DIRECTIONS FOR USE ENCLOSED Batch Number:

Herbicide



ATRAZINE 900 WG

Reg. No. L 8890 Act No. 36 of 1947

3: 07/06/2023- Sept2023



A water dispersible granule herbicide for the control of annual grasses and broadleaf weeds in crops listed.

ACTIVE INGREDIENT

atrazine (triazine)

900 g a.i/kg

GROUP |

HERBICIDE

¥ (1)



Hazard statements:

Harmful if swallowed.

Maybe harmful in contact with skin.

May cause an allergic skin reaction.
May cause damage to the heart (oral)
through prolonged or repeated
exposure.

Very toxic to aquatic life with long lasting effects.

Precautionary statements:

IF SWALLOWED: Rinse month.

Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.

Get medical help if you feel unwell.





Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
65 Botes Road, Glen Marais, Kempton Park, 1619

Tel. (011) 396 2233 Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS: Griffon Poison Centre: +27 82 446 8946

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

ATRAZINE 900 WG

Reg. No. L 8890 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 5

ACTIVE INGREDIENT:

atrazine (triazine) 900 g/kg

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PO Box 801, KEMPTON PARK, 1620, Tel. (011) 396 2233

WARNINGS

Hazard statements

Harmful if swallowed.

Maybe harmful in contact with skin.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

- Store in a cool dry place away from food, feed and seed.
- Keep out of reach of children, uninformed persons and animals.
- Aerial application: Notify all inhabitants of the area to be sprayed and issue the necessary warnings. Do
 not spray over or allow drift to contaminate water of adjacent areas.
- Re-entry: Do not enter treated field within one (1) day after application unless wearing protective clothing.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant 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 weed 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

Precautions statement

Avoid breathing dust, fumes, mists, vapours or spray.

Wash hands and face thoroughly after handling.

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

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: Rinse month. Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.

Get medical help if you feel unwell.

If skin irritation or rash occurs: Get medical help.

Collect spillage.

Dispose of contents/container to suitable landfill in accordance with local regulations.

- Prevent spray drift onto other crops, grazing, rivers, dams or any area not under treatment.
- Prevent contamination of food, drinking water and eating utensils.
- Do not apply where the roots of desirable plants can absorb the chemical.

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- Do not mix and load at least 15 metres from boreholes, streams, rivers or dams.
- Do not apply within at least 60 metres from dams. Ensure that no back siphoning to boreholes take place when applied through the irrigation system.
- Thoroughly wash and rinse spray equipment after use and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
- Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces 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 foodstuffs.

Relevant hazardous components	
Atrazine	900 g/kg
Geropon T/36	< 40 g/kg
Sodium Lauryl sulphate	< 10 g/kg

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 and consult a doctor. If exposed or concerned, get medical advice.

- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Get emergency medical help immediately if irritation occurs.
- <u>Skin:</u> Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Do not rub skin. **Obtain medical attention if irritation or rash occurs.**
- <u>Eyes:</u> 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.
- <u>Ingestion:</u> If more than 15 minutes from emergency medical care induce vomiting preferably using Ipecac Syrup (APF). Never give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water. **Seek medical attention or call a poison control centre** for treatment advice.

NOTE TO PHYSICIAN

No specific antidote. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

MODE OF ACTION

ATRAZINE 900 WG is a selective, systemic herbicide, absorbed primarily by roots, but also by foliage, translocated acropetally in the xylem accumulating in the apical meristems and leaves. Maize selectivity is due to detoxification by conjugation with glutathione (GSH) catalysed by glutathione S-transferase (GST). It inhibits photosynthetic electron transport by binding at the QB site on the D1 protein of the photosystem II complex, resulting information of reactive chemical species that oxidise and degrade lipids and proteins.

USE RESTRICTIONS

A. To avoid damage to follow on crops, the following **Re-Cropping periods** should be taken into consideration when applying **ATRAZINE 900 WG**:

a) Maize and Sugarcane	None
b) Grain sorghum	12 months
c) Sunflower, Small grain, Dry beans, Groundnuts, Soybeans, Fodder sorghum and Potatoes	18 months
d) All other crops (a test planting is however recommended)	24 months

Where the total rate of ATRAZINE 900 WG applied per season 1.1 kg per hectare (equivalent to 1.0 kg Atrazine active), the waiting periods mentioned under b and c can be reduced to 9 months. Except in the case of the sandy soils in the Northwest province and Northwest Free State which contain 0 to 10 % clay. Where the total rate of Atrazine active exceeds 1.0 kg per hectare but does not exceed the recommended dosage rate of Atrazine active per soil type, follow the use restrictions a) to d).

