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# ACETOGAN® PLUS 768 EC

Reg. no. L8557 Act/Wet 36 of/van 1947
N-AR 1116; W130715

**READ THE LABEL BEFORE USE**
**KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

| GROUP | 15 | HERBICIDE |
|---|---|---|

| | |
|---|---|
| An emulsifiable concentrate herbicide with added safener applied pre-emergence on annual grasses and certain broadleaf weeds as listed below in groundnuts, maize, potatoes, sugar cane and sweetcorn. | 'n Emulsifiseerbare konsentraat onkruiddoder plus beveiliger wat eenjarige grasse en sekere breëblaaronkruide soos hieronder gelys, vooropkom beheer in aartappels, grondbone, mielies, suikermielies en suikerriet. |

**DANGER**

**Hazard statements**
May be harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.

**ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL**

| | | |
|---|---|---|
| Acetochlor (chloroacetamide)..... | 768 g/L | ..... Asetochloor (chloorasetamied) |
| Dichlormid (safener)……..... | 138 g/L | ……Dichlormied (beveiliger) |

**NET VOLUME/NETTO VOLUME**
…… L

**REGISTRATION HOLDER/REGISTRASIEHOUER**
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**IN CASE OF POISONING, CALL THE FOLLOWING NUMBERS**:
Griffon Poison Information Centre:
+27 82 446 8946 or
Tygerberg Poison Information Centre:
+27 861 555 777
**EMERGENCY NUMBER:**
SPILL TECH: +27 86 100 6366 or +27 83 253 6618

UN no.: 3082

| | | |
|---|---|---|
| Batch number | ..... | Lotnommer |
| Date of Manufacture | ..... | Datum van Vervaardiging |
| Expiry date | ..... | Vervaldatum |

***GHS information***

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**WARNINGS**

- May be harmful if swallowed.
- May be fatal if swallowed and enters airways.
- Causes skin irritation.
- May cause an allergic skin reaction.
- Harmful if inhaled.
- May cause respiratory irritation.
- Suspected of causing cancer.
- Suspected of damaging fertility or the unborn child.
- May cause damage to organs through prolonged or repeated exposure.
- Very toxic to aquatic life with long lasting effects.

- Handle with care.
- May be irritating to eyes.
- Store in a cool, dry and well-ventilated place away from direct sunlight.
- Keep in the original container, tightly closed and under lock and key.
- Store away from food, feedstuffs, seed, and fertilizers and other agricultural remedies.
- Re-entry: Do not enter treated area until spray deposit has completely dried unless wearing protective clothing.
- Aerial application: Notify all inhabitants in the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not guarantee that it will be effective under all conditions. The activity 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 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 by 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 the event of any uncertainty.**

**PRECAUTIONS**

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Obtain, read and follow all safety instructions before use.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.

- Avoid release to the environment.
- Wash face, hands and any exposed skin thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Get medical help if you feel unwell.
- If exposed or concerned get medical advice.
- IF SWALLOWED: Get emergency medical help immediately. Do NOT induce vomiting.
- IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label).
- If skin irritation or rash occurs get medical help.
- Take off contaminated clothing and wash it before reuse.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical help.
- Collect spillage.
- Store locked up in a well-ventilated place. Keep container tightly closed.
- Dispose of contents/ container to an approved waste disposal plant.

- Avoid contact with skin and eyes.
- In case of eye contact, hold eyelid open and wash out with clean running water for at least 15 minutes.
- Do not eat, drink or smoke while mixing or applying this product or before hands and face have been washed.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Rinse the container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the spray tank.
- Destroy empty container by perforation and flattening and NEVER use for any other purpose.
- Clean the applicator thoroughly after use and dispose of wash water where it will not contaminate crops, rivers or dams.
- Avoid contamination of food, feedstuffs, drinking water and eating utensils.

## RELEVANT SUBSTANCES

| Chemical name | w/w % | CAS no. |
|---|---|---|
| Acetochlor | >60% | 34256-82-1 |
| Hydrocarbons, C10, aromatics, >1% naphthalene | 10 – 30% | 64742-94-5 |
| Dichlormid | 10 – 30% | 37764-25-3 |
| Poly(oxy-1,2-ethanediyl),.alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy | < 10% | 99734-09-5 |

## FIRST AID

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection. Emergency personnel should wear protective clothing appropriate to the type and degree of contamination.

