to sandy soils that are susceptible to wind erosion.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY:

HARVEST ACETOCHLOR 700 EC is compatible with Ametryn 500 SC, Atrazine 500 SC, Atrazine + Terbutylazine 600 SC, 2,4-D Amine 480 SL and Diuron 800 SC.

- If tank mixtures with other products are made, ensure products are compatible by mixing small volumes of all products in the correct ratios with the appropriate quantity of water.
- Compatibility may be influenced by water quality and formulation properties of other products.
- Adhere to all warnings, precautions and directions of use on the label when **HARVEST ACETOCHLOR 700 EC** is used in conjunction with other agricultural remedies.

MIXING INSTRUCTIONS:

- Half fill the spray tank with clean water.
- Shake **HARVEST ACETOCHLOR 700 EC** thoroughly before pouring.
- Add the required amount of **HARVEST ACETOCHLOR 700 EC** to the water in the spray tank.
- Fill the spray tank with water to the required level.
- Agitate the spray mixture during mixing and application.

When **HARVEST ACETOCHLOR 700 EC** is mixed with other herbicides, follow the following process:

- Half fill the spray tank with clean water.
- Add the amount of complementary herbicide while agitating.
- Fill the spray tank with clean water close to the final volume.
- Add the required amount of **HARVEST ACETOCHLOR 700 EC**. Add water to the final volume.
- Agitate the spray mixture during mixing and application.
- Do not allow the spray mixture to stand overnight – spray immediately after mixing.
- Ensure that the spray equipment is rinsed and cleaned immediately after spraying.

APPLICATION RECOMMENDATIONS

- Only use accurately calibrated equipment with the correctly spaced nozzles and with an efficient agitation mechanism.

- For optimum weed control, the seedbed must be prepared within 3 days before planting and application. The seedbed must be fine, even, firm and free of weeds, clods and trash.
- **HARVEST ACETOCHLOR 700 EC** must be applied at planting or immediately following planting, but no later than 3 days after planting for pre-emerge weed control.
- For good overall ground application use 100ℓ to 300ℓ of spray mixture per hectare.
- For more reliable control in the season, shallow incorporation of **HARVEST ACETOCHLOR 700 EC** can be carried out.
- For best results 10 to 20mm of rain or overhead irrigation is required within 7-10 days after application.
- Weed seedlings may emerge under dry conditions but are normally stunted and can be controlled by means of shallow cultivation. This will also incorporate the herbicide into the top 10 to 20mm of soil.
- Use a rotary harrow if soil crusting becomes a problem. Use the rotary harrow in the same direction that the rows have been planted to assist with crop emergence.
- Harrowing after application may reduce weed control if untreated soil is thrown into planter furrows.
- **HARVEST ACETOCHLOR 700 EC** can be applied post emergence to the crop after cultivation and when no weeds are present as it has no post emergence.
- Sufficient fertilizer should be placed near to the seed at planting to promote vigorous seedling growth.

AERIAL APPLICATION

Aerial application of **HARVEST ACETOCHLOR 700 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). 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 30ℓ 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:** 20 to 30 droplets per cm² (pre-emerge) or 35 to 45 droplets per cm² (post-emerge) must be recovered at the target area.
 - **Droplet size:** A droplet spectrum with a VMD of 350-400 microns (pre-emerge) or 300-350 microns (post-emerge) is recommended. Limit the production of fine droplets (less than 150 microns with high drift and evaporation potential) to a minimum.
 - **Flying height:** Maintain the height of the spray boom at 3 to 4 metres 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 droplet 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 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 15km/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:
- 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 drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which field to spray.

Obtain an assurance from the Aerial Spray Operator that the above requirements will be met and that relevant data will be recorded in a logbook and kept for future reference.

APPLICATION RATES **GROUNDNUTS**

- Apply after planting but before emergence of the crop or germination of the weeds.
- The following annual grasses can be controlled by the lower dosage rate: Feathertop chloris (*Chloris virgata*), goose grass (*Eleusine indica*), sweet buffalo grass (*Panicum schinzii*), and herringbone grass (*Urochloa panicoides*).
- Use the higher dosage rate for control of crab finger grass (*Digitaria sanguinalis*), as well as for extended control of broadleaved weeds, and/or the suppression of the yellow nutsedge.

