DIRECTIONS FOR USE ENCLOSED Date of Manufacture

Herbicide



AGRIZINE 500 SC

Reg. No. L 5387 Act No. 36 of 1947 W 130121

6: 24/5/2022 - May2022



A suspension concentrate herbicide for the control of annual broad-leaved weeds and grasses in maize, grain sorghum, sugarcane and pineapples as indicated.

ACTIVE INGREDIENTS

atrazine (triazine) other triazines

488 q/e 12 g/e

GROUP

HERBICIDE

WARNING



May be harmful if swallowed. May be harmful in contact with skin. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.

Causes serious eve irritation. Causes mild skin irritation

Very toxic to aquatic life with long lasting effects.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Wash hands thoroughly after handling. Do not touch eyes.

Avoid release into the environment.



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

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)

AGRIZINE 500 SC

Reg. No. L 5387 / W 130121 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 5

ACTIVE INGREDIENTS:

atrazine (triazine) 488 g/ ℓ other triazines 12 g/ ℓ

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WARNINGS

Hazard statements:

May be harmful if swallowed.	
May be harmful in contact with skin.	
May cause an allergic skin reaction.	
May cause damage to organs through prolonged	
or repeated exposure	
Causes serious eye irritation.	
Causes mild skin irritation.	
Very toxic to aquatic life with long lasting effects.	

- Store in a cool, dry place under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- In case of poisoning call a doctor and make this label available to him/her.
- Re-entry: Do not enter treated area within 1 day after treatment 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 to 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 the event of any uncertainty.

PRECAUTIONS

Precautionary statements:

Do not breathe dust, fume, gas, mist, vapours and spray.

Wash hands thoroughly after handling. Do not touch eyes.

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. Get medical help.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical help if you feel unwell.

If skin irritation occurs: Get medical help.

If skin irritation or rash occurs: Get medical help.

If eye irritation persists: Get medical help.

Collect spillage.

Dispose of contents/container in accordance with local regulations.

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- Do not eat, drink or smoke while mixing, applying or before washing hands and face or change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Do not apply where roots of desirable plants can absorb the chemical.
- Do not mix or load within at least 15 metres of boreholes, streams, rivers and dams. Do not apply within at least 15 metres from boreholes, streams and rivers. Do not apply within at least 60 metres from dams.
- Ensure that no back siphoning to boreholes or dams takes place, where **Atrazine** is applied through the irrigation system.
- Clean the applicator before using with other material 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 times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler www.croplife.co.za. Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Atrazine and other triazines	500 g/ℓ	
Ethylene glycol	< 10 %	
Atlox 4853B	< 5 %	
Rhodorsil 526 R	< 1 %	

SYMPTOMS OF HUMAN POISONING

Eye contact: Causes serious eye irritation.

Skin contact: May be harmful in contact with skin.

Ingestion: May be harmful if swallowed.

Inhalation: Not classified.

FIRST AID TREATMENT

- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if patient continues to feel unwell.
- <u>Skin contact:</u> 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 or patient feels unwell.
- <u>Eye contact:</u> Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.
- <u>Ingestion:</u> 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 signs and symptoms of **Triazine** poisoning are known or expected in humans. An antidote is neither known nor needed. Treat symptomatically when required. When large amounts have been ingested, gastric lavage or the administration of activated charcoal with water may be indicated.

Mode of Action:

AGRIZINE 500 SC contains atrazine, a 1, 3, 5-triazine compound which belongs to HRAC group 5. It is used as a selective, systemic, pre-and post-emergence herbicide for the control of annual broad leaf and grass weeds. **Atrazine** is primarily absorbed by the roots and foliage, from where it is translocated acropetally in the xylem. It accumulates in the xylem of the apical meristems and leaves.

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RESISTANCE WARNING

AGRIZINE 500 SC is a group code 5 herbicide. Any weed population may contain individuals naturally resistant to **AGRIZINE 500 SC** and other group code 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 **AGRIZINE 500 SC** or any other group code 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 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

To avoid damage to follow-up crops, the following waiting periods should be taken into consideration:

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

• Where the rate of **AGRIZINE 500 SC** does not exceed 2 litres per hectare, the waiting periods mentioned under **(b)** and **(c)** can be reduced to 9 months, except in the sandy soils of the Western Transvaal and North-western Free State, which contain 0 to 10 % clay.