Immediately remove contaminated clothing and remove the affected person from the contamination area. Keep the person warm, calm and covered up. First Aid personnel should pay attention to their own safety.

Take the container label or product name with you when seeking medical attention.

**Eye contact**: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention immediately if symptoms occur.

**Skin contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Inhalation:** Immediately remove the affected victim from exposure to an area with fresh air. Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Ingestion:** If conscious, rinse mouth thoroughly with water. Never give anything by mouth to an unconscious or convulsing person. Do NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomit, rinse mouth. Call a physician immediately.

## TOXICOLOGICAL INFORMATION

### Antidotes

None known. Treat symptomatically.

### Symptoms of human poisoning

None known.

## RESISTANCE WARNING

For resistance management **ACETOGAN® PLUS 768 EC** is classified as a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **ACETOGAN® PLUS 768 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 **ACETOGAN® PLUS 768 EC** or any group code 15 herbicides. To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different group codes
- Integrate control methods (chemical, cultural and biological) into weed control programs.
- For specific information contact the local distributor agent or the registration holder of this product.

Should **ACETOGAN® PLUS 768 EC** fail to control resistant weeds, **ADAMA South Africa (Pty.) Ltd**. will not accept responsibility for such loss as the detection of resistant weeds before application is difficult. Avoid using **ACETOGAN® PLUS 768 EC** in places were weed resistance has been ascertained.

## MODE OF ACTION

15: Inhibition of very long-chain fatty acid synthesis.

## USE RESTRICTIONS

- Do not use **ACETOGAN® PLUS 768 EC** on experimental or newly released seed hybrids, or inbred parent lines without first consulting with your seed supplier or the registration holder.
- Do not use **ACETOGAN® PLUS 768 EC** on poorly drained soils or soils with a compaction layer since this may lead to water logging which can result in crop injury.
- When **ACETOGAN® PLUS 768 EC** is tank mixed with other chemicals, the restrictions and warnings on the labels of the other chemicals must be adhered to.

## DIRECTIONS FOR USE

**Use only as directed.**

NOTICE TO THE USER: This agricultural remedy is to be used only according to the directions of this label. It is an offense under the Act to use this product inconsistent with the directions on the label.

### Compatibility

No cases of incompatibility with other agricultural chemicals have been reported. If a tank mix is to be made with other chemicals, first mix small quantities of the chemicals in water and then add to the tank while stirring. Check for any signs of incompatibility e.g. separation, flocculation, etc. When using in combination with other pesticides, read all the labels concerned and adhere to all the recommendations.

**Mixing instructions**

- Shake the container well before use. Half fill the spray tank with clean water. Pre-mix the required volume of **ACETOGAN® PLUS 768 EC** separately in a small amount of water and add to the spray tank while agitating. Fill the spray tank with water to the correct volume. Ensure thorough agitation during mixing and application.
- When tank mixing ACETOGAN® PLUS 768 EC with other products such as, SUPRANEX 90 WG, SUPRANEX 600 SC, ATRANEX® 500 SC, ATRANEX® 90 WG, and DIUREX® 800 SC, these products should first be mixed or creamed with a little water and added to the spray tank first. Add water to the tank just below the required capacity and add the pre-mixed **ACETOGAN® PLUS 768 EC** while agitating continuously. Fill the tank with water. Refer to the labels of the products which will be tank mixed with **ACETOGAN® PLUS 768 EC** and adhere to the label instructions.
- Mix only sufficient spray mixture to be used on the same day. Do not allow the spray mixture to stand overnight.

**APPLICATION**

**Ground application**

**ACETOGAN® PLUS 768 EC** can be applied by means of any suitable medium to high volume spray apparatus provided it is equipped with an efficient agitating mechanism, it is correctly calibrated and it is able to distribute the spray mixture evenly over the target area. Flat fan nozzles that can deliver a minimum of 200 L spray mixture per hectare are recommended. **ACETOGAN® PLUS 768 EC** should ideally be applied just after but not later than 5 days after planting, before weed emergence. The seedbed must be fine, firm, even and without any weed growth or an excessive amount of plant rests. Continuous rain or irrigation of at least 15 mm is needed after application to leach the herbicide into the soil. If it does not rain and weeds start to germinate, a shallow surface-blending cultivation should be done to control the weeds and to incorporate the product into the top 10-20 mm of soil.

