MISTRAL®700 WG

Reg No L 8457 Act / Wet No. 36 /1947

A water dispersable granule herbicide for the control of annual broad leaf weeds and grasses in crops as listed	‘n Waterdispergeerbare korrelonkruiddoder vir die beheer van eenjarige grasse en breëblare in gewasse soos hieronder aangedui

HRAC GROUP CODE HERBICIDE	**C 1**	**HRAC GROEPKODE ONKRUIDDODER**

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Metribuzin (triazine) 700 g / kg Metribusien (triasien)

NET MASS / NETTO MASSA

…………… kg

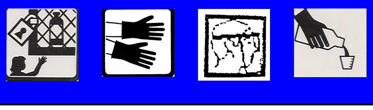
REGISTRATION HOLDER / REGISTRASIEHOUER
MAKHTESHIM-AGAN SA (PTY) LTD
Co. Reg. No. 1992/001741/07
21 Viben Street
BRACKENFELL
7561
Tel (021) 982 1460
Fax (021) 982 5810

Batch number ……………. Lotnommer

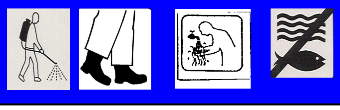
Date of Manufacture ………………. Datum van Vervaardiging

MISTRAL® 700 WG is the registered trademark of Makhteshim-Agan Israel.
MISTRAL® 700 WG die geregistreerde handelsmerk van Makhteshim-Agan, Israel.

UN No.: 3077



CAUTION
VERSIGTIG



WARNINGS:

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

Lucerne..25 days
Barley ....120 days

- Harmful if swallowed
- Toxic to aquatic organisms
- Store in a cool dry place away from food, feed, fertilizer and other agricultural products
- Keep out of reach of children, uninformed persons and animals
- **Aerial application:** Notify all the 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 adjacent areas, water or any other area that is not under treatment.

Although this remedy has been extensively tested under a variety of conditions the registration holder does not warrant that it will be effective under all conditions. The activity and efficacy of the product may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds against the remedy, 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 the 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:

- Do not inhale fumes or spray mist
- Wear rubber gloves and face shield when handling the concentrate
- Avoid skin and eye contact. Wash with soap and water after accidental skin contact. Flush out eyes with clean running water after accidental eye contact. Wash contaminated clothing with water and soap
- Do not eat, drink or smoke while mixing or applying or before hands and face are washed
- Prevent contamination of food, feed, drinking water and eating utensils
- Avoid drift of spray to other crops, grazing, rivers, dams or any other area that is not under treatment
- Destroy the empty container and do not re-use for any other purpose
- Clean the applicator after use. Dispose of the rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.

RESISTANCE WARNING:

MISTRAL® 700 WG is classified as a Group Code C 1 Herbicide. Any weed population may contain individuals which are naturally resistant to **MISTRAL® 700 WG** and other Group Code C 1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used continuously and exclusively. These resistant weeds may not be controlled by **MISTRAL® 700 WG** or any Group Code C 1 herbicide.

To delay resistance the following can be done:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered products from different herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes

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

USE RESTRICTIONS:

General:

- Do not plant any crop, except potatoes and sugar cane, within a period of six months after a **MISTRAL® 700 WG** application.
- Crops such as asparagus, beetroot, carrots, maize, soya beans and turnips may be planted 6 months after **MISTRAL® 700 WG** has been applied.
- A period of 12 months should lapse between application of **MISTRAL® 700 WG** and planting of crops such as brassicas, cucurbits, onions, peas, beans, wheat, tobacco, strawberries etc.
- The above mentioned waiting periods can increase if **MISTRAL® 700 WG** is applied to brackish soils or soils with a pH more than 7.
- Prior to planting and application of a subsequent crop, a deep and thorough ploughing operation (not less than 20 cm deep) should take place and a firm, fine, even seedbed without excessive plant rests should be prepared.
- Do not use **MISTRAL® 700 WG** on poorly drained soils or soils with a compaction layer as these conditions might cause waterlogging which can lead to crop injury.