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NOTE

The above-mentioned waiting periods will only be valid if the correct quantity of **ATRAZINE 900 WG** has been applied according to the soil type and an average or above average rainfall has been experienced during and after the season in which the application was made.

- B. If ATRAZINE 900 WG is applied to soils which expand on wetting, and crack or crumble on drying, such as turf soils, ATRAZINE 900 WG may remain active in the soil for longer than the above-mentioned waiting periods. Thus ATRAZINE 900 WG should not be applied if there is a possibility of planting Atrazine-sensitive crops in the foreseeable future. Weeds on these soils may also not be adequately controlled by a pre-emergence application of ATRAZINE 900 WG.
- **C.** Do not apply **ATRAZINE 900 WG** to inbred parent lines of maize and grain sorghum cultivars as well as experimental or newly released cultivars without first consulting the manufacturer or seed supplier.
- D. Under cold and/or very wet conditions, ATRAZINE 900 WG can cause damage to grain sorghum.
- **E.** Do not apply **ATRAZINE 900 WG** to any crop or situation not mentioned in this instruction leaflet.

RESISTANCE WARNING

ATRAZINE 900 WG is a group code 5 herbicide. Any weed population may contain individuals naturally resistant to **ATRAZINE 900 WG** and other group codes 5 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **ATRAZINE 900 WG** or any other group codes 5 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 the control methods (chemical, cultural, biological) into weed control programmes.

For specific information on resistance management contact the registration holder of this product.

DIRECTIONS FOR USE: - Use only as directed.

Compatibility:

- The compatibility of **ATRAZINE 900 WG** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used.
- As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made.
- ATRAZINE 900 WG is compatible with most pyrethroid insecticides and PREFIX S EC (L 7362) (Acetochlor 900 EC + Dichlormid), ACETAK 900 EC (L 6904), ACETOCHLOR 900 EC (L 7633 / N-AR 1101 / W1301407), PREMIUM 900 EC (L 7637) (Acetochlor 900 EC), CYCLONE 250 SC (L8880 / N-AR 1633) (Sulcotrione), UNIMOC 960 EC (L 7341 / N-AR 1553) (Metolachlor), 2,4-D AMINE 480 SL (L 4505 / W 130459 / N-AR 1096) and TROOPER 320 SL (L 6806) (2,4-D & Dicamba) and AMETRYN 500 EC (L 7742).
- Do not mix with any products not listed in this label.
- Consult a Universal Crop Protection (Pty) Ltd. representative for details.

Mixing Instructions

- Half fill the spray tank with water.
- Mix the required amount of ATRAZINE 900 WG separately in water and then add to the spray tank.
- Top up with water. Keep the chemical in continuous suspension by means of agitation.
- After each day's spraying, flush tank out thoroughly with water.
- Tank mixtures must be sprayed out immediately and not be allowed to stand in the spray tank overnight.
- Spraying equipment must be thoroughly flushed out at the end of the spraying operation.
- Ensure constant and thorough agitation during mixing and spray operations.

APPLICATION METHODS

- Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.
- Knapsack sprayers or tractor mounted boom sprayers may be used.
- A spray volume of 200 to 300 litres per hectare should be used for ground application and can be applied via flat fan-type nozzles, preferably the low drift type to avoid fine droplets.
- Constant agitation throughout the spray operation is essential. Only clean water should be used.

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Ground application:

- ATRAZINE 900 WG can be applied by means of any medium to high volume spray apparatus, provided that the apparatus has an effective mixing mechanism, is able to spray the tank mix evenly over the target area and is correctly calibrated.
- The use of a flat-fan nozzle is recommended.

PRE-EMERGENCE:

- To control the full ATRAZINE 900 WG weed spectrum, ATRAZINE 900 WG should be applied during or immediately after planting to a freshly cultivated weed- free seedbed that has an even, firm surface, is free of large clods and excessive plant rests.
- It is preferable that rain should follow within 7 to 10 days after application in order to leach the **ATRAZINE 900 WG** into the top layer of the soil where it can be absorbed by the roots of the germinating weeds.
- If, after application, dry weather conditions should prevail for a period of 7 to 10 days, weeds may germinate and develop.
- If this happens, a light cultivation should follow to control these weeds and to incorporate the ATRAZINE
 900 WG into the top layer of the soil.

POST EMERGENCE:

- When application is made post-emergence to the crop and weeds, broadleaf weeds should not be beyond the seedling stage (two-leaf stage) and grasses should not have emerged.
- Use 200 to 400 litres of water per hectare for overall application and accordingly lesser volumes of water in the case of band treatment.

