



# DRAGON

Reg. no. L10766 Act/Wet 36 of/van 1947

An emulsifiable concentrate herbicide for the selective pre-emergence control of ryegrass, certain annual grasses and broadleaf weeds in barley and wheat in the Western and Southern Cape. 'n Emulgeerbare konsentraat onkruidodder vir selektiewe vooropkombeheer van raaigras, sekere eenjarige grasse en breëblaar onkruide in gars en koring in die Wes- en Suid-Kaap.

**HRAC HERBICIDE GROUP CODE**                      **15**                      **HRAC ONKRUIDDODERGROEPKODE**

## ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

prosulfocarb (thiocarbamate)..... 800 g/L ..... prosulfokarb (tiokarbamaat)

## NET VOLUME/NETTO VOLUME

..... L

## REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty.) Ltd.  
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**DRAGON is the trademark of a company of the ADAMA GROUP.**  
**DRAGON is 'n handelsmerk van 'n maatskappy van die ADAMA GROEP.**

## CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946  
Tygerberg Poison Information Centre: +27 861 555 777

Batch number .....

Date of manufacture .....

UN no.:3082

Lotnommer

Datum van vervaardiging





## WARNINGS

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

<b>Wheat (animal feed)</b> .....	84 days
<b>Barley</b> .....	83 days

**NOTE:** Compliance with these withholding periods will ensure that residues do not exceed local Maximum Residue Limits.

- Keep out of reach of children, uninformed persons and animals.
- Keep away from food, drink and animal feedstuffs.
- When using do not eat, drink or smoke.
- This container must be disposed of in a safe way.
- Flammable: Keep away from flames.
- Harmful if swallowed.
  - If swallowed, seek medical advice immediately and show this container or label.
- Irritating to eyes and skin.
  - May cause sensitization by skin contact.
  - Risk of serious damage to eyes.
  - Repeated exposure may cause skin dryness or cracking.
  - Wear suitable gloves and eye/face protection.
- Irritating to respiratory system.
  - Harmful: may cause lung damage if swallowed.
  - Vapours may cause drowsiness and dizziness.
- Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
  - Use appropriate containment to avoid environmental contamination.
  - To avoid risks to man and the environment, comply with the instructions for use.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not guarantee that it will be effective under all conditions. The activity 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, 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 by 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 contaminate surface water or ditches with chemicals or used containers.
- Do not inhale vapour or spray mist.
- Avoid any contact of skin, eyes or clothing with concentrate or spray mixture.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while handling the product, wash hands and face before doing so.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Avoid prolonged or repeated exposure to the spray mist.
- Wear protective clothing, i.e. impermeable gloves, overalls, and eyes/face protection, hat or cap, and solid footwear.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Thoroughly wash protective equipment and clothing after use.
- Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)).
- Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

## **SYMPTOMS OF HUMAN POISONING**

Irritating to skin. Skin dryness or cracking. Drowsiness and dizziness.

## **FIRST AID TREATMENT**

Have the product container, label or MSDS with you when calling the ADAMA South Africa (Pty.) Ltd. emergency number, a poison control centre or physician, or going for treatment.

- **Inhalation:** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
- **Skin contact:** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.



- **Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
- **Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

#### NOTE TO PHYSICIAN

There is no specific antidote available. Treat symptomatically.

#### RESISTANCE MANAGEMENT

For resistance management, **DRAGON** is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **DRAGON** and other group code 15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. These resistant weeds may not be controlled by **DRAGON** or any other group code 15 herbicides which inhibits lipid synthesis.

##### To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes.
- Refer to individual product labels when alternating products or when using tank mixtures.
- Integrate other control methods (chemical, cultural, biological) into weed control programs.
- Maintain herbicide use records for each field.
- Prevent movement of resistant weed seeds and vegetative material to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Inspect each land annually in order to identify the development of resistance early.

The occurrence of resistant weeds is difficult to detect prior to use. If the above measures are not strictly adhered to ADAMA South Africa (Pty.) Ltd. cannot accept responsibility for any losses that may result from the failure of **DRAGON + LOGRAN or DRAGON + TRIANEX** to control resistant weeds.

- Always use **DRAGON + LOGRAN or DRAGON + TRIANEX** as part of an integrated crop and resistance management program (strategy) in order to prevent weed resistance.
- This crop and resistance management strategy should always include sequences with herbicides of alternative modes of action.
- **DRAGON + LOGRAN or DRAGON + TRIANEX** should only be used once a year per field. If it becomes necessary to spray escapee target plants, use herbicides from another chemical class.
- To control and eliminate resistant grasses e.g. ryegrass, the aim should be a total prevention of seeding by these resistant biotypes.
- **DRAGON + LOGRAN or DRAGON + TRIANEX** should be used as a tool to manage grass weed populations in order to



- prevent or delay resistance to products of various chemical classes
- control various levels of resistance to different products and chemical classes e.g. mainly class A (Fops and Dim's) and class B(Su's)

A local farm strategy for preventing and managing resistance should be adopted. Guidelines have been produced by the Herbicide Resistance Action Group (HRAC) and copies are available from HRAC, your distributor or agents, independent crop adviser or ADAMA South Africa (Pty.) Ltd.