**Aerial application (maize only)**

Aerial application of **ACETOGAN® PLUS 768 EC (maize only)** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS 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 30 L per hectare is recommended for pre-emergence and 30-35 L per hectare for post-emergence applications. 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: 20-30 droplets per $cm^2$ must be recovered pre-emergence and 30-45 droplet per $cm^2$ must be recovered post-emergence at the target area.
- Droplet size: A droplet spectrum with a VMD of 350-400 microns is recommended when applied pre-emergence and 300-350 microns when applied post-emergence. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3-4 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 60-75% of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80% and above) may lead to the following:
  a) Reduced efficacy due to suspension and evaporation of small droplets in the air (Inadequate coverage).
  b) Damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that above requirements will be met and that the relevant data will be compiled in a log book for future reference.

**APPLICATION RATES**

**1) Groundnuts**

| CLAY (%) | DOSAGE (L/ha) | REMARKS |
|---|---|---|
| 0−10<br>11−30 | 0.9−1.8<br>1.2−3.6 | Apply as a pre-emergence application on a weed-free seedbed. Use the higher rate for extended control of grasses and better control of broadleaf weeds and yellow nutsedge. |

**2) Maize and sweetcorn**

| CLAY (%) | DOSAGE (L/ha) | REMARKS |
|---|---|---|
| 0−10<br>11−15<br>16−20<br>21−30<br>31−40<br>41−55 | 0.64−1.60<br>0.82−1.90<br>1.00−1.90<br>1.30−2.20<br>1.60−2.50<br>2.50 | Use the lower dosage rate if a short period of weed control is required between an application and cultivation and/or a follow-up application. The higher rates must be used in cases of high grass pressure and/or the suppression of yellow nutsedge. |

**NOTE:** Low temperatures and/or heavy prolonged rains soon after planting may cause herbicide damage to the crops in the form of reduced germination, stunting, etc. These symptoms can also be aggravated if seed is planted too deep. Seed smaller than 4 flat has a higher risk of damage.

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**3) Maize (tank mixture applications)**

**3.1) Broadleaf weeds and grasses** will be controlled and yellow nutsedge (*Cyperus esculentus*) will be conditionally controlled with tank mixtures of **ACETOGAN® PLUS 768 EC** plus ATRANEX® 500 SC or ATRANEX® 90 WG. Please refer to the relevant labels for full particulars and lists of weeds controlled.

| **CLAY (%)** | **DOSAGE (L/ha)/(kg/ha)** | | |
|---|---|---|---|
| | **ACETOGAN® PLUS 768 EC** | Plus **ATRANEX® 500 SC** | or **ATRANEX® 90 WG** |
| 0−10 | 0.64−1.60 | 2.50 | 1.4 |
| 11−15 | 0.82−1.90 | 3.25 | 1.8 |
| 16−20 | 1.00−1.90 | 3.25 | 1.8 |
| 21−30 | 1.30−2.20 | 4.00 | 2.2 |
| 31−40 | 1.60−2.50 | 4.75 | 2.6 |
| 41−55 | 2.50 | 5.00 | 2.8 |

**3.2) Northern and western Free State and North West Province only.** Broadleaf weeds and grasses will be controlled with a tank mixture of **ACETOGAN® PLUS 768 EC** plus **ATRANEX® 500 SC** or **ATRANEX® 90 WG**.

| **CLAY (%)** | **DOSAGE (L/ha) / kg/ha)** | | |
|---|---|---|---|
| | **ACETOGAN® PLUS 768 EC** | plus **ATRANEX® 500 SC** | or **ATRANEX® 90 WG** |
| 0−10 | 0.64 | 2.25 | 1.3 |
| 11−15 | 0.82 | 2.25 | 1.3 |
| 16−20 | 1.00 | 2.50 | 1.1 |
| 21−30 | 1.30 | 2.75 | 1.5 |
| **REMARKS**<br>Yellow nutsedge control may not be satisfactory. Thorn apple species and khaki weed may not be controlled season long. | | | |

**3.3) Wider spectrum of broadleaf weed control. ACETOGAN® PLUS 768 EC** and **SUPRANEX 600 SC** or **SUPRANEX 90 WG** in a tank mixture can be used in cases where a wider spectrum of broadleaf weed control is desired. Please refer to the relevant labels for full particulars and lists of the weeds controlled.

