

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Herbicide



DISGRAN 750 WDG

Reg. No. L 7473 Act/Wet No. 36 of/van 1947

2: 13/9/2012-Jan2017

A selective water-dispersible granular herbicide, packed in water-soluble bags, for the control of broadleaf weeds as indicated in wheat, oats and barley in the Western and Eastern Cape and wheat in the Free State.

'n Selektiewe waterdispergeerbare korrel onkruidodder, verpak in wateroplosbare sakkies, vir die beheer van breëblaaronkruid soos aangedui in koring, hawer en gars in die Wes- en Oos-Kaap en koring in die Vrystaat.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

triasulfuron (sulfonyl urea) **750 g/kg** triasulfuron (sulfonietureum)

HRAC HERBICIDE GROUP CODE **B** HRAC ONKRUIDDODER GROEPKODE

10 x 15g

villa 

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07

PO Box / Posbus 10413, Aston Manor, 1630

Tel: 011 396 2233

Website / Webblad: www.villacrop.co.za

UN Number: 3077

Willow Set & Print 011 394-4486



CAUTION
VERSIGTIG



GEbruiksAANwYsINGS INGESLUIT

VERWYS NA BESONDERHEDE
GEDRUK OP HOUER/SAK

Date formulated:
Formuleringsdatum:

REFER TO DETAILS PRINTED
ON CONTAINER/BAG

DIRECTIONS FOR USE ENCLOSED

Batch number:
Lotnommer:

DISGRAN 750 WDG

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VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box 10413, ASTON MANOR, 1630

Tel. (011) 396 2233

CAUTION / VERSIGTIG**WARNINGS**

- Handle with care.
- Harmful if swallowed.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Aerial Application:

- Notify all 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 water or areas not under treatment.

• **NOTE**

DISGRAN 750 WDG is a highly active herbicide that in small quantities, when used incorrectly, can cause serious damage to crop seedlings, deciduous fruit trees and grape vines, during the budding and early season growth stages.

- Under the following conditions it can cause serious damage as far as 3 to 5 km from the nearest spray path of the aircraft: Cloudy weather with relative humidity above 80 % and low air movement of less than 5 km per hour.
- When such conditions prevail, aerial application should **NOT** be carried out where crop seedlings, deciduous fruit trees and grape vines in budding or early development stages are present within 5 km of the nearest spray path of the aircraft.

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 weeds 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 label instructions or to the occurrence of conditions, that could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

- Avoid inhalation of the spray mist.
- Wash contaminated clothing after use.
- Wash with soap and water after use and after accidental skin contact.
- In case of eye contact, immediately flush the eyes with clean, gentle flowing lukewarm water for at least 20 minutes, holding the eyelid(s) open. If irritation persists, seek medical advice.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.

- **Cleaning of Application Equipment:** Special attention and care must be taken with cleaning of all equipment used in the mixing and application of **DISGRAN 750 WDG**, before using it for applications in other crops:
 - Drain the spray tank and rinse thoroughly with ample water. Flush the pipes, boom and nozzles of applicator with the water.
 - Drain the spray tank again and fill with clean water to 20 % of tank capacity, whilst thoroughly rinsing all inside surfaces of the spray tank.
 - Add 1 litre sodium hypochloride (5.2 %) per 200 litres water.
 - Bleed the system to ensure that all pipes, booms and nozzles are filled with the sodium hypochloride solution by spraying the solution through all nozzles for 1 minute.
 - Let the remaining rinsate solution circulate within the spraying system for at least 5 to 10 minutes.
 - Drain the spray tank and pipe system completely.
 - In order to remove traces of the tank cleaner, flush the spray tank thoroughly with clean water, rinsing all the inside surfaces. Spray this rinsate through the nozzles and drain system.
- **Do not** dispose the wash water where it will contaminate crops, grazing, rivers and dams and the root zone of desirable plants.
- Destroy the empty container by perforation and dispose of it in a safe and responsible way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.

RESISTANCE WARNING

DISGRAN 750 WDG is a group code B herbicide. Any weed population may contain individuals naturally resistant to **DISGRAN 750 WDG** and other group code B herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **DISGRAN 750 WDG** or any other group code B herbicide.