% CLAY	HARVEST ACETOCHLOR 700 EC (ℓ /ha)
0 to 10	1.0 - 2.1
11 to 20	1.2- 4.0
21 to 30	2.0 - 4.0

MAIZE (Pre-emergence)

A pre-emergence application for the control of broad-leaf and grass weeds either alone or with a tank mix of **HARVEST ACETOCHLOR 700 EC** plus a complimentary triazine herbicide.

Apply the herbicides after crop emergence and before weed emergence or immediately after a cultivation.

Apply to glyphosate tolerant maize shortly after a glyphosate application and before new weed growth occurs.

HARVEST ACETOCHLOR 700 EC		Plus one of the following complimentary herbicides	
% Clay	(ℓ /ha)	EITHER Atrazine 500 SC (ℓ /ha)	OR Atrazine/Terbuthylazine 600 SC (ℓ /ha)
0 to 10	0.7 – 1.7	2.5	2.1
11 to 15	0.9 - 2.1	3.25	2.7
16 to 20	1.1 - 2.1	3.25	2.7
21 to 30	1.4 - 2.4	4.0	3.3
31 to 40	1.7 - 2.7	4.75	3.9
More than 40%	2.7	5.0	4.2

MAIZE (Split application)

HARVEST ACETOCHLOR 700 EC is applied pre-emergence of the crop and weeds followed by a tank mixture of **HARVEST ACETOCHLOR 900 EC** plus Atrazine/Terbuthylazine 600 SC early post-emergence of the crop either after a shallow harrow cultivation or after a glyphosate application in glyphosate tolerant maize.

HARVEST ACETOCHLOR 700 EC (ℓ/ha)		Early post-emergence tank mixture	
Clay %	(ℓ /ha) Post planting, pre-emergence	HARVEST ACETOCHLOR 900 EC (ℓ /ha)	Atrazine/Terbuthylazine 600 SC (ℓ /ha)
0 – 10	0.6 - 0.9	0.42	1.9
11 – 20	0.9 - 1.2	0.49	2.2
21 - 30	1.2 - 1.8	0.56	2.5
30%+	1.2 - 1.8	0.80	3.75

- Khaki weed (*Tagetes minuta*) may not be controlled throughout the season and yellow nutsedge (*Cyperus esculentus*) will not be controlled satisfactorily.
- Sometimes it is preferred to pre-plant incorporate a thiocarbamate herbicide (e.g. EPTC) and thereafter apply a tank mix post-emerge of the crop. The tank mix of **HARVEST ACETOCHLOR S 900 EC** mentioned above may be used in such cases provided that **HARVEST ACETOCHLOR S 900 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 application later than the 5-leaf stage of the maize, as the crop foliage may prevent the spray mixture from reaching the soil.

MAIZE (Early post-emergence application)

HARVEST ACETOCHLOR 700 EC, plus either Atrazine 500 SC or Atrazine/Terbuthylazine 600 SC or 2,4-D Amine 480 SL can be applied to maize for extended pre-emerge control of annual grass and broadleaf weeds. Established grass weeds will not be controlled with this treatment.

- Apply post-emerge of the crop.
- Apply before the 5-leaf stage of broadleaf weeds and before grasses have tillered.
- Certain weeds may not be controlled effectively at the lower dosage rates.
- Refer to and apply the use restrictions and directions for use on labels of other products when used in a mixture.

MAIZE – Early post-emergence application of **HARVEST ACETOCHLOR 700 EC** plus Atrazine 500 SC or plus Atrazine/Terbuthylazine 600 SC or plus 2,4-D Amine 480 SL.

Clay %	HARVEST ACETOCHLOR 700 EC (ℓ/ha)	PLUS		
		OR Atrazine 500 SC (ℓ/ha)	OR Atrazine/Terbuthylazine 600 SC (ℓ/ha)	OR 2,4-D Amine 480 SL (ℓ/ha)
0 – 10	0.7	2.0	2.0	2.0
11 – 20	0.7 – 0.95	3.0	2.7	2.0
21 - 30	1.0	3.0 – 3.5	3.3	2.0
31 - 50	1.0	3.0 – 5.0	4.0	2.0

SUGARCANE

The foliage of sugar cane plants will not be damaged by **HARVEST ACETOCHLOR 700 EC**. Other herbicides in the tank mixture with **HARVEST ACETOCHLOR 700 EC** may cause foliar injury to sugar cane.