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

### USE RESTRICTIONS

- Do not apply the tank mixture of **DRAGON + LOGRAN or DRAGON + TRIANEX** on fields where the wheat might grow under stress e.g. fields that are prone to water logging, frost prone areas, very low temperature or drought or when soil is known to have high levels of nematodes.
- Do not apply the the spray mixture directly onto the wheat seed. Thus do not allow the wheat seed to germinate on the surface of the soil. It should be covered by 2 - 3cm of soil before the application of **DRAGON + LOGRAN or DRAGON + TRIANEX**.
- Under certain conditions, crop damage may occur. See Application Rates, Remarks, and Crop Damage.

### MINIMUM RECROPPING INTERVALS AND CROP ROTATION GUIDELINES

- The minimum re-cropping interval is the time between the last application **DRAGON + LOGRAN or DRAGON + TRIANEX** and the anticipated planting date of subsequent crop.
- When using **DRAGON + LOGRAN or DRAGON + TRIANEX**, the recropping intervals of **LOGRAN or TRIANEX** should be adhered to. Refer also to the **LOGRAN and TRIANEX** label.
- To avoid injury to subsequent crops the following re-cropping intervals should be observed after applications of **DRAGON + LOGRAN or DRAGON + TRIANEX**.

CROPS	3 L DRAGON + 37.5 g LOGRAN/ha Or 3 L DRAGON + 37.5 g TRIANEX/ha (MONTHS)
Wheat	0
Canola	11
All other crops	24



- When using MONITOR 75WG in combination with **LOGRAN or DRAGON + TRIANEX** the rotational cropping interval of 18 months for all crops, other than wheat, as described on the MONITOR 75WG label should be adhered to.

## DIRECTIONS FOR USE

Use only as indicated

## COMPATIBILITY

- The compatibility of **DRAGON + LOGRAN or DRAGON + TRIANEX** with other products may be influenced by the formulation of the products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of ADAMA South Africa (Pty.) Ltd. and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.
- As variations may exist between formulations of products containing the same active ingredients, the trade names and registration numbers of the approved products are shown.
- **DRAGON** is compatible with LOGRAN (L3600), TRIANEX (L10765), TOUCHDOWN FORTE HITECH (L7305), GRAMOXONE (L1174), ADAMA PARAQUAT (L10792), PREEGLONE (L3304) and MONITOR 75WG (L6003).
- Do not mix **DRAGON** with any other product other than indicated above.

## MIXING INSTRUCTIONS

- Half-fill the spray tank with water and pour the required amount of **DRAGON** into the spray tank while the water is being agitated. Then top up with water to the final volume required.
- With the tank mixing of **DRAGON** and **LOGRAN or DRAGON + TRIANEX**, the **LOGRAN or TRIANEX** must be added first, well mixed and be in suspension before **DRAGON** is added.
- **Ensure thorough agitation of the mixture in the tank during mixing and spraying.**
- **Tank mixtures must be sprayed out immediately and not allowed to stand overnight in the spray tank.**

## APPLICATION TECHNIQUE

- Apply **DRAGON + LOGRAN or DRAGON + TRIANEX** at planting or within 2 days after planting but definitely pre-emergence of the crop and weeds.
- Rain after application is necessary to activate **DRAGON + LOGRAN or DRAGON + TRIANEX**.

## Ground application

- **DRAGON + LOGRAN or DRAGON + TRIANEX** may be applied with any medium to high volume boom sprayer equipped with an efficient agitation mechanism. Choice and arrangement of flat fan-type spray nozzles should be such as to ensure even distribution and

optimal recovery of the herbicide. For optimal control a water volume of at least 200 L/ha should be use.

- To calibrate a knapsack sprayer : Mark a representative area of 10m x 10m (100m<sup>2</sup>) on the soil to be sprayed. Fill the sprayer with water up to a calibration mark e.g. 20 litres. Spray the marked area evenly. Calculate the watervolume sprayed.
- Add the spray rate e.g. 20ml/100m<sup>2</sup> to the volume of water applied in the 100m<sup>2</sup> .

