


ATRANEX[®] 90 WG

Reg. no. L8138 Act/Wet 36 of/van 1947
READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS



GROUP	C1	HERBICIDE
--------------	-----------	------------------

<p>A water dispersible granule herbicide for the control of annual broadleaf weeds and grasses, as listed in maize, grain sorghum, sugarcane, pineapples and triazine resistant canola.</p>	<p>'n Benatbare korrel onkruiddoder vir die beheer van eenjarige breëblaaronkruide en grassoorte, soos aangetoon in mielies, graansorghum, suikerriet, pynappels en triasien weerstandbiedende kanola.</p>
---	--

 <p>WARNING</p>	<p>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.</p> <p>Precautionary statements Avoid release to the environment apart from the intended use. Wear protective gloves/face protection/protective clothing.</p>
---	---

ACTIVE INGREDIENT/AKTIEWE BESTANDEEL

Atrazine (triazine)..... 900 g/kg Atrasien (triasien)

NET MASS/NETTO MASSA

..... kg

REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty) Ltd; Reg. no.
1992/001741/07
Ground Floor, Simeka House
The Vineyard Office Estate, 99 Jip de Jager Drive
Bellville, 7530
T: +27 21 982 1460, infocpt@adama.com

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 3077

Batch number
Date of Manufacture
Expiry date

Lotnommer
Datum van Vervaardiging
Vervaldatum



GHS information

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.

Withholding periods (minimum number of days between last application and harvest):

Canola 60 days

- 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 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 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 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 weed 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 or registration holder in the event of any uncertainty.

PRECAUTIONS

- Keep out of reach of children.
- Do not breathe dust/mist/spray.
- Wash hands and face after handling.
- Wear protective gloves/face protection/protective clothing.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not eat, drink, or smoke when using this product.
- Get medical help if you feel unwell.
- IF ON SKIN: Wash with plenty of water.
- If skin irritation or rash occurs, get medical help.

- Take off contaminated clothing and wash it before reuse.
- Avoid release to the environment apart from the intended use.
- Collect spillage.
- Dispose of contents and/or container to an approved waste disposal plant.

- Avoid inhalation of spray and fumes.
- Wear suitable protective clothing and gloves.
- 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 and dams 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.
- **CLEAN THE EMPTY PLASTIC BAG AS FOLLOWS:** 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 bag to any other parties that may use it as container for foodstuffs.

RELEVANT SUBSTANCES

Chemical name	w/w %	CAS no.
Atrazine	>60%	1912-24-9

FIRST AID

In case of an accident or unwellness, seek medical advice immediately. If possible, show the label (directions for use) or this SDS.

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

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical help.

Skin contact: Wash with plenty of soapy water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs, get medical help.

Inhalation: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stop, administer artificial respiration. Get medical help if the person feels unwell.

Ingestion: Rinse mouth well with clean water and drink plenty of it. Call a poison centre and/or get medical help if you feel unwell.

TOXICOLOGICAL INFORMATION

Symptoms of human poisoning/ Most important delayed symptoms/effects after exposure

Inhalation: irritation of the airway, coughing may occur.

Skin contact: skin irritation and allergic skin reactions.

Eye contact: eye irritation, redness may occur.

If skin irritation or rash occurs, or if eye irritation persists, or if a burning sensation in the upper airways persists, get medical help. Treat symptomatically. Pre-existing conditions may be aggravated, such as eye, skin, or respiratory disorders.

Prolonged or repeated exposure may cause damage to organs such as the heart.

RESISTANCE WARNING

For resistance management **ATRANEX® 90 WG** is a group C1 herbicide. Any weed population may contain individuals naturally resistant to **ATRANEX® 90 WG** and other group C1 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® 90 WG** or any other group code C1 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 other 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

C1: Inhibition of photosynthesis at PSII – Serine 264 binders.

SOME WEED SPECIES NORMALLY CONTROLLED BY ATRANEX® 90 WG

BROADLEAF WEEDS

<i>Acanthospermum australe</i>	eight-seeded starbur
<i>Acanthospermum glabratum</i>	prostrate starbur
<i>Acanthospermum hispidum</i>	upright starbur
<i>Amaranthus hybridus</i>	common pigweed
<i>Amaranthus spinosus</i>	thorny pigweed
<i>Amaranthus thunbergii</i>	red pigweed
<i>Bidens bipinnata</i>	spanish blackjack
<i>Bidens formosa</i>	cosmos



