

Atrasien 500 SC

South Africa Reg. No: L 10074 Act/Wet No. 36 of/van 1947



A suspension concentrate herbicide for the control of annual broadleaf weeds and certain grasses in maize, grain sorghum and sugarcane.

ACTIVE INGREDIENT

Atrazine (triazine) 485 g/l

Other active triazine 15 g/l

GROUP

5

HERBICIDE



WARNING

HAZARD STATEMENTS:

- May be harmful if swallowed.
- May be harmful in contact with skin.
- May cause an allergic skin reaction.
- Causes serious eye damage.
- May be harmful if inhaled.
- May cause damage to organs.
- Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

- Obtain special instruction before use.
- Do not handle until all safety precautions have been read and understood.

Registration holder: **Green Island Investments (Pty) Ltd.**

Co. Reg. No.: 2013/043963/07

P.O. Box 1822, Heidelberg 1438, South Africa

Tel: 078 737 9236

24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre: +27 82 446 8946

24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411 (Typhoon Plant Protection)

Distributed by: **Typhoon Plant Protection (Pty) Ltd.**

Co. Reg. No.: 1998/006156/07, C/O Farm Vlakfontein

Corner of the R23 Benoni Road & R550 Nigel Road

Brakpan District, Heidelberg 1438, Gauteng, South Africa

Tel: 078 737 9236

Net Volume:

ℓ

Expiry Date:

Batch No:

Date of Manufacture:

U.N. No. 3082

 **Typhoon**
PLANT PROTECTION

READ LABEL IN DETAIL BEFORE OPENING THE CONTAINER. FOR FULL PARTICULARS, SEE ENCLOSED LEAFLET.
KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



WITHHOLDING PERIODS:

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

a)	Maize and Sugar cane:	None
b)	Grain Sorghum:	12 months
c)	Sunflowers, Groundnuts, Soya beans, Potatoes, Dry Beans, Forage Sorghum and Small Grains:	18 months
d)	All Other Crops (a test planting is recommended):	24 months

Note: Where the rate of **ATRA SIEN 500 SC** applied does not exceed 2 litre per hectare the waiting periods mentioned under (b) and (c) above can be reduced to 9 months except on the sandy soils of the North West Province and North Western Free State which contain 0 to 10% clay.

WARNINGS:**HAZARD STATEMENTS:**

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

- Harmful when swallowed.
- May cause skin and eye irritation.
- Store in a cool, dry place and away from food, feeds, seed, fertilizer and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Very toxic to fish and aquatic organisms.
- **Re-entry: Do not** enter treated area within 1 day after treatment unless wearing protective clothing.
- In case of poisoning call a physician and make this label available to him/her.

Aerial Application:

Notify all 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 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. The action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, incompatibility with other substances not indicated on the label, the occurrence of resistance of 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 the event of any uncertainty.

PRECAUTIONS:

PRECAUTIONARY STATEMENTS:

- P273: Avoid release to the environment.
- P280: Wear impervious rubber gloves and chemical safety goggles.
- P302+P352: **IF ON SKIN:** Wash with plenty of water and soap.
- P310: Immediately call a **POISON CENTRE**.
- P333+313: If skin irritation or rash occurs: Get medical advice.
- P305+P351+P338: **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- P391: Collect spillage.
- P501: Dispose of contents/container in accordance with local regulations.

- **Do not** inhale spray mist and vapour.
- Avoid contact with skin and eyes.
- Wear protective rubber gloves, rubber boots and a face mask when handling the product and preparing the spray mixture.
- Wash with soap and water after use and accidental skin contact.
- Wash contaminated clothing after use.
- **Do not** eat, drink or smoke while mixing, applying or before washing hands and face or changing clothing.
- Avoid drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- **Do not** mix and load spray tanks within at least 15 metre from boreholes, streams, rivers and dams.
- **Do not** apply within at least 60 metre from dams.
- Ensure that no back-siphoning to boreholes or dams takes place where triazine is applied through the irrigation system.
- Wash application equipment thoroughly after use. Dispose of wash water in a safe manner and **do not** contaminate crops, grazing, rivers, dams, boreholes, fountains, etc.
- The applicator should not be used for applying chemicals other than herbicides.
- **TRIPLE RINSE** empty containers in the following manner. 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. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.
- Destroy 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.

