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ATRANEX® 500 SC

Reg. no. L5352 Act/Wet 36 of/van 1947
N-AR 0486; W130698

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

GROUP	5	HERBICIDE

A suspension concentrate herbicide for the control of annual broadleaf weeds and grasses, as listed in maize, grainsorghum, sugarcane and pineapples.	'n Suspensiekonsentraat onkruiddoder vir die beheer van eenjarige breëblaaronkruide en grassoorte, soos aangetoon in mielies, graansorghum, suikerriet en pynappels.

WARNING

Hazard statements
May cause allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
Do not breathe fumes/mist/vapours or spray.
Collect spillage.

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

Atrazine (triazine)……..…...…… 500 g/L ……..... Atrasien (triasien)

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 cause allergic skin reaction.
- May cause damage to organs through prolonged or repeated exposure.
- Very toxic to aquatic life with long lasting effects.

- Could be poisonous when swallowed.
- Store in a cool dry place away from food, feeds, seed and other agricultural remedies.
- **Aerial application:** Notify all inhabitants of the are to be treated and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.

Aerial application

Aerial application of **ATRANEX® 500 SC** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 0118 (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/ha 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: 20–30 droplets per cm^2 must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 350–400 microns is recommended. 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 m 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 the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

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 climatic and storage conditions, compatibility with other substances not indicated on the label and the occurrence of resistance of disease 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, 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 the event of any uncertainty.

PRECAUTIONS

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label carefully and follow all instructions.
- Do not breathe fumes/mist/vapours or spray.
- Wear protective gloves, protective clothing, and eye and face protection.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment – if this is not the intended use.
- Get medical help if you feel unwell.
- IF ON SKIN: Wash with plenty of water under the safety shower.
- If skin irritation or rash occurs: Get medical help.
- Take off contaminated clothing and wash it before reuse.
- Collect spillage.
- Dispose of contents/container to a licensed waste facility and in accordance with local and national regulatory requirements.

- Wash with soap and water after use.
- 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
- Do not mix and load at least 15 m from boreholes, streams, rivers or dams.
- Do not apply within at least 60 m from dams.

- Ensure that no back siphoning to boreholes take place when Atrazine is 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.
- **IMPORTANT: Tripple Rinse:** 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 container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner. Destroy empty container by perforation and flattening and never use for any other purpose.

RELEVANT SUBSTANCES

Chemical name	w/w %	CAS no.
Atrazine	30–60%	1912-24-9
Monoethylene glycol	<10%	107-21-1

FIRST AID

Emergency personnel should wear protective clothing appropriate to the type and degree of contamination.

Remove contaminated clothing and move the affected person away from the contamination area. Keep the person warm, calm, and comfortable. First Aid personnel should pay attention to their own safety.

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

Eye contact: Immediately rinse/flush the eyes gently with water from the eye wash fountain for several minutes (at least 15 minutes), while holding the eyelids apart. Check for and remove contact lenses if easy to do so. Continue rinsing. Obtain medical attention if irritation occurs and persists.

Skin contact: Remove all contaminated clothing and shoes. Rinse the skin with plenty of water for 15 to 20 minutes under the safety shower. Wash contaminated clothing before re-use. Obtain medical attention.

Inhalation: Remove the affected victim from exposure to an area with fresh air. Keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion: Obtain immediate medical attention or call a poison control centre for treatment advice. If conscious, rinse mouth thoroughly with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting unless directed to do so by a medical professional. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits.

TOXICOLOGICAL INFORMATION

Notes to physician

Treat symptomatically and supportively.

Symptoms of human poisoning

None known for the product.

Atrazine – could cause eye /skin irritation, skin sensitization (dermatitis) breathing difficulty, weakness, exhaustion, incoordination, salivation and liver injury.

RESISTANCE WARNING

For resistance management **ATRANEX® 500 SC** is classified as a group 5 herbicide. Any weed population may contain individuals naturally resistant to **ATRANEX® 500 SC** and other group 5 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. The resistant weeds may not be controlled by **ATRANEX® 500 SC** or any other group 5 herbicide. To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group. Alternate or tank mix with products from different herbicide groups.
- For tank mixing or alternation with products in other herbicide groups, refer to applicable product labels.
- Integrate control methods (chemical, cultural and biological) into weed control programs.

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

MODE OF ACTION

5: Inhibition of photosynthesis at PSII – Serine 264 binders.