ADAMA

Listen - Learn - Deliver

<i>Bidens pilosa</i>	common blackjack
<i>Chenopodium album</i>	white goosefoot
<i>Chenopodium carinatum</i>	green goosefoot
<i>Cleome monophylla</i>	single leaf cleome
<i>Cleome rubella</i>	pretty Lady
<i>Commelina benghalensis</i>	Bengal wandering Jew
<i>Crotalaria sphaerocarpa</i>	wild lucerne
<i>Datura ferox</i>	common thorn apple
<i>Datura stramonium</i>	large thorn apple
<i>Fumaria muralis</i>	Fumitory
<i>Galinsoga parviflora</i>	small flowered quick weed
<i>Gisekia pharnaceoides</i>	Gisekia
<i>Hibiscus trionum</i>	bladder hibiscus
<i>Hibiscus cannabinus</i>	wild stockrose
<i>Nicandra physaloides</i>	apple of Peru
<i>Physalis angulata</i>	wild gooseberry
<i>Polygonum aviculare</i>	prostrate knotweed
<i>Portulaca oleracea</i>	common purslane
<i>Richardia brasiliensis</i>	mexican Richardia
<i>Schkuhria pinnata</i>	dwarf marigold
<i>Tagetes minuta</i>	tall khakiweed (limited late season control)
<i>Vigna vexillata</i>	wild sweetpea

GRASSES

<i>Chloris virgata</i>	feather top chloris
<i>Eleusine coracana</i>	goosegrass
<i>Lolium spp.</i>	ryegrass
<i>Panicum schinzii</i>	vlei panicum
<i>Setaria pallide-fusca</i>	garden bristle grass
<i>Setaria verticillata</i>	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

Eleusine coracana

Commelina benghalensis

Panicum schinzii

Chloris virgata

Tagetes minuta

Note: Resistant strains of this weed may not be adequately controlled.

ATRANEX® 90 WG provides variable control of the following weeds:

Tribulus terrestris

common dubbeltjie

Note: 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 label.

Under abnormally wet conditions the late season control of weeds may not be adequate. To control a broader spectrum of annual grasses, **ATRANEX® 90 WG** can be applied in a tank mixture or as a separate application in combination with a registered grass killer. **ATRANEX® 90 WG** is compatible in a spray mixture with all presently registered grass herbicides. Consult the labels of the specific grass herbicides for the application rates, as well as for the specific **ATRANEX® 90 WG** application rates to be used when mixtures are applied. The directions for use on labels concerned must be followed closely.

Note: Where **ATRANEX® 90 WG** is used in combination with EPTC in maize, at least two-thirds of the recommended rate of **ATRANEX® 90 WG** should be used according to soil type.

ATRANEX® 90 WG is compatible with registered wetting agents, pre-emergent graminicides, SIMANEX® 90 WG, TYLLANEX® 80 WG, BROMOTRIL® P 500 SC, 2,4-D Amine®, MCPA®, and most insecticides and fungicides. When **ATRANEX® 90 WG** is mixed with any of the above products, all information on the label concerned must be carefully consulted and the instructions followed.

USE RESTRICTIONS

- A** To avoid damage to follow on crops, the following waiting periods should be taken into consideration when applying **ATRANEX® 90 WG**.
- 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)** **All other crops (a test planting is however recommended)**24 months
- e)** Where the total rate of **ATRANEX® 90 WG** applied per season does not exceed 1.1kg/ha (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 North West province and north west Free State which contain 0–10% clay.
- f)** Where the total rate of Atrazine active exceeds 1.0 kg/ha, but does not exceed the recommended dosage rate of Atrazine active per ground type, follow the use restrictions a–d.

Note: The above-mentioned waiting periods will only be valid if the correct quantity of **ATRANEX® 90 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 **ATRANEX® 90 WG** is applied to soils which expand on wetting, and crack or crumble on drying, such as turf soils, **ATRANEX® 90 WG** may remain active in the soil for longer than the above-mentioned waiting periods. Thus **ATRANEX® 90 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.
- C** Do not apply **ATRANEX® 90 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, **ATRANEX® 90 WG** can cause damage to grain sorghum.

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.

Mixing

Half fill the spray tank with water. Mix the required amount of **ATRANEX® 90 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.

APPLICATION

Ground application

ATRANEX® 90 WG can be applied by means of any suitable medium to high volume spray apparatus, provided that the apparatus has an effective mixing mechanism, is able to spray the spray mix evenly over the target area and is correctly calibrated. The use of a flat-fan nozzles is recommended.

Pre-emergence: To control the full **ATRANEX® 90 WG** weed spectrum, **ATRANEX® 90 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 7–10 days after application in order to leach the **ATRANEX® 90 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 7–10 days, weeds may germinate and develop. If this happens, a light cultivation should follow to control these weeds and to incorporate the **ATRANEX® 90 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 200–400 L of water per hectare for overall application and accordingly lesser volumes of water in the case of band treatment.