## APPLICATION RATES

### General weeds and "voorsaai" situations

- When weeds have emerged at planting, **DRAGON + LOGRAN** or **DRAGON + TRIANEX** and **DRAGON + LOGRAN + MONITOR 75WG** or **DRAGON + TRIANEX + MONITOR 75WG** can be applied in tank mixtures with either TOUCHDOWN FORTE or GRAMOXONE, ADAMA PARAQUAT or PREEGLONE to control the emerged weeds.
- For the application rates of TOUCHDOWN FORTE, GRAMOXONE, ADAMA PARAQUAT or PREEGLONE refer to the relevant registered labels.

### Target grasses: *Lolium multiflorum*

TABLE 1: Pre-emergence application rates of DRAGON + LOGRAN or DRAGON + TRIANEX

CROP	RATES		WEEDS	WEEDS
	DRAGON	LOGRAN or TRIANEX	BOTANICAL NAMES	COMMON NAMES
Wheat Barley	3 L/ha	30g/ha	<i>Anagallis arvensis</i>	Scarlet pimpernel
			<i>Arctotheca spp</i>	Cape marigold
			<i>Chenopodium murale</i>	Nettle-leaved goosefoot
			<i>Coronopus didymus</i>	Swinecress
			<i>Cotula australis</i>	Brassbuttons
			<i>Emex australis(65-90%)</i>	Spiney emex
			<i>Erodium moschatum</i>	Musk heron's bill
			<i>Fumaria muralis</i>	Fumitory
			<i>Galium spp</i>	Gallium
			<i>Lolium multiflorum</i>	Italian ryegrass
			<i>Medicago polymorpha</i>	Bur clover



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CROP	RATES		WEEDS	WEEDS
	DRAGON	LOGRAN or TRIANEX	BOTANICAL NAMES	COMMON NAMES
			<i>Phalaris canariensis</i>	Canary grass
			<i>Polygonum aviculare</i>	Prostrate knotweed
			<i>Raphanis raphanistrum</i>	Wild radish
			<i>Silene spp</i>	Gunpowder weed
			<i>Vulpia myuros</i>	Rat's tail fescue
<b>Knapsack sprayers: 30 ml DRAGON + 0.30 g LOGRAN or TRIANEX/100m<sup>2</sup></b>				

- Care should be taken to cover the wheat and barley seed completely with 2 - 3 cm of soil after planting before the application of **DRAGON + LOGRAN** or **DRAGON + TRIANEX**.
- Follow the recommendations on the **LOGRAN** or **TRIANEX** labels carefully.

**Target grasses: *Lolium multiflorum* and *Bromus diandrus***

**Table 2: The application rates of DRAGON + LOGRAN or DRAGON + TRIANEX and MONITOR 75WG: (Only to be used in wheat - not to be used in barley or any other cereal crop)**

CROP	PRE-EMERGENCE APPLICATION			POST-EMERGENCE APPLICATION	WEEDS	
	DRAGON	LOGRAN or TRIANEX	MONITOR 75WG	MONITOR 75WG	BOTANICAL NAMES	COMMON NAMES
	L/ha	g/ha	g/ha	g/ha		
Only Wheat	3	30	20	20	<i>Bromus diandrus</i>	Ripgut brome
	3	30	40	-	<i>Emex australis</i>	Spiny Emex

- The weed spectrum for MONITOR 75WG would apply as described in the MONITOR 75WG label.





- Weed growth stage – the second application of MONITOR 75WG should be done at the 2 – leaf stage of the Bromus diandra seedling – see the MONITOR 75WG label for detailed instructions.
- When **DRAGON** plus **LOGRAN** or **TRIANEX** is included in a tank mix with MONITOR 75WG, all warnings, restrictions and directions on all labels do apply.

### Remarks

- It is of utmost importance that **DRAGON + LOGRAN** or **DRAGON + TRIANEX** is applied to a well prepared, firm seedbed that is free of weeds, clods and stones. The presence of clods and stones will lead to irregular control.
- Weeds that have germinated will not be adequately controlled by **DRAGON + LOGRAN** or **DRAGON + TRIANEX**.
- During the application of **DRAGON + LOGRAN** or **DRAGON + TRIANEX** take care that no multiple applications or overlapping of the spray boom takes place as this would increase the possibility of crop damage.
- **DRAGON + LOGRAN** or **DRAGON + TRIANEX** should be used as part of an appropriate management strategy, including sequences with herbicides of alternative modes of action e.g. fops and dims.
- Application of **DRAGON + LOGRAN** or **DRAGON + TRIANEX** is recommended pre-emergence of both the crop and the weeds.
- The use of **DRAGON + LOGRAN** or **DRAGON + TRIANEX** can also be recommended for pre-emergence control of ALS/ACCase resistant grasses e.g. *Lolium* spp and general broadleaf weeds.
- **DRAGON + LOGRAN** or **DRAGON + TRIANEX** should preferably be applied at planting or within 2 days after planting.
- Wheat seed should be adequately covered by 2 – 3 cm of soil after planting or sowing.