NOTE

The above-mentioned waiting periods will only be valid if the correct quantity of **AGRIZINE 500 SC** 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 **AGRIZINE 500 SC** has been applied.

- When AGRIZINE 500 SC is applied to soils, which expand on wetting and crack or crumble on drying out such as turf soils, AGRIZINE 500 SC may remain active in the soil much longer than the above-mentioned waiting periods. Thus, it should not be applied to such soils if it is contemplated to plant Atrazine sensitive crops in the foreseeable future. On these soils weeds may also not be controlled satisfactorily by a pre-emergence application.
- **Do not** apply **AGRIZINE 500 SC** to inbred parent plants of maize- or grain sorghum hybrids or experimental or newly released maize and grain sorghum cultivars without first referring to the manufacturer or seed supplier.
- <u>Springbok Flats area:</u> **AGRIZINE 500 SC** is **not normally recommended**, if, however, you want to use **AGRIZINE 500 SC**, first consult the representative of the supplier.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

AGRIZINE 500 SC is compatible with the following products: **2,4-D AMINE 480 SL** (L 4505 (U) / W 130459 / N-AR 1096) and **AMETRYN 500 SC** (L 7742).

Mixing instructions:

- Shake well just before use.
- · Replace the lid after use.
- Half fill the spray tank with water.
- Add the required quantity of **AGRIZINE 500 SC** through a 50-mesh sieve into the tank, whilst stirring.
- Top up with water to the final volume required.
- Keep the chemical in continuous suspension by means of agitation. After each day's spraying thoroughly flush tank with water.

Application:

 Accurately calibrate spray equipment prior to application. Use fan type nozzles, to ensure a uniform coverage.

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- Apply onto a well-prepared seedbed free of clods and with an even surface. It is preferable that rain should follow within 7 to 10 days after application in order to leach the **AGRIZINE 500 SC** into the top layer of the soil, where it can be absorbed by the roots of 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 very shallow cultivation with a millipede should follow to control these weeds and to incorporate the herbicide into the top layer of the soil.
- Where application is performed post-emergence to the crops and weeds, broad-leaved weeds should not be beyond the seedling stage (2-leaf stage) and grasses not germinated. Cultivate first to eliminate weeds and apply on clean soil. Same rates as for pre-emergence. Use 200 to 400 litres water per hectare for overall application. Proportionately lesser volumes of water to be used in the case of band treatment.

Aerial application

Aerial application of **AGRIZINE 500 SC** 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:

- <u>Volume</u>: The following spray mixture volumes is recommended: **Pre-emergence** 30 litres per hectare, **Post-emergence** 30 to 35 litres per hectare. 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.
- <u>Droplet coverage</u>: The following number of droplets must be recovered at the target area: **Pre-emergence** 20 to 30, **Post-emergence** 35 to 45.
- <u>Droplet size</u>: The following droplet spectra are recommended: **Pre-emergence** VMD of 350 to 400 micron, **Post-emergence** VMD of 300 to 350 micron. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- <u>Flying height</u>: 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 <u>atomising equipment</u> 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 <u>temperature</u> 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.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high humidity conditions</u> (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 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 logbook and kept for future reference.

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APPLICATION RATES

Crop / Soil Type	Dosage rate / ha	Remarks	
Maize			
Pre-emergence and	early post-emergence:		
0 to 10 % clay	2.5 ℓ	These application rates are for overall application.	
11 to 20 % clay	3.25 ℓ	Proportional amounts should be applied in the case	
21 to 30 % clay	4.0 ℓ	of band treatment.	
31 to 40 % clay	4.75 ℓ	Soils with more than 50 % clay (post-emergence	
41 to 50 % clay	5.0 ℓ	 applications) or soils with more than 3 % organic matter may require higher dosage rates. 	
> 50 % clay	-	Not recommended. (Pre-emergence application).	
Grain sorghum		Not recommended	
0 to 25 % clay	-	Not recommended.	
26 to 30 % clay	4.0 ℓ	Post-emergence only when the sorghum has at least	
31 to 35 % clay	4.75 ℓ	5 leaves at the time of application.	
36 to 40 % clay	4.75 ℓ	Pre- and post-emergence.	
41 to 55 % clay	5.0 ℓ	Pre- and post-emergence.	

