



ATRANEX 90 WG

Reg No L 8138 Act / Wet 36 of 1947

A water dispersible granule herbicide for the control of annual broadleaf weeds and grasses, as listed in maize, grainsorghum, sugarcane, pineapples and canola.

'n Benatbare korrel onkruidodder vir die beheer van eenjarige breëblaaronkruid en grassoorte, soos aangetoon in mielies, graansorghum, suikerriet, pynappels en canola.

HRAC GROUP CODE HERBICIDE

C 1

HRAC GROEPKODE ONKRUIDDODER

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Atrazine (Triazine)

900 g / kg

Atrasien (Triasien)

NET MASS / NETTO MASSA

..... kg

REGISTRATION HOLDER / REGISTRASIEHOUER

MAKHTESHIM-AGAN SA (PTY) LTD

Reg no 1992/001741/07

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BRACKENFELL

7561

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Batch number

.....

Lotnommer

Date of Manufacture

.....

Datum van Vervaardiging

**ATRANEX is the registered trademark of Makhteshim-Agan Israel.
ATRANEX is die geregistreerde handelsmerk van Makhteshim-Agan, Israel.**



**CAUTION
VERSIGTIG**



WARNINGS

- Poisonous when swallowed.
- Store in a cool dry place away from food, feeds, seed and other agricultural remedies.
- 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 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, 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

- 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 15m from boreholes, streams, rivers or dams.
- Do not apply within at least 60m 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.

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 C1 herbicide. To delay herbicide resistance:

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

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

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
<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>	
<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>	
<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>	
<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 grasskiller. **ATRANEX 90 WG** is compatible in a spray mixture with all presently registered grasskillers. Consult the labels of the specific grasskillers 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, soyabeans, 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 1.0kg 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 1.0kg/ha, but does not exceed the recommended dosage rate of Atrazine active per groundtype, 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

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

1. Ground Application

ATRANEX 90 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 tankmix evenly over the target area and is correctly calibrated. The use of a flat-fan nozzle 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 to 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 to 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 to 400 litres of water per hectare for overall application and accordingly lesser volumes of water in the case of band treatment.

2. 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 litres 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 to 40 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 350 to 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 to 4 metres 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:
 - 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

A. MAIZE (Pre-emergence and early post-emergence)

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

B. GRAINSORGHUM

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 khakiweed should not have emerged.

% CLAY	ATRANEX 90 WG (kg/ha)	REMARKS
0 – 25	-	Not recommended.
26 – 30	2.2kg	Post-emergence only.
31 – 35	2.6kg	Post-emergence only.
36 – 40	2.6kg	Pre- and post-emergence.
41 - 55	2.8kg	Pre- and post emerge 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 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 GRAINSORGHUM: Make sure that sufficient fertilizer is applied at the time of planting to promote the growth of the seedlings.

C. MAIZE AND GRAINSORGHUM (Post-emergent application of **ATRANEX 90 WG** plus 2,4-D Amine)

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

D. MAIZE AND SORGHUM (Stale seedbed / 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 or grainsorghum 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.
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.

E. 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 tankmix of **ATRANEX 90 WG** with a registered grasskiller, such as SULTAN 500 SC (Reg. No. L6892), is recommended. Consult the label of the specific grasskiller for application rates.

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

F. PINEAPPLES

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

G. CANOLA (Pre-emergence and post-emergence)

For the control of weeds in on light to medium soils, apply **ATRANEX 90 WG** as a pre-emergence overall spray immediately after planting and once again after weed emergence.

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

WAARSKUWINGS:

- Giftig indien ingesluk.
- Bêre in 'n koel plek en weg van voedsel, voer, saad en ander landbouchemiese middels.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor aangrensende gebiede of water spuit of die spuitnewel toelaat om dit te besoedel nie
- **Herbetreding:** Moet nie behandelde gebied binne 1 dag na behandeling binnegaan nie tensy beskermende klere gedra word

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens en dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim deur die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in geval van enige onsekerheid.

VOORSORGMAATREËLS:

- Voorkom inaseming van die dampe of spuitnewel.
- Dra geskikte beskermende oorklere en handskoene
- Was met seep en water na gebruik
- Voorkom oorwaai van spuitnewel na ander gewasse, weiding, riviere, damme of enige ander gebied wat nie onder behandeling is nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.
- Moenie spuit waar wortels van gewenste plante die middel kan opneem nie.
- Geen vermenging of volmaak van spuittenk moet plaasvind nader as 15m vanaf boorgate, spruite, riviere en damme nie.
- Geen toediening moet plaasvind nader as 60m vanaf damme nie.
- Geen terugvloei na boorgate of damme moet plaasvind wanneer **ATRANEX 90 WG** deur die besproeiingsstelsel toegedien word nie.