AERIAL APPLICATION

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SABS Code 0118 (Aerial Application of Agricultural Remedies). 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:

Equipment

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

Application Parameters

- A minimum volume of 40 litres spray mixture per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage of 30 to 40 droplets per cm² must be recovered at the target.
- A droplet spectrum with a VMD of 250 to 280 microns is recommended. Ensure that the production of fine droplets, with a VMD less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4 metres above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Apply before the crop growth becomes too dense, which will interfere with overall plant coverage.

Meteorological Conditions

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions nor during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
- Do not spray when the wind speed exceeds 15 km per hour.

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General

- Ensure that 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.

Pre-emergence aerial application:

- A minimum spray volume of 40 litres per hectare.
- A minimum of 20 to 30 droplets per cm² must be recovered on the target area.
- Employ a droplet spectrum with VMD of 450 microns. Ensure that the production of fine droplets (less than 150 microns with high drift and evaporation potential) is restricted to a minimum.

RECOMMENDATIONS

MAIZE (Pre-emergence in tank mixture with Prefix S EC)

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% Clay	ATRAZINE 900 WG	Prefix S EC	Remarks
0 to 10	1.0 to 1.4 kg/ha	0.75 to 1.25	
11 to 20	1.1 to 1.8 kg/ha	1.25 to 1,75	These application rates are for overall
21 to 30	1.4 to 2.2 kg/ha	1.75 to 2.0	application herbicide. Proportionately lower amounts should be applied in the
31 to 40	2.0 to 2.6 kg/ha	2.0 to 2.25	case of band treatment.
41 to 55	2.0 to 2.8 kg/ha	2.25	

MAIZE (Pre-emergence in tank mixture with Cyclone 250 SC and Prefix S EC)

% Clay	ATRAZINE 900 WG	Prefix S EC	Cyclone 250 SC	Remarks
0 to 10	0.17 to 0.47 kg/ha	0.5	0.25 to 0.7	These application rates are for
11 to 15	0.17 to 0.47 kg/ha	0.75	0.25 to 0.7	overall application herbicide.
16 to 20	0.33 to 0.5 kg/ha	0.9	0.5 to 0.75	Proportionately lower amounts
21 to 50	0.33 to 0.5 kg/ha	1.0	0.5 to 0.75	should be applied in the case of band treatment.

MAIZE (Early post-emergence in tank mixture with Trooper 320 SL or 2.4-D Amine 480 SL)

ATRAZINE 900 WG	Trooper 320 SL		2,4-D Amine 480 SL	Remarks
1.1 kg/ha	0.5 <i>∉</i> ha	OR	0.75 <i>ℓ</i> /ha	Apply from full emergence of the maize crop until a height of 30 cm has been reached. Where the maize crop exceeds 30 cm in height, drop arms should be used to direct the spray beneath the leaf canopy of the maize. Ensure in all cases that the spray mixture reaches the target. Spray when weeds are in the 3 to 6 leaf stage. Add the recommended rate of an approved penetrant such as PERFORMER, PENETREX, SOLITAIRE.

REMARKS

The mixture of **ATRAZINE 900 WG** plus **2,4-D Amine 480 SL** may be used on both maize and grain sorghum provided the sorghum field's clay content is greater than 15 %.

NOTE

Do not exceed the recommended dosage rates.

Do not apply to areas likely to become waterlogged.

Do not apply to soils with high leaching potential.

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Do not irrigate after application. Under cold conditions and/or where high rainfall is expected after application, **ATRAZINE 900 WG** may damage sorghum, irrespective of the soil type.

IMPORTANT FOR MAIZE AND GRAIN SORGHUM

Make sure that sufficient fertilizer is applied and correctly placed at the time of planting to promote the growth of the seedlings.

MAIZE (Minimum tillage or Stubble mulching):

Where minimum tillage or stubble mulching is practised, weeds may already have come up at the time of planting. If maize is planted under such circumstances, or if they are planted into an old seedbed where grasses have already germinated and/or broadleaf weeds have developed past the four-leaf stage, it is recommended that **Paraquat** be added to the **ATRAZINE 900 WG** spray solution, at a dosage rate recommended by the Universal Crop Protection (Pty) Ltd. The **Paraquat** will destroy the existing weeds and create a clean pre-emergence condition that will allow **ATRAZINE 900 WG** to work effectively.

NOTE

- 1. When **Paraqua**t is added, the application must take place before the crop emerges otherwise **Paraquat** will cause damage to the crop.
- In case of minimum tillage or stubble mulching, the amount of stubble and organic material at the soil surface may reduce the efficacy of ATRAZINE 900 WG. The representative of the Universal Crop Protection (Pty) Ltd. or distributor should be consulted.