NOTE

Grasses already emerged at time of application will not be controlled. Do not apply **AGRIZINE 500 SC** to experimental or newly released cultivars of Sorghum, without first referring to the distributor. Do not apply to areas likely to become waterlogged. Do not apply to soils with high leaching potential and do not irrigate after application. Sorghum may be damaged, if cold and/or wet conditions appear, after an **AGRIZINE 500 SC** application, irrespective of soil type. **Do not** exceed the recommended dosage rates.

Maize and Grain sorghum

Post-emergence application as a tank mix with 2,4-D Amine 480 SL:

This tank mixture is recommended for situations when broad-leaved weed control becomes desirable after these crops have emerged, except in cases where a full dosage of **AGRIZINE 500 SC** has already been applied. In this case a direct spray of **2,4-D Amine 480 SL** as described on the **2,4-D Amine 480 SL** product label, is recommended.

<u>Maize</u>		Spray onto actively growing broad-leaved weeds
All soils	2.5 ℓ	when they are not taller than 100 mm. If the crop is
Grain sorghum	PLUS	already higher than 400 mm, directed spraying is
Above 16 % clay	0.75 ℓ	recommended in order to achieve better wetting of
·	2,4-D Amine 480 SL	the weeds. Do not apply under wet conditions, since
	•	the crop may then be adversely affected.

Maize and Grain sorghum IMPORTANT

Ensure that sufficient fertilizer is band placed near the seed at planting to promote vigorous seedling growth. Damage may result if **AGRIZINE 500 SC** is applied to inbred parent plants, especially to the male or pollen parent, of sorghum and maize cultivars.

Sugarcane		Apply as a pre-emergence overall spray. For best
0 to 35 % clay	2.5 ℓ	results apply immediately before irrigation or before
		rain is expected.
> 35 % clay	-	Not recommended.
<u>Pineapples</u>	3.7 ℓ	
0 to 20 % clay	PLUS	
	3.7 ℓ	Early post-emergence treatment (early seedling
	Ametryn 500 SC	stage) is recommended in situations where a mixed
21 to 35 % clay	5.2 ℓ	population of grasses and broad-leaved weeds occur
	PLUS	and where late germinating weeds are a problem.
	5.2 ℓ	
	Ametryn 500 SC	
> 35 % clay	-	Not recommended.

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SOME WEED SPECIES NORMALLY CONTROLLED		
Broad-le	eaved weeds:	
Acanthospernum australe	Prostrate starbur	
Acanthospernum glabratum	Five-seeded prostrate starbur	
Acanthospernum hispidum	Upright starbur	
Amaranthus deflexus	Pigweed	
Amaranthus hybridus	Cape pigweed	
Amaranthus spinosus	Thorny pigweed	
Amaranthus thunbergii	Red pigweed	
Bidens bipinnata	Spanish blackjack	
Bidens formosa	Cosmos	
Bidens pilosa	Common blackjack	
Chenopodium album	White goosefoot	
Chenopodium carinatum	Green goosefoot	
Cleome monophylla	Single-leaved Cleome	
Cleome rubella	Cleome (Pretty lady)	
Commelina benghalensis	Wandering Jew	
Crotalaria sphaerocarpa	Wild lucerne	
Datura ferox	Large thorn apple	
Datura stramonium	Thorn apple	
Galinsoga parviflora	Small-flowered quick weed	
Gisekia pharnaceoides	Gisekia	
Hibiscus trionum	Bladder Hibiscus	
Hibiscus cannabinus	Stockrose (Kenaf)	
Nicandra physaloides	Apple of Peru	
Physalis angulata	Wild Physalis	
Richardia brasiliensis	Mexican Richardia	
Schkuhria pinnata	Dwarf marigold	
Tagetes minuta	Tall khaki weed (Limited late season control)	
Vigna vexilata	Wild cowpea	
Grass species:		
Eleusine indica	Goose grass	
Setaria pallide-fusca	Garden bristle grass	
NOTE		

NOTE

If dry conditions prevail for a period of 7 to 14 days, after a pre-emergence application, the following weed species **may not** be adequately controlled, especially on heavy soils:

Bidens formosa, Commelina benghalensis, Datura spp. and Eleusine indica.

Under abnormal wet conditions, late season control may not be adequate.

AMETRYN 500 SC is a registered product of VILLA CROP PROTECTION (PTY) LTD.

2,4-D AMINE 480 SL is a registered product of UNIVERSAL CROP PROTECTION (PTY) LTD.

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