Potatoes:

- Do not use **MISTRAL® 700 WG** in winter grown potatoes or in areas where untimely frost might occur. Cold spells after a **MISTRAL® 700 WG** application may cause crop injury and stunting of potato plants. There may also be differences in susceptibility to phytotoxicity between the various varieties. Under unfavourable growing conditions, the varieties Astrid, BP 1, Earliest of All, Koos Smit and Late Harvest will be more susceptible to damage.
- Good quality potato seed without any disease should be used. Plants from seed of 60 g and smaller are more prone to crop damage.
- Too early ridging or disturbance of soil after application may stimulate germination of weeds as well as causing a shift of the treated soil on the plant row resulting in a higher concentration of **MISTRAL® 700 WG** on the row which can lead to phytotoxicity. It is recommended that a period of six weeks should lapse between application of **MISTRAL® 700 WG** and ridging of potatoes or that application should take place after ridging and before emergence.
- **Do not use MISTRAL® 700 WG in potatoes in the "Sandveld" of the Western Cape (Aurora, Clanwilliam, Darling, Eendekuil, Elandsbaai, Het Kruis, Hopefield, Lambertsbaai, Leipoldtville, Paleisheuwel, Piketberg, Redelinghuys, Velddrif, Vredenburg, Vredendal, etc.).**

Lucerne:

- **MISTRAL® 700 WG** should only be applied to established lucerne, i.e. at least one year old.
- Apply after cutting or grazing before the lucerne starts to grow actively. Some chlorosis might appear on the lucerne but it will disappear within a short while and have no effect on the yield.
- Do not apply **MISTRAL® 700 WG** in lucerne grown on alkaline soils (pH > 7), soil with mineral deficiencies or where waterlogging can occur.
- Use **MISTRAL® 700 WG** only on the cultivars CUF 101, Grananda and SA. Standard.

Barley:

- Do not apply **MISTRAL® 700 WG** in combination with any of the post-emergence grass herbicides or within 7 days before or after application thereof.
- Do not apply **MISTRAL® 700 WG** in combination with any Bromoxynil formulation in barley.
- Control of *Emex australis* might be variable if it exceeds the two-leaf stage at application.
- Slight chlorosis of the crop might appear after application, but this symptom will disappear and will not have any effect on the yield

Tomatoes:

- Apply **MISTRAL® 700 WG** as a directed spray in transplanted tomatoes at least 14 days after transplantation. Do not spray over the tomato plants.
- Cold, wet conditions after application might cause leaf damage and stunting.

DIRECTIONS FOR USE:
Use only as directed.

Compatibility:

MISTRAL® 700 WG is compatible with DIUREX 800 SC, DIUREX 800 WG, AMETREX 500 SC, AMETREX 800 WG, PARAQUAT 200 SL and ALANEX 480 CS. The quality of the dilution water can vary from farm to farm and from year to year therefore a physical compatibility test should be carried out prior to mixing products. The restrictions on the labels of the products with which **MISTRAL® 700 WG** is mixed should be adhered to.

Mixing:

Half fill spray tank with clean water. Pre-mix the required volume **MISTRAL® 700 WG** with a small amount of water until all the granules are dissolved. Add to the spray or mixing tank while agitating the spray solution. Fill the tank to capacity while agitation is continued. If **MISTRAL® 700 WG** is mixed with another chemical the label instructions should be followed.

It is important that the spray mixture is kept in suspension during the mixing and application processes by thorough and continuous agitation.

APPLICATION:

Ground application:

MISTRAL® 700 WG can be applied by any suitable medium or high volume spray apparatus provided it is equipped with an efficient agitation system, it is able to distribute the spray solution evenly over the target area and it is calibrated correctly. It is recommended that **MISTRAL® 700 WG** is applied in 200 – 300 ℓ water per ha and that suitable flat fan nozzles are used.

Application can be made pre-emergence or early post-emergence to weeds not taller than 3 – 5 cm. Rain or irrigation of 15 – 20 mm at 5 – 10 days after application is necessary to leach the **MISTRAL® 700 WG** into the soil in order to obtain the full benefit of the residual action.

Aerial application:

Aerial application of **MISTRAL® 700 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 minimum spray volume of 30 ℓ per ha is recommended. As the product has not been evaluated at a reduced volume rate the registration holder can not 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 cm^2 must be recovered at the target area
- **Droplet size**: A droplet with a VMD of 350 – 450 micron 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 3 – 4 metres above the target. Do not spray when the aircraft dives, banks or is in a climb.
- 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 Relative Span.
- Position all atomisers within the inner 60 – 75 % of the wing span to prevent droplets from entering the **wingtip vortices**
- The differences 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
  c) 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:

CROP	**CLAY %**	**DOSAGE RATE / HA**	**REMARKS**
BARLEY	-	140 g	Apply as an early post-emergence spray in the four-leaf stage of the crop (growth stage 14 of Zadoks scale) as a ground or aerial application.
LUCERNE	0 – 10 % 11 – 20 % 21 – 35 %	750 g 1,0 kg 1,2 – 1,5 kg	Apply only to dormant established lucerne which is at least one year old, prior to weed emergence. Use the higher dosage rate on soils with a higher clay percentage. Please refer to the section about Lucerne under "USE RESTRICTIONS".
POTATOES		**Ground application:**	Apply immediately after planting and before