Before using a tank mix with **HARVEST ACETOCHLOR 700 EC** on sugarcane read and apply label recommendations and use restrictions.

Sugarcane pre-emergence application (plant and ratoon)

HARVEST ACETOCHLOR 700 EC (ℓ/ha)		Plus one of the following complimentary herbicides			
		OR Atrazine 500 SC (ℓ/ha)	OR Diuron 800 SC (ℓ/ha)	OR Atrazine 500 SC (ℓ/ha)	
<30% clay	>30% clay	2.0 - 3.0	3.0	<35% clay	>35% clay
1.6 - 2.3	2.1 - 3.0			2.0 - 5.0	3.0 - 5.0

- Apply the lower Ametryn 500 SC dosage on light to medium soils and use the higher dosage on medium to heavy soils.
- Use the higher Atrazine 500 SC dosage on soils where a longer residual action is required.
- Apply higher dosage rate 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.

Sugarcane pre-emergence application (plant and ratoon)

HARVEST ACETOCHLOR 700 EC (ℓ/ha)		Plus one of the following complimentary herbicides			
		OR Ametryn 500 SC (ℓ/ha)	OR Diuron 800 SC (ℓ/ha)	OR Atrazine 500 SC (ℓ/ha)	
<30% clay	<30% clay	6.0 PLUS a suitable wetter. See notes below.	2.5 - 3.0 PLUS 1.5 - 3.0 ℓ paraquat 145 SL or 200 SL. See notes below.	<35% clay	<35% clay
2.1 - 3.0ℓ	2.7 - 3.6ℓ			2.0 - 5.0ℓ	3.0 - 5.0ℓ

NOTE:

- Apply the lower dosage rate on light to medium soils and use the higher dosage rate on medium to heavy soils.
- Ametryn 500 SC: Direct spray between the rows from the 5-leaf stage of the sugar cane.
- Ametryn 500 SC and Diuron 800 SC: Apply before the tillering stage of annual grasses.
- Diuron 800 SC: Only apply up to the 2 to 3 leaf stage of sugar cane.
- Atrazine 500 SC: Use the higher dosage on soils where a longer residual action is required.

Weeds Controlled by HARVEST ACETOCHLOR 700 EC		Onkruid wat deur HARVEST ACETOCHLOR 700 EC beheer word	
GRASSES		GRASSE	
Sweet signal grass Feathertop chloris Crab finger grass African goose grass Goose grass Common buffalo grass Sweet buffalo grass Garden bristle grass Herringbone grass	<i>Brachiaria eruciformis</i> <i>Chloris virgata</i> <i>Digitaria sanguinalis</i> <i>Eleusine coracana</i> <i>Eleusine indica</i> <i>Panicum maximum</i> <i>Panicum schinzii</i> <i>Setaria pallide-fusca</i> <i>Urochloa panicoides</i>	Litjiessinjalgras Witpluimchloris Kruisvingergras Jngosgras Jongosgras Gewone buffelsgras Soetbuffelsgras Rooiborselsaadgras Beesgras	
BROADLEAVES		BREËBLARE	
Perennial pigweed Common pigweed Thorny pigweed Red pigweed White goosefoot Green goosefoot Bengal wandering jew Thorn apple* Small flowered quickweed Bladder weed Apple of Peru Wild gooseberry Purslane Dwarf marigold Khaki weed*	<i>Amaranthus deflexus</i> <i>Amaranthus hybridus</i> <i>Amaranthus spinosus</i> <i>Amaranthus thunbergii</i> <i>Chenopodium album</i> <i>Chenopodium carinatum</i> <i>Commelina benghalensis</i> <i>Datura Species</i> <i>Galinsoga parviflora</i> <i>Hibiscus trionum</i> <i>Nicandra physaloides</i> <i>Physalis angulata</i> <i>Portulaca oleracea</i> <i>Schkuhria pinnata</i> <i>Tagetes minuta</i>	Meerjarige misbredie Gewone misbredie Doringmisbredie Rooimisbredie Withondebossie Groenhondebossie Bengaalse wandelende jood Stinkblaar* Knopkruid Terblansbossie Basterappelliefie Wilde Appelliefie Porselein Kleinkakiebos Kakiebos*	

*Early germinating only

* Alleenlik vroeg ontkiemend