Related ingredients:

Substance name (IUPAC)	CAS - No.	Concentration % By weight
	EC - No.	
Atrazine	1912-24-9	50%
Polyaryl phenyl ether phosphate, amine salt / calcium salt	105362-40-1	1-5%
Ethylene Glycol	105362-40-1	1-5%

SYMPTOMS OF HUMAN POISONING:

Acute toxicity to this herbicide is expected to be low and no adverse effects from exposure have been reported. Skin contact, ingestion and inhalation are likely routes of exposure. Symptoms of poisoning include abdominal pain, diarrhea and vomiting, eye irritation, irritation of mucous membranes and skin irritations.

FIRST AID TREATMENT:

Inhalation: Remove source of contamination or move patient to fresh air. Keep patient under observation and obtain medical attention if necessary.

Skin contact: If irritation occurs, remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. If irritation persists, obtain medical assistance.

Eye contact: Immediately flush the contaminated eyes with gently flowing clean water for 20 minutes, holding the eyelid(s) open until no evidence of chemical remains. If irritation persists, obtain medical assistance.

Ingestion: Have patient rinse mouth thoroughly with water. **Do not** induce vomiting. In severe cases, obtain medical advice immediately.

NOTE TO PHYSICIAN:

No signs and symptoms of triazine poisoning are known or expected in humans. No specific antidote is available. Treat symptomatically and supportively when required. When large amounts have been ingested, consider gastric lavage or administer activated charcoal.

RESISTANCE WARNING:

For resistance management, **ATRASIEN 500 SC** is a **Group code 5 herbicide**. Any weed population may contain individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **ATRASIEN 500 SC** or any other **Group code 5 herbicide**.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicide 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.

USAGE RESTRICTIONS:

- The above-mentioned withholding periods are valid only if the correct dosage rate of **ATRASIEN 500 SC** according to soil type was applied and normal or above average rainfall occurred after application.
- When **ATRASIEN 500 SC** is applied to soils which expand on wetting and crack or crumble on drying out, such as turf soils, it may remain in the soil for much longer than the above-mentioned waiting periods.
- Thus, it should not be used on such soils, if sensitive crops might be planted in the foreseeable future.
- On such soils it may also give poor control of the weeds when applied **pre-emergence**.
- **Do not** apply to inbred parent plants of maize and grain sorghum cultivars without first referring to the distributor or seed supplier.

Do not apply **ATRASIEN 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.

Springbok Flats area: **ATRASIEN 500 SC** is not normally recommended, if, however, you want to use **ATRASIEN 500 SC**, first consult the representative of the supplier.

DIRECTIONS FOR USE: (Use only as directed).

Compatibility:

- The compatibility of **ATRASIEN 500 SC** with other products may be influenced by the formulation of the products involved as well as the quality of water. Since the formulation of other products may change and water quality may vary from farm to farm a physical compatibility test should always be carried out prior to application.

MIXING INSTRUCTIONS:

- Shake well before use.
- Replace cap after pouring.
- Half fill the spray tank with water, then pour the required quantity of **ATRASIEN 500 SC** through a 50 mesh sieve into the tank whilst stirring.
- Top up the tank with water to the final volume required.
- Ensure thorough agitation during filling and spraying operations.

APPLICATION:

- **ATRASIEN 500 SC** must be applied before or shortly after weeds emerge.
- The soil should preferably have a smooth surface, free of large clods.
- If dry conditions prevail for a period of 7 to 15 days after application, weeds may emerge and develop. In such cases it is recommended that a light cultivation be carried out with a rotary cultivator to destroy these weeds and to mix the herbicide into the top 10 to 20 mm of soil.

Ground Application:

- **ATRASIEN 500 SC** can be applied with any medium or high volume sprayer equipped with efficient agitation and which is capable of adequate coverage and even distribution.
- Best results are obtained using flat fan type spray nozzles and applying a minimum spray volume of 200 litres water per hectare.

Aerial Application:

Aerial application of **ATASIEN 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:

- **Volume:** A spray volume of 30 litres per hectare is recommended for **pre-emergence** and 30 to 35 litres per hectare for **post-emergence**. 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 must be recovered at the target area, when applied **pre-emergence** and 35 to 45 droplets per cm² when applied **post-emergence**.
- **Droplet size:** A droplet spectrum with a VMD of 350 to 400 microns is recommended, when applied **pre-emergence** and 300 to 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 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 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:
 - 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.

MAIZE:

ATRASIEN 500 SC applied **pre-emergence** and early **post-emergence**.