CROP	CLAY %	DOSAGE RATE / HA	REMARKS
	0 – 10 % 11 – 20 % 21 – 35 %	750 g 1,0 kg 1,2 – 1,5 kg	emergence of potatoes. Apply the higher rate where the soil clay percentage is higher.
		MISTRAL® 700 WG + ALANEX 384 EC Tankmix	For improved control of annual grasses and the suppression of Yellow nutgrass (*Cyperus esculentus*), ALANEX 384 EC can be used in a tank mix with **MISTRAL® 700 WG**.
	0 – 10 %	**MISTRAL® 700 WG** 500 g + ALANEX 384 EC 5,0 ℓ	
	11 – 20 %	**MISTRAL® 700 WG** 750 g + ALANEX 384 EC 5,0 ℓ	
	21 – 35 %	**MISTRAL® 700 WG** 1,2 – 1,5 kg + ALANEX 384 EC 5,0 ℓ	
	0 – 10 % 11 – 20 % 21 – 35 %	**Aerial application:** 1,0 kg 1,2 kg 1,2 – 1,5 kg	Apply in a least 30 ℓ but preferably in 40 ℓ of water per ha. Please refer to the section under aerial application. **NOTE:** Please refer to Potatoes under USE RESTRICTIONS.
SUGARCANE Plant and ratoon cane	6 – 20 %	**Pre-emergence:** 2,5 – 3,0 kg or 1,4 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC	Do not apply to soils with less than 6 % clay. Apply evenly over moist soil after planting, or harvest before weed emergence. Use the higher rate for suppression of *Cyperus esculentus* (Yellow nutgrass) and longer residual control of broadleaf weeds on soils with higher clay percentages.
	21 – 35 %	3,0 kg or 1,7 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC	For the control of grasses and especially *Panicum maximum*, application should be done pre-emergence.
		Early post-emergence:	Do not apply to soils with less than 6 % clay.

CROP	CLAY %	DOSAGE RATE / HA	REMARKS
	6 – 20 %	2,5 – 3,0 kg or 1,4 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC + 3,0 – 4,0 ℓ AMETREX 500 SC	Grass weeds (especially *Panicum maximum*) should not be developed beyond the 2 – 3 leaf stage whilst broad leaf weeds should not be developed further than the 4 – 6 leaf stage at application. Where the above-mentioned weeds have developed past the recommended stage, it is advised that Paraquat 200 SL is added to the spray mixture at the recommended rate.
	21 – 35 %	3,0 kg or 1,7 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC + 3,0 – 4,0 ℓ AMETREX 500 SC / AMETREX 800 WG 1,9 kg	Use the higher rate on heavier soils or where a longer residual is desired or where suppression of *Cyperus esculentus* is needed.
	6 – 35 %	**Aerial application:** **Early post-emergence:** 2,5 kg plus 2,5 kg / 2,0 ℓ DIUREX 800 WG / DIUREX 800 SC	Apply evenly in at least 30 ℓ, but preferably in 40 ℓ water per ha. Please refer to the section under aerial application.
TOMATOES Transplanted	0 – 10 % 11 – 20 % 21 – 35 %	750 g 1,0 kg 1,2 – 1,5 kg	Apply to transplanted tomatoes at least 14 days after transplantation and after the transplant has taken root. Do not apply over the tomato plants, but use a directed spray between the tomato rows. Grasses should preferably be sprayed not later than at emergence and broadleaf weeds should not have developed further than the 4-leaf stage. Use the higher rate at the higher percentages.

ALANEX 384 EC (Reg. No. L4725) is the registered trade mark of Makhteshim-Agan Industries, Israel
AMETREX 800 WG (Reg. No. L8113) is the registered trade mark of Makhteshim-Agan Industries, Israel
AMETREX 500 SC (Reg. No. L4656) is the registered trade mark of Makhteshim-Agan Industries, Israel
DIUREX 800 WG (Reg. No. L8139) is the registered trade mark of Makhteshim-Agan Industries, Israel

DIUREX 800 SC (Reg. No. L5334) is the registered trade mark of Makhteshim-Agan Industries, Israel

WEED SPECTRUM:

The following weeds are normally controlled by **MISTRAL® 700 WG**:

BROADLEAF WEEDS:

Acalypha eckloni	
Acanthospernum hispidum	Upright starbur
Ageratum conyzoides	Blue weed
Amaranthus deflexus	Pigweed
Amaranthus hybridus	Common pigweed
Amaranthus spinosus	Thorny pigweed
Amaranthus thunbergii	Red pigweed
Anagallis arvensis	Pimpernel
Anthemis cotula	Stink mayweed
Argemone mexicana	Yellow flowered Mexican poppy
Bidens pilosa	Common blackjack
Capsella bursa-pastoris	Shepard's purse
Cenia turbinata	Goose daisy
Chenopodium album	White goosefoot
Chenopodium carinatum	Green goosefoot
Chenopodium murale	Nettle-leaved goosefoot
Cirsium vulgare	Scotch thistle
Conyza canadensis	Horseweed fleabane
Datura ferox	Large thorn apple
Datura stramonium	Thorn apple
Emex australis	Spiny emex
Fumaria muralis	Fumitory
Galinsoga parviflora	Gallant soldier
Hibiscus trionum	Bladderweed
Leucas martinieciensis	Bobbin weed
Nicandra physaloides	Apple of peru
Physalis angulata	Wild gooseberry
Polygonum aviculare	Prostrate knotweed
Portulaca oleracea	Purslane
Raphanus raphanistrum	Wild radish
Richardia brasiliensis	Tropical richardia
Schukuhria pinnata	Dwarf marigold
Sigesbeckia orientalis	St Paul's wort
Solanum retroxflexum	Black nightshade
Spergula arvenis	Corn spurry
Stellaria media	Chickweed
Tagetes minuta	Khaki weed
Tribulus terrestris	Dubbeltjie
Urtica urens	Small stinging nettle
Verbena bonariensis	Purple top
Xanthium spinosum	Spiny cocklebur
Xanthium strumarium	Cocklebur

GRASSES:

Chloris virgata	Feathertop chloris
Digitaria sanguinalis	Crab fingergrass
Eleusine coracana	African goosegrass
** Panicum maximum*	Common buffalo grass
Panicum schinzii	Sweet buffalo grass
Setaria verticillata	Sticky bristle grass
Tragus racemosus	Large carrot-seed grass
Urochloa panicoides	Garden urochloa
** Cyperus esculentus*	Yellow nutgrass

* At least 3,0 kg **MISTRAL® 700 WG** per ha should be used to control these weeds.

VARIABLE CONTROL:

Pre-emergence control of the following weeds may be variable:

Cyperus esculentus	Yellow nutsedge
Chenopodium album	White goosefoot

NOTE:

MISTRAL® 700 WG should be applied to a fine, firm, even and well prepared seedbed without excessive plant rests. Rain or irrigation of at least 10 – 15 mm is needed for pre-emergence applications to leach the **MISTRAL® 700 WG** into the weed germination zones.

Excessive rain after application of **MISTRAL® 700 WG** might cause excessive leaching, especially on soils with a low clay content, which in turn might affect the period of control of shallow germinating weeds.

WAARSKUWINGS:

Onthoudingsperiodes (minimum aantal dae tussen laaste toediening en oes of voer):

Lusern .... 25 dae
Gars .... 120 dae

- Skadelik indien ingesluk.
- Giftig vir waterorganismes.
- Bewaar in 'n koel, droë plek weg van voedsel, voer, kunsmisstowwe en ander landbouprodukte
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Lugtoediening:** Stel alle inwoners in die onmiddellike gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie spuit of toelaat dat spuitmis wegdrywing aanliggende gebiedem water of enige ander gebied wat nie onder behandeling is nie, besoedel.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid van toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond, klimaats- en bergingstoestande, kwaliteit van die verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van versuim van 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 die geval van enige onsekerheid.

VOORSORGMAATREELS:

- Moet nie dampe of spuitmis inasem nie
- Dra rubberhandskoene en 'n gesigmasker as konsentraat hanteer word
- Vermy vel- en oogkontak. Was met water en seep na toevallige velkontak. Spoel oë met skoon lopende water uit na toevallige oogkontak. Was besoedelde klere met water en seep.
- Moet nie eet, drink of rook voordat hande en gesig gewas is nie
- Verhoed boesoedeling van voedsel, voer, drinkwater en eetgerei
- Verhoed dat die sproeinewel wegdryf na ander gewasse, weiding, riviere of damme of enige ander gebied wat nie onder behandeling is nie.
- Vernietig lee houer en moet dit vir geen ander doel hergebruik nie
- Maak die toediener deeglik skoon na gebruik . Gooi die waswater waar dit nie gewasse, weiding, damme, riviere of boorgate sal besoedel nie.

WEERSTANDSWAARSKUWING:

MISTRAL®700 WG word as 'n groepkode C 1 onkruiddoder geklassifiseer. Enige onkruidpopulasie mag individue bevat wat 'n natuurlike weerstand teen **MISTRAL®700 WG** en ander groepkode C 1 onkruiddoders het. Die weerstandbiedende individue kan uiteindelik die onkruidpopulasie domineer as hierdie onkruiddoders aanhoudend en uitsluitlik gebruik word. Hierdie weerstandbiedende onkruide mag dalk nie deur **MISTRAL®700 WG** of enige ander groepkode C 1 onkruiddoder beheer word nie.