### Crop damage

- **DRAGON + LOGRAN** or **DRAGON + TRIANEX** applied pre-emergence may slow crop emergence or even reduce the crop stand or cause yellowing. These affects are transient, the crop recovers quickly and should not affect the yield adversely.
- This recovery is due to the ability of wheat to compensate by increased tillering and ear numbers.
- **DRAGON + LOGRAN** or **DRAGON + TRIANEX** may result in reductions in plant emergence.
  - Under wet and cold conditions especially after excessive rain showers (>40mm).
  - Or when seed germinate on the surface of the soil (inadequate coverage or incorporation when seeding).
- The possibility of crop damage is greatly reduced when wheat seed is planted with a wheat planter. Crop damage may be more frequent when seed is sown by means of broadcasting especially when seed is inadequately covered by soil after sowing.



- Various external stress factors e.g. high rainfall or cold weather snaps would cause increased herbicidal damage and cannot be attributed to only **DRAGON + LOGRAN** or **DRAGON + TRIANEX**.

**DRAGON** = is the trademark of a company of the ADAMA GROUP.

**LOGRAN**<sup>®</sup> = Registered Trademarks of a SYNGENTA Group Company.

**MONITOR**<sup>®</sup> = Registered Trademarks of Philagro.

**TRIANEX** (L10765) = Registered product of ADAMA South Africa (Pty) Ltd.

## WAARSKUWINGS

**Onthoudingsperiodes:** Laat die volgende aantal dae toe tussen laaste toediening en oes (beweiding) van die gewasse soos hieronder aangedui:

**Koring (veevoer)** ..... 84 dae

**Gars** ..... 83 dae

**LET WEL:** Nakoming van hierdie onthoudingsperiodes sal verseker dat die plaaslike Maksimum Residu Limiete nie oorskry word nie.

- Hou buite bereik van kinders, oningeligte persone en diere.
- Berg weg van voedsel, water en diere voeding.
- Moenie eet, drink of rook terwyl die produk hanteer word nie.
- Hierdie houer moet op 'n veilige manier vernietig word.
- Vlambaar: Hou weg van oop vlamme.
- Skadelik indien ingesluk word.
  - Indien ingesluk word, verkry dringend mediese advies en toon hierdie etiket aan die geneesheer
- Kan vel en oë irriteer.
  - mag velsensitasie veroorsaak deur velkontak.
  - mag ernstige skade aan oë veroorsaak
  - herhaaldelike velkontak mag vel droogheid of barste veroorsaak.
  - dra toepaslike handskoene en oog of gesigsbeskerming
- Kan die asemhalingsstelsel irriteer
  - skadelik - mag long skade veroorsaak indien ingesluk word.
  - dampe mag lomerigheid en duiseligheid veroorsaak.
- Baie giftig vir akwatiese organismes en mag langdurige negatiewe uitwerking op die akwatiese omgewing hê.
  - gebruik die nodige voorsorg om omgewingskontaminasie te verhoed.
  - verhoed onnodige risiko's vir die mens en die omgewing. Volg die gebruiksaanwysings noukeurig.
- **Herbetreding:** Moet nie behandelde gebiede betree indien die spuitneerslag nie afgedroog het nie, tensy beskermende oorklere gedra word.

**Hoewel hierdie middel omvattend onder 'n groot verskeidenheid 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 metode, 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.

### **VOORSORGMAATREËLS**

- Moenie oppervlakwater of slote met chemikalieë of gebruikte houers besoedel nie.(ekstra in Dragon)
- Moet nie die dampe of spuitnewel inasem nie.
- Vermy kontak van die vel, oë of kleding met die konsentraat van die spuitmengsel.
- Was met seep en water na gebruik.
- Was besoedelde klere na gebruik.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat die hande en gesig gewas is nie.
- Vermy oorwaai van spuitnewel na ander gewasse, weiding, riviere, damme en gebiede wat nie onder behandeling is nie.
- Vermy langdurige en herhaaldelike blootstelling aan die spuitnewel.
- Dra beskermende klere bv. ondeurdringbare handskoene, oorklere, oë- en gesig beskerming, hoed en industriële skoene.
- Vermy besoedeling van voedsel, voer, drinkwater en eetgerei.
- Maak toediener deeglik skoon na gebruik en gooi waswater waar dit nie gewasse, weiding, riviere, damme of boorgate sal besoedel nie.
- Was die beskermende klere en toerusting deeglik na gebruik.
- Keer die leë houer oor die spuit-of mengtenk om en dreineer vir minstens 30 sekondes nadat die vloeitot 'n drup verminder het. Spoel daarna die leë houer drie keer na mekaar met een kwart van die houervolume vars water en giet die spoelwater in die spuittenk of mengtenk oor. Kap gate in die drie-keer gespoelde houer waarna dit aan 'n goedgekeurde versamelaar of verwerker oorhandig moet word ([www.croplife.co.za](http://www.croplife.co.za)).
- Moet nie die houer begrawe, verbrand of aan enige ander partye skenk wat dit as houer vir voedsel of drinkgoed mag gebruik nie.