Aerial application

Aerial application of **ATRANEX® 90 WG** 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 mixture volume of 30 L per hectare 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.
- **Droplet coverage:** 30–40 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 350–450 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 the 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 15km/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 problems:

- 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.

APPLICATION RATES

Maize (Pre-emergence and early post-emergence)

% CLAY	ATRANEX® 90 WG (kg/ha)	REMARKS
0–10	1.4 kg	These application rates are for overall application of the herbicide. In the case of band treatment, accordingly lower amounts should be applied.
11–20	1.8 kg	
21–30	2.2 kg	
31–40	2.6 kg	
41–55	2.8 kg	

Grain sorghum

Note: Pre-emergence application is only recommended on soil which contain more than 35 % clay. Post-emergence application is only recommended on soils which contain more than 25 % clay and on sorghum which has at least five leaves at the time of application. Broadleaf weeds should not have developed beyond the seedling stage (two-leaf stage) and grasses and khaki weed should not have emerged.

% CLAY	ATRANEX® 90 WG (kg/ha)	REMARKS
0–25	-	Not recommended.
26–30	2.2 kg	Post-emergence only.
31–35	2.6 kg	Post-emergence only.
36–40	2.6 kg	Pre- and post-emergence.
41–55	2.8 kg	Pre- and post-emergence Grasses already emerged at time of application will not be controlled.

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. Do not irrigate directly after application. Under cold conditions and/or where high rainfall is expected after application, **ATRANEX® 90 WG** may damage sorghum, irrespective of the soil type.

Important for Maize and Grain sorghum: Make sure that sufficient fertilizer is applied at the time of planting in a band close to the seed to promote the growth of the seedlings.

Maize and Grain Sorghum (Post-emergent application of **ATRANEX® 90 WG plus 2,4-D Amine)**

CROP	% CLAY	ATRANEX® 90 WG (kg/ha)	REMARKS
Maize	All	1.1 kg + 0.75 L 480 g/L 2,4-D Amine	Apply to actively growing broadleaf weeds which are not larger than 100 mm. When the crop exceeds 400 mm in height, a direct spray is recommended to ensure improved coverage of the weeds.
Grain Sorghum	More than 15	1.1 kg + 0.75 L 480 g/L 2,4-D Amine	Do not apply under cold, or cold and wet conditions as the crop may be adversely affected under such conditions.

Maize and Sorghum (Stale seedbed/Minimum tillage or Stubble mulching):

Where minimum tillage or stubble mulching is practiced, weeds may already have come up at the time of planting. If maize or grain sorghum are 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 **ATRANEX® 90 WG** spray solution, at a dosage rate recommended by the manufacturer. The Paraquat will destroy the existing weeds and create a clean pre-emergence condition that will allow **ATRANEX® 90 WG** to work effectively.

NOTE:

1. When paraquat is added, the application must take place before the crop emerges otherwise paraquat will cause damage to the crop after emergence.
2. In case of minimum tillage or stubble mulching, the amount of stubble and humus at the soil surface may reduce the efficacy of **ATRANEX® 90 WG**. The representative of the manufacturer or distributor should be consulted.

Sugarcane

For the control of broadleaf weeds on light to medium soils, apply **ATRANEX® 90 WG** as a pre-emergence overall spray immediately after planting and before weed emergence. For best results, apply shortly before irrigation or before rain is expected. For control of annual grasses, a tank mix of **ATRANEX® 90 WG** with a registered grass herbicide, such as SULTAN 500 SC (Reg. No. L6892), is recommended. Consult the label of the specific grass herbicides for application rates.

SOIL TYPE	% CLAY	ATRANEX 90 WG (kg/ha)
Light to medium	0–35	1.1 kg

Pineapples

% CLAY	ATRANEX® 90 WG (kg/ha)	REMARKS
0–20	2.1 kg + 2.3 kg Ametrex 80 WG	Early post-emergence treatments are recommended where a mixed spectrum of grasses and broadleaf weeds have occurred and also where later germinating weeds are a problem.
21–35	2.9 kg + 3.25 kg Ametrex 80 WG	
Above 35	Not recommended	

Canola (Pre-emergence or post-emergence)

% CLAY	ATRANEX® 90 WG (kg/ha)	Remarks
All soil types	1.1 kg	<p>For the control of weeds in Triazine resistant Canola, ATRANEX® 90 WG can be applied either as a pre-emergence application directly after sowing or as a post-emergence application when the canola is in the true three to four leaf stage but before weeds have developed beyond the seedling stage.</p> <p>The control of <i>Lolium spp</i> will be erratic by a post-emergent application of ATRANEX® 90 WG.</p> <p>NOTE: Do not exceed the dosage of 1.1 kg ATRANEX® 90 WG per hectare.</p> <p>ONLY FOR USE ON TRIAZINE RESISTANT CANOLA CULTIVARS.</p>