Om die voorkoms van weerstand te vertraag kan die volgende gedoen word:

- Vermy die eksklusiewe aanhoudende gebruik van onkruiddoders in dieselfde groepkode. Wissel af, of gebruik in tenkmengsels met ander geregistreerde onkruiddoders in ander groepkodes
- Integreer met ander beheermetodes (chemise, bewerking, biologies) in onkruidbeheerprogramme

Vir meer spesifieke inligting rakende weerstandbestuur, skakel met die registrasiehouer van hierdie produk.

GEBRUIKSBEPERKINGS:

Algemeen:

- Alleenlik aartappels en suikerriet kan binne ‘n periode van 6 maande na toedineing van **MISTRAL®700 WG** geplant word.
- ‘n Periode van minstens ses maande moet verloophet na toediening van **MISTRAL®700 WG** voordat gewasse soos aspersies, beet, wortels, mielies, sojabone en rape geplant kan word.
- ‘n Periode van minstens 12 maande moet verloop na toediening van **MISTRAL®700 WG** voordat gewasse soos rankgewasse koolgewasse, uie, ertjies, bone, koring, blaarslaai, tabak ens aangeplant kan word.
- Bogenoemde wagperiodes kan verleng indien **MISTRAL®700 WG** toegedien word aan brak gronde of gronde met ‘n pH van meer as 7.
- ‘n Deeglike diep ploegbewerking (nie minder as 20 cm) en voorbereiding van fyn, ferm eweredige saadbed sonder oormatige plantreste moet die plantproses en toediening voorafgaan.
- Moet nie **MISTRAL®700 WG** op swak gedreineerde gronde met ‘n kompaksielaag gebruik nie aangesien dit tot versuiptoestande kan lei wat gewasskade kan veroorsaak.

Aartappels:

- Moet nie **MISTRAL®700 WG** op aartappels wat in die winter aangeplant word of waar ontydige ryp mag voorkom, gebruik nie. Koue periodes na die toediening van **MISTRAL®700 WG** mag gewasskade of verdwerging van aartappels tot gevolg hê. Daar mag verskille ten opsigte van vatbaarheid vir fitotoksiteit tussen variëteite bestaan. Onder ongunstige groeitoestande is Astrid, BP 1, Earliest of All, Koos Smit en Late Harvest meer vatbaar vir skade as ander variëteite.
- Saad van ‘n hoë kwaliteit sonder enige siektes moet aangeplant word. Moere wat minder as 60 g weeg is ook meer geneig om plante voorte te bring wat meer geneig is tot skade.
- Te vroeë operding of versteuring van die grond na toediening kan herontkieming van onkruide stimuleer. Operding kan ook veroorsaak dat behandelde grond op die plantry gegooi word wat ‘n hoër konsentrasie op die ry tot gevolg het. Dit kan lei tot gewasskade. Dit word aasnbeveel dat **MISTRAL®700 WG** na operding en vooropkom van aartappels toegedien word of dat operding 6 weke na toediening eers plaasvind.
- **Moet nie MISTRAL®700 WG in aartappels in die “Sandveld”, Aurora, Clanwilliam, Darling, Eendekuil, Elandsbaai, Het Kruis, Hopefield, Lambertsbaai, Leipoldtville, Paleisheuwel, Piketberg, Redelinghuys, Velddrif, Vredenburg, Vredendal ens) in die Wes-Kaap gebruik nie.**

Lusern:

- **MISTRAL®700 WG** kan alleenlik in gevestigde lusern wat minstens een jaar oud is, gebruik word.
- Dien toe na sny of beweiding vor die lusern weer aktief begin groei. Daar mag chlorose op die lusern voorkom wat binne ‘n kort rukkie sal verdwyn. Dit het egter geen invloed op die oesopbrengs nie.

- Moet nie **MISTRAL®700 WG** toedien op alkalise gronde (pH >7), gronde met mineraaltekorte of waar versuiptoestande mag ontstaan.
- Gebruik **MISTRAL®700 WG** net op die cultivars CUF 101, Granandа en SA Standard.

Gars:

- Moet **MISTRAL®700 WG** nie in kombinasie of binne 7 dae voor of 7 dae na enige van die na-opkom grasdoders toedien nie.
- Moet nie **MISTRAL®700 WG** in kombinasie met Bromoksiniel formulasie in gars toedien nie.
- Beheer van *Emex australis* mag nie na wense wees as dit die 2-blaarstadium oorskry tydens toediening.
- ‘n Effense vergeling van die gars kan voorkom na toediening, maar dit sal vinnig verdwyn en het geen invloed op die oesopbrengs nie.