### **SIMPTOME VAN MENSLIKE VERGIFTIGING**

Velirritasie. Droogheid of bars van die vel. Lomerigheid en duiseligheid.

### **NOODHULPBEHANDELING**



Hou die produk houer, die etiket en die MSDS byderhand wanneer die ADAMA Suid-Afrika (Pty.) Ltd noodnommer, of die gifsentrum of die dokter geskakel word of as jy gaan vir behandeling.

- **Inasemhaling:** Verwyder pasiënt van verdere blootstelling aan die middel en plaas in 'n goed geventileerde omgewing. Indien asemhaling staak of onreëlmatig is pas kunsmatige respirasie toe. Hou pasiënt rustig en warm. Skakel 'n mediese dokter of gifsentrum onmiddellik.
- **Velkontak:** Trek dadelik alle gekontameneerde klere uit. Was dadelik in baie water. Kontak 'n dokter as velirritasie voortduur. Was gekontameneerde klere voor hergebruik.
- **Oogkontak :** Spoel onmiddellik met genoeg water, ook onder die ooglede vir tenminste 15 minute. Verwyder kontaklense. Onmiddellike mediese sorg word vereis.
- **Inname:** Indien ingesluk, kontak 'n mediese dokter onmiddellik en wys hierdie etiket of houer. Moet **nie** braking veroorsaak **nie**.

#### NOTA AAN GENEESHEER

Geen teenmiddel is bekend nie. Behandel simptome.

#### WEERSTANDBESTUUR

Vir die doel van weerstandbestuur is **DRAGON** 'n groep kode 15 onkruidoder. Enige onkruidpopulasie mag individue wat natuurlik weerstandbiedendheid toon teen **DRAGON** en ander groep kode 15 onkruidoders bevat. Hierdie weerstandbiedende individue kan uiteindelik die onkruidpopulasie domineer as hierdie produkte aanhoudend en eksklusief gebruik word. In sulke gevalle mag **DRAGON** of enige van die groep 15 onkruidoders wat lipiedsintese inhibeer, nie die weerstandbiedende individue beheer nie.

Om onkruidoder weerstandbiedendheid te verhoed moet:

- die eksklusiewe en herhaaldelike gebruik van onkruidoders in dieselfde onkruid groep vermy word. Hierdie produkte moet met ander onkruidoders van ander groep kodes afgewissel word of in tenkmengsels gebruik word.
- verwys na die individuele produk etikette wanneer met produkte afgewissel word of wanneer tenkmengsels gebruik word.
- ander onkruidbeheer maatreëls soos chemiese-, biologiese- en verbouingsmetodes geïntegreer word in die beheer van onkruid.
- onkruidoderrekords moet gehou word vir elke land.
- die vervoer/beweging van weerstandbiedende onkruid sade of vegetatiewe materiaal na ander lande verhoed word deur implemente en stropers skoon te maak voor gebruik van een land na 'n ander en deur skoon saad te plant.
- elke land jaarliks inspekteer word om weerstandbiedendheid vroegtydig te identifiseer.

Die voorkoms van weerstandbiedende onkruid is moeilik om voor bespuiting te bepaal. Indien nie aan die bogenoemde maatreëls voldoen word nie, kan ADAMA Suid-Afrika (Pty.) Ltd. nie verantwoordelik gehou word vir enige verliese wat mag voorkom weens die gebrek aan beheer deur **DRAGON + LOGRAN** of **DRAGON + TRIANEX** op weerstandbiedende onkruid nie.