BROADLEAF WEED SPECIES NORMALLY CONTROLLED BY ATRANEX® 500 SC

Botanical Name	Common Name
Acanthospermum australe	Australian starbur
Acanthospermum glabratum	Prostrate starbur
Acanthospermum hispidum	Upright starbur
Amaranthus hybridus *	Cape pigweed
Amaranthus spinosus	Thorny pigweed
Amaranthus thunbergii	Red pigweed
Bidens bipinnata	Spanish blackjack
Bidens formosa	Cosmos
Bedens pilosa	Common blackjack
Chenopoduim album	White goosefoot
Chenopoduim carinatum	Green goosefoot
Cleome monophylla	Single leaf cleome
Cleome rubella	Pretty Lady
Commelina benghalensis	Bengal commelina

Crotalaria sphaerocarpa	Crotalaria
Datura ferox	Common thorn apple
Datura stramonium	Large thorn apple
Galinsoga parviflora	Small flowered quick weed
Gisekia pharnaceodes	Gisekia
Hibiscus trionum	Bladder hibiscus
Hibiscus cannabinus	Wild stockrose
Nicandra physaloides	Apple of Peru
Physalis angulata	Wild Physalis
Portulaca oleracea	Common purslane
Richardia brasiliensis	Mexican richardia
Schkuhria pinnata	Dwarf marigold
Tagetes minuta	Tall khakiweed – limited late season control
Vigna vexillata	Wild sweetpea

GRASSES

Botanical Name	**Common Name**
Eleusine indica	Goosegrass
Setaria pallide-fusca	Garden bristle grass
Chloris virgata	Feather top chloris
Panicum schinzii	Vlei panicum
Setaria verticillata	Bur bristle grass

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:

Bidens formosa

Datura spp

Elusine indica

Commelina benghalensis

Panicum schinzii

Chloris virgata

***Note**: Resistant strains of this weed may possibly not be adequately controlled by **ATRANEX® 500 SC.**

ATRANEX® 500 SC provides variable control of the following weeds:

Tribulus terrestris	Common dubbeltjie

Note: This product controls certain grasses and numerous annual broadleaf weeds. Other annual broadleaf weeds that were not present during the development trials with the product, may possibly also be controlled to a certain degree. The registration holder does not accept any responsibility for unlisted weeds. Under abnormally wet conditions the late season control of weeds may not be adequate. To control a broader spectrum of annual grasses, **ATRANEX® 500 SC** can be applied in a tank mixture or as a separate application in combination with one of the registered grass killers. **ATRANEX® 500 SC** is compatible in a spray mixture with all presently registered grass killers. Consult the labels of the specific grass killers for application rates, as well as for the specific **ATRANEX® 500 SC** application rates to be used when mixtures are sprayed. The directions for use on labels concerned must be closely followed.

Note: Where **ATRANEX® 500 SC** is used in combination with EPTC in maize, at least two-thirds of the recommended rate of **ATRANEX® 500 SC** according to soil type should be used. **ATRANEX® 500 SC** is also compatible with registered wetting agents and BROMOXYNIL. When **ATRANEX® 500 SC** is mixed with any of the above products, all information on the label concerned must be carefully consulted and the instructions followed. **ATRANEX® 500 SC** can also be used in a tank mix with 2,4-D Amine (480 g/L) for the control of broadleaf weeds up to 100 mm in height, applied to maize and grain sorghum at any stage before flowering. For application rates and use restrictions consult the tables under "**APPLICATION RATES**".

USE RESTRICTIONS

To avoid damage to follow on crops the following waiting periods should be taken into consideration after application of **ATRANEX® 500 SC**:

a) Maize and Sugarcane……..none
b) Grain Sorghum……..…12 months
c) Sunflower, Small grain, Dry beans, Groundnuts, Soya beans, Fodder sorghum and Potatoes……18 months
d) Al other crops (a test planting is never the less recommended)……24 months

Where the total rate of **ATRANEX® 500 SC** applied per season does not exceed 2 L/ha (1 kg active ingredient per hectare), the waiting periods mentioned under b and c can be reduced to 9 months, except in the case of sandy soils in the North West Province and north west Free State on soils containing 0–10% clay.

NOTE

- The above-mentioned waiting periods will only be valid if the correct quantity of **ATRANEX® 500 SC** has been applied according to the soil type and an average or rainfall has been experienced during and after the season in which the **ATRANEX® 500 SC** has been applied.
- If **ATRANEX® 500 SC** is applied to soils which expand on wetting and crack or crumble on drying out, such as turf soils, **ATRANEX® 500 SC** may remain active much longer in the soil than above mentioned waiting periods. Thus **ATRANEX® 500 SC** 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 satisfactory by a pre-emergence application of Atrazine.
- Do not apply **ATRANEX® 500 SC** 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.

DIRECTIONS FOR USE

Use only as directed.

NOTICE TO THE USER: This agricultural remedy is to be used only in 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.

Shake well before use. Replace cap after pouring. Half fill the spray tank with water. Add the required quantity of **ATRANEX® 500 SC.** 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.

APPLICATION

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

Pre-emergence

To control the full **ATRANEX® 500 SC** weed spectrum, **ATRANEX® 500 SC** must be applied during or immediately after planting in freshly cultivated soil to thereby ensure a weed-free seedbed. The soil should have an even and firm surface, free of large clods. It is preferable that the rain should follow within 7–10 days after application in order to leach the **ATRANEX® 500 SC** into the top layer of the soil where it can be absorbed by roots of germinating weeds. If, after application, dry weather conditions should prevail for a period of 7–10 days, weeds may germinate and develop. If this happens, a cultivation with a rotary hoe should follow to control these weeds and to incorporate the herbicide 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 – 400 L water per hectare for overall application. Accordingly lesser volumes of water are to be used in the case of band treatment.