SUGARCANE

Light to Medium soil up to 35 % clay content apply 1.1 kg per hectare ATRAZINE 900 WG

For the control of annual grasses and broadleaf weeds on light to medium soils, apply **ATRAZINE 900 WG** in tank mix with a registered grass killer, such as **Acetochlor 900 EC OR UNIMOC 960 EC**, is recommended as a pre-emergence overall spray immediately after planting and before weed emergence. For best results, apply shortly irrigation or before rain is expected. **Consult the label of the specific grass killer for application rates.**

PINEAPPLES

I INLAI I LLO		
% Clay	Rate of ATRAZINE 900 WG	Remarks
0 to 20	2.1 kg/ha PLUS 3.6 ∉ha Ametryn 500 SC	Early post-emergence treatments are recommended where a mixed population of
21 to 35	2.9 kg/ha PLUS 5.2 ∉ha Ametryn 500 SC	grasses and broadleaf weeds have occurred and also where later germinating weeds are a problem.
Above 35	Not recommended	

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WEEDS CONTROLLED BY ATRAZINE 900 WG:		
Broadleaf weeds species (Pre-emergence ONLY)		
Botanical name	Common name	
Acanthospermum australe	Eight-seeded starbur	
Acanthospermum glabratum	Prostrate starbur	
Acanthospermum hispidum	Upright starbur	
Amaranthus hybridus	Common pigweed	
Amaranthus spinosus	Thorny pigweed	
Amaranthus thunbergii	Red pigweed	
Bidens bipinnata	Spanish blackjack	
Bidens formosa	Cosmos	
Bidens pilosa	Common Blackjack	
Chenopoduim album	White Goosefoot	
Chenopoduim carinatum	Green Goosefoot	
Cleome monophylla	Single leaf cleome	
Cleome rubella	Pretty Lady	
Commelina benghalensis	Bengal Wandering Jew	
Crotalaria sphaerocarpa	Wild Lucerne	
Datura ferox	Common thorn apple	
Datura stramonium	Large thorn apple	
Galinsoga parviflora	Small flowered quick weed	
Gisekia pharnaceoides	Gisekia	
Hibiscus trionum	Bladder hibiscus	
Hibiscus cannabinus	Wild stockrose	
Nicandra physaloides	Apple of Peru	
Physalis angulata	Wild gooseberry	
Portulaca oleracea	Common purslane	
Richardia brasiliensis	Mexican richrdia	
Schkuhria pinnata	Dwarf marigold	
Tagetes minuta	Khaki weed	
Vigna vexillata	Wild sweet pea	
Grass sp	pecies (Pre-emergence)	
Botanical name	Common name	
Eleusine coracana	Goosegrass	
Setaria pallide-fusca	Garden bristle grass	
Chloris virgata	Feather top chloris	
Panicum schinzii	Vlei panicum	
Setaria verticillata	Bur bristle grass	

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If dry conditions prevail for a period of seven to fourteen days after application the following weed species may not be adequately controlled, especially in heavy soils:

Botanical name	Common name
Bidens formosa = Cosmos bipinnatus	Cosmos
Datura spp	Thorn apple
Eleusine coracana	Goose grass
Commelina benghalensis	Benghal wandering jew
Panicum schinzii	Buffalo grass
Chloris virgata	Feathered chloris
Tagetes minuta	Khaki weed

NOTE

- Resistant strains of this weed may not be controlled.
- This product mainly controls some grasses and numerous annual broadleaf weeds, however, other annual broadleaf weeds that were not present during the development trials with the product, may also be controlled to a certain degree.
- The registration holder still does not accept any responsibility for the control of weeds not listed on the
- Under abnormally wet conditions the late season control of weeds may not be adequate.
- To control a broader spectrum of annual grasses, **ATRAZINE 900 WG** can be applied in a tank mixture or as a separate application in combination with a registered grass killer.
- ATRAZINE 900 WG is compatible in a spray mixture with all presently registered grass killers. Consult
 the labels of the specific grass killers for the application rates, as well as for the specific ATRAZINE
 900 WG application rates to be used when mixtures are applied. The directions for use on labels
 concerned must be followed closely.
- Where ATRAZINE 900 WG is used in combination with EPTC in maize, at least two thirds of the recommended rate of ATRAZINE 900 WG should be used according to soil type.

The registration holder does not accept any liability in respect of the control of unlisted weeds.

PREFIX S EC, ACETAK 900 EC and TROOPER 320 SL are registered products of MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD.

AMETRYN 500 EC, ACETOCHLOR 900 EC, PREMIUM 900 EC, 2,4-D AMINE 480 SL, UNIMOC 960 EC and CYCLONE 250 SC are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

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