- Gebruik **DRAGON + LOGRAN of DRAGON + TRIANEX** as 'n deel van 'n geïntegreerde gewas en weerstandsbestuursprogram (strategie) om onkruid weerstandbiedendheid te voorkom.
- Hierdie gewas en weerstandsbestuursprogram moet onkruidodders van verskillende werkingswyses insluit.
- **DRAGON + LOGRAN of DRAGON + TRIANEX** moet slegs een keer per jaar per land gebruik word. Indien dit nodig is om plante wat nie beheer is nie te spuit, gebruik onkruidodders van 'n ander chemiese klas.
- Om weerstandbiedende grasse bv. raaigras te beheer en te elimineer moet die strategie wees om plante van veral hierdie weerstandbiedende populasie nie toe te laat om saad te stort nie.
- **DRAGON + LOGRAN of DRAGON + TRIANEX** moet gebruik word om gras populasies te bestuur sodat :
  - weerstandbiedendheid teen verskillende produkte van verskillende chemiese groepe te verhoed of te vertraag.
  - verskillende grade van weerstandbiedendheid teenoor verskillende produkte of chemiese klasse van produkte (bv. hoofsaaklik klas A (Fops en Dim's) en klas B (Su's) beheer kan word.

'n Plaaslike plaasstrategie vir die voorkoming en bestuur van weerstandbiedendheid moet ontwikkel word. Riglyne is ontwikkel deur die "Herbicide Resistance Action Group" (HRAC) en voorskrifte is verkrygbaar vanaf HRAC, handelaars, agente, onafhanklike gewas konsultante of ADAMA Suid- Afrika (Pty.) Ltd.

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

### **GEBRUIKSBEPERKINGS**

- Moenie 'n tenkmengsel van **DRAGON+LOGRAN of DRAGON + TRIANEX** gebruik op lande waar die koring onder stres mag groei nie bv. lande wat geneig is om te versuip, lande wat makliker ryp kry, of lae temperature, of droogte geneigd is of lande wat geneig is tot hoë nematode besmettings.
- Moenie die spuitstof direk op die koring saad toedien nie. Moet dus nie toelaat dat die koring saad op die oppervlak van die grond ontkiem nie. Dit moet bedek word met 2 - 3 cm grond voordat **DRAGON + LOGRAN of DRAGON + TRIANEX** toegedien word.
- Onder sekere toestande mag gewas skade voorkom. Sien Toedieningshoeveelhede, Opmerkings, Gewas skade.

### **MINIMUM WAGPERIODES EN WISSELBOU-AANWYSINGS**

- Die minimum wagperiode is die tyd vanaf die laaste toediening van **DRAGON + LOGRAN of DRAGON + TRIANEX** en die verwagte datum van aanplanting van die volgende gewas.

- Indien besluit word om **DRAGON + LOGRAN** of **DRAGON + TRIANEX** te gebruik moet die wagperiodes op die **LOGRAN** of **TRIANEX** etiket ook nagevolg word. Verwys na die **LOGRAN** of **TRIANEX** etiket.
- Om skade aan opvolggewasse te voorkom, moet die volgende wagperiodes in ag geneem word indien **DRAGON + LOGRAN** of **DRAGON + TRIANEX** toegedien is:

GEWAS	3 L DRAGON/ha + 37.5 g LOGRAN/ha Of 3 L DRAGON/ha + 37.5 g TRIANEX/ha (MAANDE)
Koring	0
Kanola	11
Alle ander gewasse	24

- Indien MONITOR 75WG in kombinasie met **DRAGON** en LOGRAN of TRIANEX gebruik word, moet die rotasie periode van 18 maande vir ander gewasse anders as koring, soos beskryf word in die MONITOR 75WG etiket, gebruik word .

## GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui

## VERENIGBAARHEID

- Die verenigbaarheid van **DRAGON + LOGRAN** of **DRAGON + TRIANEX** met ander produkte mag beïnvloed word deur die formulاسie van die produkte betrokke asook die kwaliteit van die water wat gebruik word. Aangesien die formulاسie van produkte sonder kennisgewing aan ADAMA Suid-Afrika (Pty.) Ltd. verander mag word en die kwaliteit van die water van plaas na plaas mag verskil moet 'n fisiese verenigbaarheids toets altyd voor toediening gedoen word.
- Aangesien variasies mag voorkom tussen formulاسies van produkte wat dieselfde aktiewe bestanddele bevat, word die handelsname en registrاسie nommers van die goedgekeurde produkte gegee.
- **DRAGON** is verenigbaar met LOGRAN (L3600), TRIANEX (L10765) TOUCHDOWN FORTE HITECH (L7305), GRAMOXONE (L1174), ADAMA PARAQUAT (L10792), PREEGLONE (L3304) en MONITOR 75WG (L6003).
- Moenie **DRAGON** met enige ander produk as die hierbo genoem meng nie.