| CLAY (%) | DOSAGE (L/ha) / (kg/ha) | | |
|---|---|---|---|
| | **ACETOGAN® PLUS 768 EC** | plus **SUPRANEX 600 SC** | or **SUPRANEX 90 WG** |
| 0−10 | 0.64−1.60 | 2.0 | 1.3 |
| 11−15 | 0.82−1.90 | 2.7 | 1.8 |
| 16−20 | 1.00−1.90 | 2.7 | 1.8 |
| 21−30 | 1.30−2.20 | 3.3 | 2.2 |
| 31−40 | 1.60−2.50 | 4.0 | 2.7 |
| 41−55 | 2.50 | 4.0 | 2.7 |

**Note**

- If conditional yellow nutsedge control is desired, use the higher application rate of **ACETOGAN PLUS® 768 EC**. For conditions, refer to the note following the list of weeds with variable control below.
- The higher application rate of **ACETOGAN® PLUS 768 EC** can also be used under conditions of high grass pressure (especially crab finger grass) in regions with high rainfall.
- In some cases it is the preferred practice to incorporate a thiocarbamate herbicide before planting and apply tank mixtures post-emergence to the crop.
- The above-mentioned tank mixtures of **ACETOGAN® PLUS 768 EC** may be used in this way provided that the **ACETOGAN® PLUS 768 EC** is only sprayed pre-emergence to the weeds as it possesses no post-emergence herbicidal activity.
- Such applications should not be made later than the 5-leaf stage as the leaves of the maize crop may prevent the spray mixture from reaching the soil.
- Please refer to the ATRANEX® 500 SC, ATRANEX® 90 WG, SUPRANEX 600 SC or SUPRANEX 90 WG labels for full particulars and lists of the weeds controlled.

**4) Sugarcane**

| CLAY (%) | DOSAGE (L/ha) | REMARKS |
|---|---|---|
| 1−35<br>>35 | 2.5<br>3.7 | **ACETOGAN® PLUS 768 EC** should be tank mixed with the following broadleaf herbicides:<br>DIUREX® 800 SC: use 3 L/ha pre-emergence.<br>ATRANEX® 500 SC: use 2−3 L/ha pre-emergence only. Use the lower rate on soils with up to 35% clay and the higher rate on heavier soils. |

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**5) Potatoes**

| CLAY (%) | DOSAGE (L/ha) | REMARKS |
|---|---|---|
| 0−10<br>11−20<br>21−30<br>> 30 | 0.82<br>1.70<br>1.90<br>3.60 | Apply under irrigation only. Crop injury may be caused by cold conditions following an **ACETOGAN® PLUS 768 EC** application. |

**WEEDS NORMALLY CONTROLLED**

Refer to the list of weeds below. The control of yellow nutsedge (*Cyperus esculentus*) as well as some broadleaf weeds may be variable and depends on whether climatic conditions are favourable or not. To increase the spectrum of broadleaf weeds controlled, it is recommended that tank mixes or follow-on applications of other registered broadleaf herbicides are done in combination with **ACETOGAN® PLUS 768 EC**.

**ANNUAL GRASSES**

| Botanical Name | Common Name |
|---|---|
| *Chloris virgate* | feathertop chloris |
| *Digitaria sanguinalis* | crab fingergrass |
| *Eleusine coracana* | goose grass |
| *Panicum coracana* | sweet buffalo grass |
| *Setaria verticillata* | sticky bristle grass |
| *Urochloa panicoides* | herringbone grass |

**ANNUAL BROADLEAF WEEDS**

| Botanical Name | Common Name |
|---|---|
| *Amaranthus hybridus* | Cape pigweed |
| *Amaranthus spinosus* | thorny pigweed |
| *Chenopodium album* | white goosefoot |
| *Commelina benghalensis* | Bengal wandering jew |
| *Galinsoga parviflora* | Gallant soldier |
| *Physalis angulate* | wild gooseberry |

| Botanical Name | Common Name |
|---|---|
| *Portulaca oleracea* | Purslane |
| *Schkuhria pinnata* | dwarf marigold |
| *Tagetes minura* | khaki weed (early germination) |

**Control of the following weeds are variable**

| Botanical name | Common name |
|---|---|
| *Cyperus esculentus* | yellow nutsedge |
| *Cleome monophylla* | spindlepod |

**NOTE:** *Cyperus esculentus* control can only be achieved when planting is done into a fine, firm, even seedbed immediately following a deep mouldboard ploughing. Planting must be done straight after the seedbed preparation. Continuous rain or irrigation of at least 15 mm on lighter soils and 25 mm on heavier soils should take place after application and before the nutsedge starts to germinate and develop.