Aerial application

ATRANEX® 500 SC may be applied by aerial application, provided the spray mixture is distributed evenly over the target area and the loss of spray mixture during application is limited to a minimum. To meet above, the following requirements must be adhered to:

- Use only a conventional boom fitted with flat fan nozzles e.g. SS6515 or equal.
- A minimum spray volume of 30 L/ha.
- A minimum of 20–30 droplets per cm^2 must be recovered on the target area.
- Use a droplet spectrum with a VMD of 450 micron.
- Maintain a flying height of three meters above the target area at wind speeds of 0–8 km/h and two meters at 8–15 km/h.
- Stop spraying when the wind speed exceeds 15 km/h.
- The difference between the wet and dry bulb reading, as determined with a whirling hygrometer should not exceed 8 °C.
- Do not spray during the heat of the day.
- Ensure that the lands are properly marked.

- It is essential that assurance is obtained from the spray operator that the above mentioned requirements will be adhered to.

APPLICATION RATES

Maize (Pre-emergence and early post- emergence).

% CLAY	ATRANEX® 500 SC (L/ha)	REMARKS
0–0 11–20 21–30 31–40 41–55	2.50 3.25 4.00 4.75 5.00	These application rates are for overall application of the herbicide. According lesser amounts should be applied per ha of maize in the case of band treatment.

Grain sorghum

Note: Pre-emergence application is only recommended on soil which contains more than 35% clay. Post-emergence application is recommended only on soils containing more than 25% clay and if the sorghum has at least five leaves at the time of application.

Grain sorghum

% CLAY	ATRANEX 500 SC (L/ha)	REMARKS
0–25	-	Not recommended.
26–30	4.00	Post-emergence only.
31–35	4.75	Post-emergence only.
36–40	4.75	Pre- and post-emergence.
41–55	5.00	Pre- and post-emerge Grasses already emerged at time of application will not be controlled.

Note: Do not apply to areas likely to become waterlogged. Do not apply to soils with high leaching potential and do not irrigate after application. Under cold and/or high rainfall conditions after application, **ATRANEX® 500 SC** may damage sorghum, irrespective of soil type. Do not exceed the recommended dosage rates.

Maize and Grain sorghum: Post-emergent application of **ATRANEX® 500 SC** plus 2,4-D® AMINE

CROP/TARGET	% CLAY	ATRANEX® 500 SC (L/ha)	REMARKS
Maize	All	2.0 + 0.75 L 480 g/L Amine	Apply to actively growing broadleaf weeds which are not larger than 100 mm. When the crop exceeds 400 mm in height, a directed spray is recommended to ensure improved coverage of the weeds.
Grain Sorghum	More than 15	2.0 + 0.75 L 480 g/L Amine	Do not apply under cold, or cold and wet conditions as the crop may possibly be affected detrimentally.

Maize and Grain sorghum: Stale seedbed/Minimum tillage or stubble Mulching

Where minimum tillage or stubble mulching is practiced, weeds may already have come up at time of planting. If maize or grain-sorghum are planted under such circumstances, or into an old seedbed, where grasses have already germinated or broadleaf weeds have develop past the four leaf stage, it is recommended that paraquat be added to the **ATRANEX® 500 SC** spray solution, at a dosage rate as recommended by the manufacturer. The paraguat will destroy the already existing weeds and create a clean pre-emergence condition that will allow **ATRANEX® 500 SC** to work effectively.

Note: Where paraquat is added, the application must take place before the crop comes up, because paraquat will damage the crop plant that may already have emerged. In case of minimum tillage or stubble mulching, the amount of stubble and humus at the soil surface may reduce the efficacy of **ATRANEX® 500 SC.** The representative of the manufacturer or distributor should therefore be consulted.

Sugarcane

For the control of broadleaf weeds on light to medium soils, apply **ATRANEX® 500 SC** as a pre-emergence overall spray immediately after planting and before weeds emerge. For best results apply shortly before irrigation or before rain is expected. For control of annual grasses a tank mixture of **ATRANEX® 500 SC** with a registered grass killer is recommended. Consult the label of the specific grass killer for application rates.

SOIL TYPE	% CLAY	ATRANEX 500 SC (L/ha)
Light to medium	0-35	2.5 L

Pineapples

% CLAY	ATRANEX 500 SC (L/ha)	REMARKS
0–20	3.7 + 3.7 L **AMETREX® 500 SC**	Early post emergence treatments recommended in situation where a mixed population of grasses and broadleaf weeds occur and where later germinating weeds are a problem.
21–35	5.2 + 5.2 L **AMETREX® 500 SC**	
Above 35	Not recommended	