## MENGINSTRUKSIES

- Vul die spuitenk halfvol met water. Voeg die verlangde hoeveelheid **DRAGON** direk in die spuitenk terwyl dit voortdurend geroer word. Voeg dan die finale hoeveelheid water by.
- Met die vermenging van **DRAGON + LOGRAN** of **DRAGON + TRIANEX** moet die **LOGRAN** of **TRIANEX** eerste bygevoeg word, goed gemeng word, en in suspensie gebring word, voordat **DRAGON** bygevoeg word.
- **Verseker deeglike roering van die mengsel in die tenk terwyl gemeng en gespuit word.**
- **Tenkmengsels moet dadelik gespuit word en nie toegelaat word om in die tenk te staan nie.**

## TOEDIENINGSTEGNIEKE

- Dien **DRAGON + LOGRAN** of **DRAGON + TRIANEX** tydens plant toe of binne 2 dae na aanplanting, maar definitief voor die opkoms van die gewas en die onkruid.
- Reën na toediening is nodig om **DRAGON** of **DRAGON + LOGRAN** of **DRAGON + TRIANEX** te aktiveer.

## Grondtoediening

- **DRAGON + LOGRAN** of **DRAGON + TRIANEX** mag toegedien word met enige medium tot hoë volume balk spuit wat met 'n doeltreffende roermeganisme toegerus is en wat goeie bedekking en eweredige verspreiding verseker. Die beste resultate word verkry deur van platwaaierspuitpunte gebruik te maak en 'n spuitvolume van minstens 200 L/ha te gebruik.
- Om 'n rugsak spuit te kalibreer: Merk 'n verteenwoordigende area van 10m x 10m (100m<sup>2</sup>) uit op die grond waar gespuit moet word. Vul die rugsak spuit met skoon water tot by 'n kalibrasie merk op die houer soos tot by die 20 liter merk. Spuit die afgemerkte area eweredig. Bereken die volume water wat uitgespuit is.
- Die dosis soos op die etiket bv. 20ml/100m<sup>2</sup> moet dan gevoeg word by die volume water wat uitgespuit is per 100m<sup>2</sup>.

## TOEDIENINGSHOEVEELHEDE

### Algemene onkruid in voorsaai omstandighede.

- Indien onkruid reeds ontkiem het tydens planttyd kan **DRAGON+LOGRAN** of **DRAGON + TRIANEX** en **DRAGON+LOGRAN+ MONITOR 75WG** of **DRAGON + TRIANEX + MONITOR 75WG** in tenkmengsels met TOUCHDOWN FORTE, GRAMOXONE, ADAMA PARAQUAT (L10792) of PREEGLONE gebruik word om onkruid te beheer.
- Vir die toediening van TOUCHDOWN FORTE, GRAMOXONE, ADAMA PARAQUAT of PREEGLONE verwys na die relevante geregistreerde etikette. Alle waarskuwings, voorsorgmaatreëls en aanbevelings van hierdie produkte moet nagekom word.





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Teiken grasse: *Lolium multiflorum*

TABEL 1 :Vooropkoms toediening van DRAGON + LOGRAN of DRAGON + TRIANEX

GEWASSE	HOEVEELHEDE		ONKRUIDE	
	DRAGON	LOGRAN of TRIANEX	BOTANIESE NAME	GEWONE NAME
Koring Gars	3 L/ha	30g/ha	<i>Anagallis arvensis</i>	Pimpernel
			<i>Arctotheca spp</i>	Soetgousblom
			<i>Chenopodium murale</i>	Muurhondebossie
			<i>Coronopus didymus</i>	Peperkruid
			<i>Cotula australis</i>	Cotula
			<i>Emex australis</i> (65 – 90 %)	Kaapse dubbeltjie
			<i>Erodium moschatum</i>	Turknael
			<i>Fumaria muralis</i>	Duiwekerwel
			<i>Galium spp</i>	Gallium
			<i>Lolium multiflorum</i>	Italiaanse raaigras
			<i>Medicago polymorpha</i>	Klitsklawer
			<i>Phalaris canariensis</i>	Kanariegras
			<i>Polygonum aviculare</i>	Voëlduisendknoop
			<i>Raphanis raphanistrum</i>	Ramenas
			<i>Silene spp</i>	Kruitbossie
<i>Vulpia myuros</i>	Lang baardswenkgras			

**Rugsak spuite:** 30 ml DRAGON + 0.30g g LOGRAN of TRIANEX/100m<sup>2</sup>

- Daar moet verseker word dat die koring en gars saad ten volle bedek word na plant met 2 – 3 cm grond voordat enige **DRAGON + LOGRAN of DRAGON + TRIANEX** bespuitings gedoen word.
- Volg die aanwysings op die **LOGRAN of TRIANEX** etiket noukeurig na.