Tamaties:

- **MISTRAL®700 WG** kan alleenlik op uitgeplante tamaties as ‘n gerigte bespuiting toegedien word ten minste 14 dae na uitplant. Moet nie direk oor die tamatieplantjies toedien nie.
- Koue, nat toestande na toediening mag blaarbeskadiging en verdwerging van plante tot gevolg hê.

GEBRUIKSAANWYSINGS:
Gebruik slegs soos aangedui.

Verenigbaarheid:

MISTRAL®700 WG is verenigbaar met DIUREX 800 SC, DIUREX 800 WG, AMETREX 500 SC, AMETREX 800 WG, ALANEX 480 SC en PARAQUAT 200 SL. Die kwaliteit van verdunningswater kan van plaas tot plaas en van jaar tot jaar varieer. Dit word daarom aanbeveel dat ‘n mengbarheidstoets altyd gedoen word voordat produkte vermeng word. Die voorwaardes op die etikette van die produk waarmee **MISTRAL®700 WG** gemeng word, moet nagekom word.

Vermenging:

Maak die spuittenk halfvol met skoon water. Vermeng die benodigde hoeveelheid **MISTRAL®700 WG** met ‘n klein hoeveelheid water totdat al die korreltjies opgelos is. Voeg by die spuit of mengtenk terwyl geroer word. Vul die tenk met water terwyl die mengsel deeglik geroer word. Indien **MISTRAL®700 WG** met ‘n ander middel gemeng word, moet die aanwysings op die middel se etiket gevolg word.

Dit is belangrik dat die spuitmengsel in suspensie gehou word tydens vermenging en toediening deur voortdurend deeglik te roer.

TOEDIENING:

Grondtoediening:

MISTRAL®700 WG kan deur middel van enige geskikte medium of hoëvolume spuitapparaat toegedien word mits dit toegerus is met ‘n doeltreffende roermeganisme, dit in staat is om die spuitmengsel eweredig oor die teikenoppervlak te versprei en dit korrek gekalibreer is. Dit word aanbeveel dat van geskikte platwaaierspuitpunte gebruik gemaak word en dat 200 – 300 ℓ water per ha gebruik word.

Toediening kan vooropkom of vroeg na-opkom op onkruide nie groter as 3 – 5 cm gemaak word. Reën of besproeiing van 10 – 15 mm is nodig binne 5 – 10 dae na toediening om die **MISTRAL®700 WG** in die grond te loog sodat die volle nawerking van die produk verkry kan word.

Lugtoediening:

MISTRAL®700 WG kan deur middel van lugtoediening aangewend word deur ‘n geregistreerde Lugtoedieningsoperateur wat gebruik maak van ‘n korrek gekalibreerde geregistreerde vliegtuig wat volgens die instruksie van SANS Kode 10118 (Lugtoedienging van Landbouchemiese Middels) bedryf word. Daar moet verseker word dat die spuitmengsel eweredig oor die teikengebied versprei word en dat die verlies aan spuitmateriaal tot ‘n minimum beperk word. Dit is dus noodsaaklik dat aan die volgende kriteria voldoen word:

- **Volume:** Dit word aanbeveel dat ‘n spuitvolume van minstens 30 ℓ / ha gebruik word. Omdat hierdie produk nie by laer volumes ge-evalueer is nie, kan die registrasiehouer nie verantwoordelik gehou word vir enige negatiewe effek, sou dit teen ‘n laer volume as die aanbevole volume toegedien word.
- **Druppelverspreiding:** 30 tot 40 druppels / cm^2 moet op die teikengebied herwin word
- **Druppelgrootte**: ‘n Druppelspektrum met ‘n VMD van 350 tot 400 mikron word aanbeveel. Die vorming van druppels met ‘n VMD kleiner as 150 mikron moet tot ‘n minimum beperk word
- **Vlieghoogte:** Handhaaf ‘n vlieghoogte van tussen 3 – 4 m vanaf die teikenoppervlak tot die spuitbalk. Moet nie spuit as die vliegtuig duik, klim of draai nie.
- Gebruik geskikte **atomiseringsapparaat** wat die geskikte druppelgrootte en verspreiding sal verskaf, maar wat ‘n minimum verlies aan produk tot gevolg sal hê. Die spuitstelsel moet ‘n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binneste 60 – 75 % van die vlerkspan om te verhoed dat druppels in die **vlerkpuntvortekse** beweeg.
- Die verskil in **temperatuur** tussen die nat- en droëboltermometer van ‘n swaai hygrometer, moet nie 8 °C oorskry nie.
- Staak die bespuiting indien die **windspoed** 15 km / h oorskry.
- Staak bespuiting onder toestande van **turbulente** onstabiele, droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur **inversietoestande** (deur bo of binne die inversielaag te spuit) en / of **hoë lugvogtoestande** (relatiewe humiditeit 80 % en meer) mag tot die volgende probleme aanleiding gee:
    a) Verlaagde effektiwiteit aangesien die druppels as ‘n wolk in die lug bly hang (onvoldoende bedekking van teiken)
    b) Skade aan nie-teikengewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit gaan 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 logbook saamgevat is vir toekomstige verwysing