SOIL TYPE:	% CLAY:	ATRASIEN 500 SC (ℓ/ha) FOR OVERALL APPLICATION:
Light sand/sand:	0 – 10 %	2,5 ℓ
Loamy sand/sandy :	11 – 20 %	3,25 ℓ
Sandy clay loam:	21 – 30 %	4,0 ℓ
Sandy clay loam/sandy clay:	31 – 40 %	4,75 ℓ
Sandy clay, and soils high in organic matter:	41 – 50 %	5,0 ℓ

GRAIN SORGHUM:

Note the following use restrictions:

Pre-Emergence:

- Recommended only on soils containing more than 35 % clay.

Post-Emergence:

- Recommended only on soils containing more than 25 % clay.
- **ATRASIEN 500 SC** can only be applied **post-emergence** if broadleaf weeds have not developed beyond the seeding stage (2 leaf stage), grasses and *Tagetes minuta* have not yet emerged, and the grain sorghum has 5 or more leaves.
- Where grasses have already emerged and broadleaf weeds have developed beyond the seedling stage, these weeds must first be destroyed by cultivation and **ATRASIEN 500 SC** then applied onto clean soil.

SOIL TYPE:	% CLAY:	ATRASIEN 500 SC (ℓ/ha) FOR OVERALL APPLICATION:	
Light sand/sandy loam:	0 – 20 %	NOT RECOMMENDED	
Sandy clay loam:	21 – 25 %	NOT RECOMMENDED	
	26 – 30 %	4,0 ℓ	Post-emergence only
Sandy clay and soils high in organic matter:	31 – 35 %	4,75 ℓ	
	36 – 40 %	4,75 ℓ	Pre- or post- emergence
	41 – 50 %	5,0 ℓ	

NOTE: Under cold and/or very wet conditions **ATRASIEN 500 SC** may damage grain sorghum.

SUGAR CANE:

- For the control of broadleaf weeds on light to medium soils, apply **ATRASIEIN 500 SC** as an overall spray immediately after planting and before weeds emerge.

SOIL TYPE:	% CLAY:	ATRASIEIN 500 SC (ℓ/ha) FOR OVERALL APPLICATION:
Light to medium:	0 – 35 %	2,5 ℓ
Medium to Heavy:	>35 %	NOT RECOMMENDED

WEEDS CONTROLLED:

The following weed species are normally controlled by **ATRASIEIN 500 SC** at the dosage rate recommended above:

BROADLEAF WEEDS:

<i>Acanthospermum australe</i>	Eight-seeded prostrate starbur	<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria
<i>Acanthospermum glabratum</i>	Five-seeded prostrate starbur	<i>Datura ferox</i>	Large thorn apple
<i>Acanthospermum hispidum</i>	Upright starbur	<i>Datura stramonium</i>	Thorn apple
<i>Amaranthus deflexus</i>	Perennial pigweed	<i>Galinsoga parviflora</i>	Gallant soldier
<i>Amaranthus hybridus</i>	Common pigweed	<i>Gisekia pharnacioides</i>	Gisekia
<i>Amaranthus spinosus</i>	Thorny pigweed	<i>Hibiscus cannabinus</i>	Kenaf
<i>Amaranthus thunbergii</i>	Red pigweed	<i>Hibiscus trionum</i>	Bladderweed
<i>Bidens bipinnata</i>	Spanish blackjack	<i>Nicandra physalodes</i>	Apple of Peru
<i>Bidens formosa</i>	Cosmos	<i>Physalis angulata</i>	Wild gooseberry
<i>Bidens pilosa</i>	Common blackjack	<i>Portulaca oleracea</i>	Purslane
<i>Chenopodium album</i>	White goosefoot	<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Chenopodium carinatum</i>	Green goosefoot	<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Cleome monophylla</i>	Spindlepod	<i>Tagetes minuta</i>	Khakiweed
<i>Cleome rubella</i>	Pretty lady	<i>Vigna vexillata</i>	Wild cow-pea
<i>Commelina benghalensis</i>	Benghal wandering Jew		

GRASSES:

<i>Eleusine indica subsp. africana</i>	Goose grass	<i>Setaria pallide-fusca</i>	Red bristle grass
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If dry conditions prevail for a period of 7 to 14 days after **pre-emergence** application the following weed species may not be adequately controlled, especially on heavy soils:

<i>Bidens formosa</i>	Cosmos	<i>Eleusine indica subsp. africana</i>	Goose grass
<i>Commelina benghalensis</i>	Benghal wandering Jew	<i>Tagetes minuta</i>	Khakiweed
<i>Datura spp.</i>	Thorn apple		