WEERSTANDSWAARSKUWING

ATRANEX 90 WG is 'n groepkode C1 onkruidodder. Enige populasie van 'n spesifieke onkruid populasie kan individue insluit wat 'n natuurlike weerstand teen **ATRANEX 90 WG** of enige ander groepkode C1 onkruidodder het. Indien hierdie onkruidodders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **ATRANEX 90 WG** of enige ander groepkode C1 onkruidodder beheer word nie. Om weerstand teen onkruidodders te vertraag:

1. Vermyn die eksklusiewe herhaaldelike gebruik van onkruidodders met dieselfde groepkode. Wissel af met of gebruik tenkengsels van produkte in verskillende onkruidodder groepkodes.

2. Raadpleeg toepaslike individuele produketikette wanneer daar afgewissel word, of tenkmengsels gemaak word, met produkte in ander onkruidododer groepkodes.
3. Integreer ander beheermaatreëls (chemies, verbouing en biologies) in onkruidododer programme.

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

SOMMIGE ONKRUIDE WAT NORMAALWEG DEUR ATRANEX 90 WG BEHEER WORD

BREëBLAAR ONKRUIDE	
<i>Acanthospermum australe</i>	Agtsadige kruipsterklits
<i>Acanthospermum glabratum</i>	Vyfsadige kruipsterklits
<i>Acanthospermum hispidum</i>	Regopsterklits
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Amaranthus spinosus</i>	Doring misbredie
<i>Amaranthus thunbergii</i>	Roomisbredie
<i>Bidens bipinnata</i>	Spaanse knapsekêrel
<i>Bidens formosa</i>	Kosmos
<i>Bidens pilosa</i>	Gewone knapsekêrel
<i>Chenopodium album</i>	Withondebossie
<i>Chenopodium carinatum</i>	Groen hondebosse
<i>Cleome monophylla</i>	Rusperbossie
<i>Cleome rubella</i>	Mooinooientjie
<i>Commelina benghalensis</i>	Bengaalse wandelende jood
<i>Crotalaria sphaerocarpa</i>	Wildelusern
<i>Datura ferox</i>	Groot stinkblaar
<i>Datura stramonium</i>	Gewone stinkblaar
Fumaria muralis	Duiwekerwel
<i>Galinsoga parviflora</i>	Knopkruid
<i>Gisekia pharnaceoides</i>	Gisekia
<i>Hibiscus trionum</i>	Terblansbossie
<i>Hibiscus cannabinus</i>	Wildestokroos
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Physalis angulata</i>	Wilde appelliefie
Polygonum aviculare	Voëlduisendknoop
<i>Portulaca oleracea</i>	Gewone poslein
<i>Richardia brasiliensis</i>	Meksikaanse richardia
<i>Schkuhria pinnata</i>	Klein kakiebos
<i>Tagetes minuta</i>	Lang kakiebos (beperkte laatseisoen beheer)
<i>Vigna vexillata</i>	Wilde akkerboontjie
GRASSE	
<i>Chloris virgata</i>	Witpluim chloris
<i>Eleusine coracana</i>	Jongosgras
Lolium spp.	Raaigras
<i>Panicum schinzii</i>	Vleibuffelsgras
<i>Setaria pallide-fusca</i>	Tuinsetaria
<i>Setaria verticillata</i>	Klitssetaria

Indien droë weertoestande voortduur vir 'n tydperk van sewe tot veertien dae na toediening, mag die volgende

onkruidsoorte nie na wense beheer word nie, veral op swaarder grond.

Bidens formosa
Commelina benghalensis
Datura spp
Eleusine coracana
Panicum schinzii
Chloris virgata
Tagetes minuta

NOTA: Weerstandbiedende rasse van hierdie onkruid mag dalk nie bevredigend deur **ATRANEX 90 WG** beheer word nie.

ATRANEX 90 WG gee wisselvallige beheer van die volgende onkruidsoort:

Tribulus terrestris - Gewone dubbeljie

NOTA: Hierdie produk beheer hoofsaaklik sekere eenjarige breëblaaronkruid. Ander eenjarige breëblaaronkruid wat nie tydens die ontwikkelingsproewe met die middel voorgekom het nie, kan ook moontlik in mindere of meerdere mate beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid ten opsigte van ongelyste onkruid nie.