TOEDIENINGSHOEVEELHEDE:

GEWAS	KLEI %	TOEDIENINGS-HOEVEELHEID / HA	OPMERKINGS
AARTAPPELS	 0 – 10 % 11 – 20 % 21 – 35 %	**Grond toediening:** 750 g 1,0 kg 1,2 – 1,5 kg	Dien onmiddellik toe na plant en voordat aarappels opkom. Dien die hoër dosis toe waar die kleipersentasie hoër is.
		MISTRAL® 700 WG + ALANEX 384 EC Tankmix	Vir verbeterde beheer van eenjarige grasse en die onderdrukking van geeluintjies *(Cyperus esculentus)* kan **MISTRAL® 700 WG** in 'n tenkmengsel met ALANEX 384 EC gebruik word.
	0 – 10 %	**MISTRAL® 700 WG** 500 g + ALANEX 384 EC 5,0 ℓ	
	11 – 20 %	**MISTRAL® 700 WG** 750 g + ALANEX 384 EC 5,0 ℓ	
	21 – 35 %	**MISTRAL® 700 WG** 1,2 – 1,5 kg + ALANEX 384 EC 5,0 ℓ	
	 0 – 10 % 11 – 20 % 21 – 35 %	**Lugtoediening:** 1,0 kg 1,2 kg 1,2 – 1,5 kg	Dien in minstens 30 ℓ maar verkieselik in 40 ℓ water / ha toe. Verwys na die afdeling onder Lugbestpuiting. **Belangrik:** Verwys na Aartappels onder die afdeling GEBRUIKSBEPERKINGS.
GARS	-	140 g	Dien vroeg na-opkom van die gars in die 4-blaar stadium toe (groeistadium 14 van die Zadoks-skaal) deur middel van grondbespuiting of lugbespuiting.
LUSERN	0 – 10 % 11 – 20 % 21 – 35 %	750 g 1,0 kg 1,2 – 1,5 kg	Dien slegs op gevestigde dormante lusern wat minstens een jaar oud is, vooropkom van onkruide toe. Verwys na Lusern onder die afdeling GEBRUIKSBEPERKINGS
SUGARCANE Plant en oorstaan riet	 6 – 20 %	**Vooropkom:** 2,5 – 3,0 kg or	Moet nie op grond met minder as 6 % klei toedien nie. Dien eweredig op klam grond toe na plant of oes voordat onkruide ontkiem. Gebruik die hoër dosis vir

GEWAS	KLEI %	TOEDIENINGS-HOEVEELHEID / HA	OPMERKINGS
		1,4 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC	die onderdrukking van *Cyperus esculentus* (geeluintjies) en langer nawerking op gronde met hoër kleipersentasies.
	21 – 35 %	3,0 kg or 1,7 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC	Vir die beheer van grasse en veral *Panicum maximum* moet toediening vooropkom daarvan plaasvind.
	6 – 20 %	**Vroeg na-opkom:** 2,5 – 3,0 kg or 1,4 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC + 3,0 – 4,0 ℓ AMETREX 500 SC	Moet nie op grond met minder as 6 % klei toedien nie. Grasonkruide en veral *Panicum maximum*moet nie verder as die 2 – 3 blaar stadium en breëblare nie verder as die 4 – 6 blaarstadium ontwikkel het tydens toediening nie. Indien bogenoemde onkruide verder as bg stadium ontwikkel het, word aanbeveel dat Paraquat 200 SL teen aanbevole hoeveelhede bygevoeg word. Gebruik die hoër dosis op swaarder gronde, of waar langer nawerking verlang word of waar onderdrukking van *Cyperus esculentus* benodig word.
	21 – 35 %	3,0 kg or 1,7 – 2,0 kg + 2,0 kg / 2,0 ℓ DIUREX 800 WG/ DIUREX 800 SC + 3,0 – 4,0 ℓ AMETREX 500 SC / AMETREX 800 WG 1,9 kg	
	6 – 35 %	**Lugtoediening:** **Vroeg na-opkom** 2,5 kg plus 2,5 kg / 2,0 ℓ	Dien in ten minste 30 ℓ maar verkieslik 40 ℓ water per ha toe. Verwys na die afdeling onder "Lugtoediening"

GEWAS	KLEI %	TOEDIENINGS-HOEVEELHEID / HA	OPMERKINGS
		DIUREX 800 WG / DIUREX 800 SC	
TAMATIES	0 – 10 % 11 – 20 % 21 – 35 %	750 g 1,0 kg 1,2 – 1,5 kg	Gebruik alleenlik op uitgeplante tamaties en dien tenminste 14 dae na uitplant as wortels alreeds gevorm het, toe. Dien as 'n gerigte tussenry bespuiting en nie or die plantrye toe. Grasse moet nie later as die ontkiemingstadium en breëblare nie verder as die 4-blaar stadium ontwikkel het tydens toediening. Gebruik die hoër dosis vir hoër kleipersentasies.