**Tekien grasse: *Lolium multiflorum* en *Bromus diandrus***

**Tabel 2: Die toediengings hoeveelhede van DRAGON + LOGRAN of DRAGON + TRIANEX en MONITOR 75WG:** (slegs vir gebruik in koring - moenie op gars of enige ander kleingraan gewas gebruik nie)

GEWAS	VOOROPKOMS-TOEDIENING		NA-OPKOMS TOEDIENING		ONKRUIDE	
	DRAGON	LOGRAN of TRIANEX	MONITOR 75WG	MONITOR 75WG	BOTANIESE NAAM	GEWONE NAAM
	L/ha	g/ha	g/ha	g/ha		
Slegs Koring	3	30	20	20	<i>Bromus diandrus</i>	Predikantsluis
	3	30	40	-	<i>Emex australis</i>	Kaapse dubbeltjie

- Die onkruid spektrum soos deur die MONITOR 75WG etiket gegee sal van toepassing wees.
- Onkruid groeistadium - die tweede toediening van MONITOR 75WG moet tydens die 2 blaar stadium van die Bromus diandra saailing gedoen word. Sien die MONITOR 75WG etiket vir gedetailleerde aanwysings.
- Indien **DRAGON** plus **LOGRAN** of **DRAGON + TRIANEX** saam met MONITOR 75WG in 'n tenkmengsel gebruik word geld alle waarskuwings, voorsorgmaatreëls beperkings en aanbevelings soos vervat in al die betrokke etikette.

**Opmerkings**

- Dit is van die uiterste belang dat **DRAGON + LOGRAN** of **DRAGON + TRIANEX** toegedien word op 'n goed voorbereide ferm saadbed vry van enige onkruide, kluite of klippe. Die teenwoordigheid van oormatige kluite en klippe sal lei tot onreëlmatige beheer.
- Onkruide wat reeds ontkiem het, sal nie deur **DRAGON + LOGRAN** of **DRAGON + TRIANEX** voldoende beheer word nie.
- Gedurende die toediening van **DRAGON + LOGRAN** of **DRAGON + TRIANEX** moet sorg gedra word dat daar op geen manier dubbel gespuit word of oorvleueling van die spuitbalk wat plaasvind nie aangesien dit kan lei tot moontlike verhoogde skade.
- **DRAGON + LOGRAN** of **DRAGON + TRIANEX** behoort gebruik te word as deel van 'n bestuurstrategie wat insluit die opeenvolging van onkruidodders met verskillende werkingswyses bv. fops en dims.
- Die toediening van **DRAGON + LOGRAN** of **DRAGON + TRIANEX** word aanbeveel om vooropkoms van beide die gewas en die onkruid te geskied.

- Die gebruik van **DRAGON + LOGRAN of DRAGON + TRIANEX** word aanbeveel vir die vooropkoms beheer van ALS/ACcase weerstandbiedende grasse soos *Lolium spp* en algemene breëblaar onkruid.
- **DRAGON + LOGRAN of DRAGON + TRIANEX** behoort verkieslik met planttyd of binne 2 dae na plant toegedien word.
- Koring saad moet te alle tye goed bedek wees met 2 - 3 cm grond na plant of saai.

### Gewas skade

- Vooropkoms toegediende **DRAGON + LOGRAN of DRAGON + TRIANEX** mag soms die gewas se ontkieming vertraag, stand verminder of vergeling veroorsaak. Hierdie effek is slegs tydelik. Die gewas herstel gewoonlik vinnig en die opbrengs sal nie nadelig beïnvloed word nie.
- Hierdie herstel word toegeskryf aan die vermoë van koring om te kompenseer deur te stoel en meer are te produseer.
- **DRAGON + LOGRAN of DRAGON + TRIANEX** mag die ontkieming van koring saailinge verminder
  - onder nat koue omstandighede veral wanneer oormatige reënbuie voorkom (>40mm).
  - of wanneer die saad op die grond oppervlakte ontkiem (onvoldoende bedekking tydens die plant proses).
- Die moontlikheid vir gewas skade word grootliks verminder wanneer koring saad met 'n koring planter geplant word. Gewas skade mag meer voorkom indien gesaai word, veral as die toekrap proses onvoldoende is. 'n Moontlikheid sou wees om 20% meer saad te plant of te saai.
- Verskeie eksterne stres faktore bv. hoë reënval en koue weerstoestande kan onkruidodderskade tot gevolg hê en kan nie altyd aan die toediening van **DRAGON + LOGRAN of DRAGON + TRIANEX** toegeskryf word nie.

**DRAGON** = is die handelsmerk van 'n maatskappy van die ADAMA GROEP.

**LOGRAN**<sup>®</sup> = Geregistreerde Handelsmerk van 'n Syngenta Groep Maatskappy.

**MONITOR** = Geregistreerde Handelsmerk van Philagro.

**TRIANEX** (L10765) is 'n geregistreerde produk van ADAMA Suid-Afrika (Pty) Ltd.