Onder abnormale nat toestande mag die laatseisoen beheer van onkruid nie na wense wees nie. Om 'n breër spektrum van eenjarige grasse te beheer kan **ATRANEX 90 WG** in 'n tenkmengsel of as 'n afsonderlike toediening in kombinasie met 'n geregistreerde grasdoder gebruik word. **ATRANEX 90 WG** is mengbaar in 'n spuitmengsel met al die huidige geregistreerde grasdoders. Vir die toedieningshoeveelhede van onderskeie grasdoders, asook vir die betrokke **ATRANEX 90 WG** toedieningshoeveelhede wanneer mengsels gespuit word, moet etikette van die produkte geraadpleeg word. Die gebruiksaanwysings op die betrokke etikette moet noukeurig gevolg word.

LET WEL: Waar **ATRANEX 90 WG** in kombinasie met EPTC in mielies gebruik word, moet ten minste twee-derdes van die aanbevole toedieningshoeveelheid **ATRANEX 90 WG** volgens grondtipe gebruik word.

ATRANEX 90 WG is verenigbaar met geregistreerde benattingsmiddels, vooropkom grasdoders, SIMANEX 90 WG, TYLLANEX 80 WG, BROMOTRIL P 500 SC, 2,4-D Amien, MCPA, meeste insek- en swamdoders. Wanneer **ATRANEX 90 WG** met enige van bo-staande produkte gemeng word, moet alle inligting op die betrokke etiket geraadpleeg word en die gebruiksaanwysings gevolg word.

GEBRUIKSBEPERKINGS

- A. Om skade aan opvolggewasse te voorkom, moet die volgende wagperiodes toegepas word.
- | | |
|---|-----------|
| a. Mielies en suikerriet | Geen |
| b. Graansorghum | 12 maande |
| c. Sonneblom, kleingraan, droë bone, grondbone, sojabone, voersorghum en aartappels | 18 maande |
| d. Alle ander gewasse ('n toetsaanplanting word in egter aanbeveel) | 24 maande |
| e. Waar die totale hoeveelheid ATRANEX 90 WG per seisoen toegedien nie 1.1kg / ha in die seisoen | |

oorskry nie (1.0kg atrasiën aktief), kan die wagperiodes soos genoem onder b en c verminder word na 9 maande, behalwe in die geval van sanderige grond in die Noordwes provinsie en Noord Wes Vrystaat waar die kleipersentasie laer 0 - 10% is.

- f. Waar die totale hoeveelheid Atrasiën aktief wel 1,0kg / ha oorskry, maar nie meer as die aanbevole dosis Atrasiën (aktief) volgens die grondtipe oorskry nie, geld gebruiksbepelings a - d.

NOTA: Bogenoemde wagperiodes geld slegs indien die korrekte hoeveelheid **ATRANEX 90 WG** volgens grondsoort toegedien was en normale of bogemiddelde reënval gedurende die seisoen waarin **ATRANEX 90 WG** toegedien is en daarna voorgekom het.

- B. Waar **ATRANEX 90 WG** toegedien is aan gronde wat uitsit by natwording en kraak of krummel tydens uitdroging, soos byvoorbeeld turfgronde, mag dit wees dat **ATRANEX 90 WG** langer in die grond aktief bly as wat bogenoemde wagperiodes aandui. Gevolglik moet **ATRANEX 90 WG** nie op sulke gronde toegedien word indien dit benodig word om Atrasiën gevoelige gewasse in die voorsienbare toekomst daarop te plant nie. Op hierdie gronde mag onkruid ook nie bevredigend deur 'n vooropkom-toediening van **ATRANEX 90 WG** beheer word nie.
- C. Moenie **ATRANEX 90 WG** toedien aan ingeteelde ouerplante van mielie- en graansorghumbasters, proef of nuut-vrygestelde mielie- of graansorghum kultivars sonder om eers die vervaardiger of saadverskaffer te raadpleeg nie.
- D. Onder koue of baie nat en/of koue toestande kan **ATRANEX 90 WG** graansorghun beskadig.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

VERMENGING

Maak die spuittenk halfvol met water. Meng die benodigde hoeveelheid **ATRANEX 90 WG** apart in water en gooi in die spuittenk. Vul die tenk verder met water. Hou die middel in die spuittenk voortdurend in suspensie deur roering. Aan die einde van die dag moet die spuittenk deeglik met water uitgespoel word.