ALANEX 384 EC (Reg. Nr L4725) is die geregistreerde handelsmark van Makhteshim-Agan Industries, Israel
AMETREX 800 WG (Reg. Nr L8113) is die geregistreerde handelsmark van Makhteshim-Agan Industries, Israel
AMETREX 500 SC (Reg. Nr L4656) is die geregistreerde handelsmark van Makhteshim-Agan Industries, Israel
DIUREX 800 WG (Reg. Nr L8139) is die geregistreerde handelsmark van Makhteshim-Agan Industries, Israel
DIUREX 800 SC (Reg. Nr L5334) is die geregistreerde handelsmark van Makhteshim-Agan Industries, Israel

ONKRUIDSPEKTRUM:

Die volgende onkruide word normaalweg deur **MISTRAL® 700 WG** beheer:

BREëBLARE:

Acalypha eckloni	
Acanthospermum hispidum	Regopsterklits
Ageratum conyzoides	Indringer-ageratum
Amaranthus deflexus	Misbredie
Amaranthus hybridus	Gewone misbredie
Amaranthus spinosus	Doringmisbredie
Amaranthus thunbergii	Rooimisbredie
Anagallis arvensis	Pimpernel
Anthemis cotula	Stinkkamille
Argemone mexicana	Meksikaanse papawer
Bidens pilosa	Gewone knapsekêrel
Capsella bursa-pastoris	Herderstassie
Cenia turbinate	Ganskos
Chenopodium album	Withondebossie
Chenopodium carinatum	Groenhondebossie
Chenopodium murale	Muurhondebossie
Cirsium vulgare	Skotse dissel

Conyza canadensis	Skraalhans
Datura ferox	Groot stinkblaar
Datura stramonium	Gewone stinkblaar
Emex australis	Kaapse dubbeltjie
Fumaria muralis	Duiwekerwel
Galingsoga parviflora	Knopkruid
Hibiscus trionum	Terblansbossie
Leucas martinicensis	Tolbossie
Nicandra physaloides	Basterappelliefie
Physalis angulata	Wilde appelliefie
Polyugonum aviculare	Voëlduisendknoop
Portulaca oleracea	Porslein
Raphanus raphanistrum	Ramenas
Richardia brasiliensis	Meksikaanse Richardia
Schkuhria pinnata	Klein kakiebos
Sigesbeckia orientalis	Paulskruid
Solanum retroflexum	Nastergal
Spergula arvensis	Sporrie
Stellaria media	Sterremuur
Tagetes minuta	Lang kakiekos
Tribulus terrestris	Gewone dubbeltjie
Urtica urens	Klein brandnetel
Verbena bonariensis	Blouwaterbossie
Xanthium spinosum	Boetebos
Xanthium strumarium	Kankerroos

GRASSE:

Chloris virgata	Witpluimchloris
Digitaria sanguinalis	Kruisvingergras
Eleusine coracana	Jongosgras
* *Panicum maximum*	Gewone buffelsgras
Panicum schinzii	Soetgras
Setaria verticillata	Klitsborselgras
Tragus racemosus	Grootwortelsaadgras
Urochloa panicoides	Tuinurochloa
* *Cyperus esculentus*	Geeluintjie

* Ten minste 3,0 kg / ha moet gebruik word vir beheer van hierdie onkruide.

WISSELVALLIGE BEHEER:

Vooropkom beheer van die volgende onkruide kan wisselvallig wees:

Chenopodium album	Withondebossie
Cyperus esculentus	Geeluintjie

BELANGRIK:

MISTRAL® 700 WG moet toegedien word op ‘n goed voorbereide saadbed wat eweredig, fyn, ferm en sonder oormatige plantreste is. Reën of besproeiing van ten minste 10 – 15 mm is nodig vir vooropkom toedienings sodat **MISTRAL® 700 WG** na die onkruid ontkiemingsones geloog kan word.

Oormatige reën op gronde met ‘n lae klein-inhoud mag oormatige loging van **MISTRAL® 700 WG** veroorsaak wat die periode van beheer van veral vlak ontkiemende onkruide mag veroorsaak.