TOEDIENING

1. Grondtoediening

ATRANEX 90 WG kan deur middel van enige geskikte medium of hoë volume spuitapparaat toegedien word, mits die apparaat toegerus is met 'n doeltreffende roermeganisme, in staat is om die spuitmengsel eweredig oor die teikenarea te versprei en korrek gekalibreer is. Die gebruik van platwaaierspuitpunte word aanbeveel.

VOOROPKOM: Om die volle **ATRANEX 90 WG** onkruidspektrum te beheer moet **ATRANEX 90 WG** toegedien word tydens of onmiddelik nadat in varsbewerkte grond geplant is op 'n onkruidvrye gelyke, fyn, ferm saadbed sonder oormatige plantreste. Dit is verkieslik dat reën binne 7 tot 10 dae na toediening volg sodat **ATRANEX 90 WG** in die bogrond ingewas kan word, waar dit deur die wortels van ontkiemende onkruid opgeneem kan word. Indien droë weerstoestande vir 'n periode van 7 tot 10 dae na toediening voortduur, mag onkruid ontkiem en ontwikkel. Waar dit gebeur, word aanbeveel dat 'n ligte bewerking uitgevoer word om die onkruid te vernietig en die onkruiddoder met die boonste grondlaag te vermeng.

NA-OPKOM: Waar toediening na opkom van die gewas en onkruid geskied, moet breëblaaronkruid nie

groter as die saailingstadium (tweeblaarstadium) wees nie en grasse moet nog nie opgekom het nie. Vir algehele toediening gebruik 200 tot 400 liter water per hektaar. Gebruik dienooreenkomstig minder water in geval van strookbehandeling

2. Lugtoediening

ATRANEX 90 WG kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (Aerial Application of Agricultural Pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- Volume: 'n Minimum spuitmengsel volume van 30 liter per ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- Druppel bedekking: 30 tot 40 druppels per cm² moet op die teikenarea herwin word.
- Druppelgrootte: 'n Druppelspektrum met 'n VMD van 350 – 450 mikron word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoëdrywing en verdampingspotensiaal) tot 'n minimum.
- Vlieg hoogte: Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik nie, uitklim of draai nie.
- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binnste 60 tot 75% van die vlerkspan om te verhoed dat druppels binne-in die vlerkpuntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihieter, moet nie 8°C oorskry nie.
- Stop bespuiting indien die windspoed 15km/uur oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestands (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80% en meer) mag tot volgende probleme aanleiding gee:
 - a) verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken)
 - b) skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

TOEDIENINGSHOEVEELHEDE**A. MIELIES** (Voor- en vroeg na-opkom)

% KLEI	ATRANEX 90 WG (kg/ha)	OPMERKINGS
0 – 10	1.4kg	Hierdie toedieningshoeveelhede geld vir algehele toediening van die onkruidoder. Vir strookbehandeling moet dien-ooreenkomstig minder van die onkruidoder per hektaar toegedien word.
11 – 20	1.8kg	
21 – 30	2.2kg	
31 – 40	2.6kg	
41 – 55	2.8kg	

B. GRAANSORGHUM

NOTA: Vooropkomtoediening word slegs aanbeveel op gronde wat meer as 35% klei bevat. Na opkomtoediening word slegs aanbeveel op gronde wat meer as 25% klei bevat indien graansorghum tydens toediening reeds vyf of meer blare het. Breërblaaronkruid moet nie verder as die saailingstadium (2-blaar stadium) ontwikkel het nie en grasse en kakiebos moet nog nie opgekom het nie.

% KLEI	ATRANEX 90 WG (kg/ha)	OPMERKINGS
0 – 25	-	Nie aanbeveel nie.
26 – 30	2.2kg	Slegs na-opkom.
31 – 35	2.6kg	Slegs na-opkom.
36 – 40	2.6kg	Voor- en na-opkom.
41 – 55	2.8kg	Voor- en na-opkom Grasse wat tydens toediening reeds op is, sal nie beheer word nie.

NOTA: Moenie toedien op lande wat moontlik kan versuip nie. Moenie op grond met 'n hoë logingspotensiaal gebruik nie en moenie direk na toediening besproei nie. Indien koue en/of baie nat toestande intree nadat **ATRANEX 90 WG** toegedien is, mag graansorghum beskadig word, ongeag die grondsoort. Moenie die aanbevole toedieningshoeveelhede oorskry nie.

BELANGRIK VIR MIELIES EN GRAANSORGHUM: Maak seker dat voldoende kunsmis tydens plant in 'n strook naby die saad geplaas word om die groei van saailinge te bevorder.

C. MIELIES EN GRAANSORGHUM (Na-opkom toediening van **ATRANEX 90 WG** plus 2,4-D Amien)

GEWAS	% KLEI	ATRANEX 90 WG (kg/ha)	OPMERKINGS
MIELIES	ALLE	1.1kg + 0.75l 480g/l 2,4-D Amien	Dien toe op aktiefgroeiende breëblaar onkruid nie groter as 100mm. Indien die gewas hoër as 400mm is, word gerigte bespuiting aanbeveel om sodoende beter benutting van die onkruid te verkry.
GRAAN SORGHUM	MEER AS 15	1.1kg + 0.75l 480g/l 2,4-D Amien	Moenie onder koue en/of nat toestande toedien nie, aangesien die gewas onder sulke toestande moontlik benadeel kan word.

D. MIELIES EN SORGHUM (Ou saadbed / Minimum of Stoppel bewerkings)

Waar minimum- of stoppelbewerking toegepas word, mag onkruid ten tye van plant alreeds opgekom het. Indien mielies of graansorghum onder sulke toestande, of in 'n saadbed geplant word, waar grasse alreeds opgekom het en die breëblaaronkruid reeds verder as die saailingstadium ontwikkel het, word aanbeveel dat Paraquat by die **ATRANEX 90 WG** gevoeg word teen 'n hoeveelheid soos aanbeveel deur die vervaardiger. Die Paraquat sal die bestaande onkruid vernietig en 'n vooropkومتوestand skep wat **ATRANEX 90 WG** sal toelaat om doeltreffend te werk.

LET WEL:

1. Waar Paraquat bygevoeg word, moet toediening plaasvind voordat die gewas opgekom het, aangesien Paraquat die gewas, nadat dit opgekom het, sal beskadig.
2. By minimum- of stoppelbewerkings kan die digtheid van die stoppels en humus die werking van **ATRANEX 90 WG** benadeel. Raadpleeg dus 'n verteenwoordiger van die verspreider of vervaardiger.

E. SUIKERRIET

Dien **ATRANEX 90 WG** as 'n algehele vooropkombespuiting toe op ligte tot medium gronde vir die beheer van die breëblaaronkruid in suikerriet. Doen bespuiting onmiddellik voor besproeiing of net voordat reën verwag word om goeie resultate te verseker. Vir die beheer van eenjarige grasse word 'n tenkmengsel van **ATRANEX 90 WG** met 'n geregistreerde grasdoder soos SULTAN 500 SC (Reg. No. L6892) aanbeveel. Raadpleeg die etiket van die betrokke grasdoders vir toedieningshoeveelhede.

GRONDSOORT	% KLEI	ATRANEX 90 WG (kg/ha)
Ligte tot medium	0 - 35	1.1kg

F. PYNAPPELS

% KLEI	ATRANEX 90 WG (kg/ha)	OPMERKINGS
0 – 20	2.1kg + 2.3kg Ametrex 80 WG	Vroeë na-opkom behandeling aanbeveel in gevalle waar 'n gemengde spektrum van grasse en breëblaar-onkruid voorkom en waar laat ontkiemende onkruid 'n probleem is.
21 – 35	2.9kg + 3.25kg Ametrex 80 WG	
Bo 35	Nie aanbeveel	

G. KANOLA (Voor- of na-opkom)

% KLEI	ATRANEX 90 WG (kg/ha)	OPMERKINGS
Alle grondsoorte	1.1 kg	<p>Vir die beheer van onkruid in Triasiën weerstandbiedende kanola kultivars kan ATRANEX 90 WG vooropkom direk na plant of as 'n na-opkom bespuiting toegedien word. Tydens 'n na-opkom toediening moet kanola in die drie-tot vierblaar stadium wees terwyl die onkruid nie verder as die saailingstadium moet wees nie. Die beheer van <i>Lolium spp</i> sal wisselvallig wees met 'n na-opkom toediening.</p> <p>BELANGRIK: Moet nie die toedieningshoeveelheid van 1.1 kg ATRANEX 90 WG oorskry nie.</p> <p>GEbruik ALLEENLIK OP TRIASIEN WEERSTANDBIEDENDE KANOLA KULTIVARS</p>