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,
- 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

- Do not use **DISGRAN 750 WDG** in cereal crops under sown with legumes.
- Do not use **DISGRAN 750 WDG** in wheat, barley or oats that are stressed by severe drought, flooding, disease or insect damage conditions.
- The use of **DISGRAN 750 WDG** in barley is restricted to the Western-, Southern- and Eastern Cape.
- **Follow-up crops:**
 - Low concentrations of **DISGRAN 750 WDG** in the soil may cause damage to crops other than wheat, oats or barley. Therefore, careful planning should take place with regard to crop rotation, prior to the application of **DISGRAN 750 WDG**.
 - After a **DISGRAN 750 WDG** post-emergence application, the following minimum pre-plant intervals* for follow-up crops must be adhered to, in order to avoid injury to follow-up crops:

Wheat, Barley & Oats	6 months
Sweet and Bitter lupins, Peas & Canola	9 months
Medics, Clover & Lucerne	11 months
Any other crop	24 months, preceded by a test planting

(* pre-plant interval = time period between the last application of **DISGRAN 750 WDG** and the anticipated date of planting of a follow-up crop).

Withholding periods: In case of pre-emergence application, allow at least 24 months between application and planting of any crops.

NOTES

- It is not recommended to use **DISGRAN 750 WDG** on soils with a pH (H₂O) of 7 or higher, and/or on soils containing free lime. The residual effect of **DISGRAN 750 WDG** can be extended, adversely affecting crop rotation strategies beyond normally indicated intervals.
- The above-mentioned re-cropping waiting periods also depend on normal or above average rainfall during, and following, the growing season when the application was performed.

- **Metsulfuron-methyl's** re-cropping intervals must also be taken into consideration if it is to be used in a tank mixture with **DISGRAN 750 WDG**.

DIRECTIONS FOR USE: Only use as indicated.

Pre-emergence application:

- Apply **DISGRAN 750 WDG** during or immediately after planting to a moist, fine, even, well prepared seedbed, free of weeds, without excessive clods, stones or stubble.
- Best results are obtained if the pre-emergence application of **DISGRAN 750 WDG** is followed by rain, shortly after application.
- Optimal results are obtained when all cultivation practices (including planting/sowing) are finished before application of **DISGRAN 750 WDG**.
- Sub-optimal control can be expected when **DISGRAN 750 WDG** is incorporated into the soil. In cases where **DISGRAN 750 WDG** has to be incorporated, the following must be kept in mind:
 - incorporation must be performed on dry, sandy soil, free from stones, clods and/or organic material (e.g. stubble),
 - do not incorporate deeper than 2.5 cm into the soil.
- The wind action of a sleeveboom sprayer must be disconnected if **DISGRAN 750 WDG** is applied with a sleeveboom sprayer.

Post-emergence application:

- Best results will be obtained if **DISGRAN 750 WDG** is applied to young, actively growing weeds (seedling to 5 cm height) under moist conditions. Weeds affected by drought stress will be less susceptible. Sufficient rainfall, that carries the product into the root zone of germinating weeds, will ensure residual control of weeds germinating, after application of **DISGRAN 750 WDG**.
- Apply **DISGRAN 750 WDG** alone, or in tank mixture with **Campatop® 225 EC**, or **Metsulfuron-methyl**, to young weeds (preferably within 1 month after emergence of the crop), to obtain maximum weed control or suppression.
- Apply **DISGRAN 750 WDG** in tank mixture with **Campatop® 225 EC** in the Eastern Free State from early September after good rainfall, but only after the average temperature for 3 consecutive days, exceeds 10 °C.
- The degree of control and duration of efficacy may differ according to the weed species and size, and growing conditions (e.g. soil pH, rainfall, soil organic content, etc.) during and following the time of application.
- The use of a suitable surfactant/penetrant in the spray mixture, will improve wetting and penetration of the leaf.
- Although the visible symptoms of dying weeds may not be visible before 1 to 3 weeks, **DISGRAN 750 WDG** rapidly inhibits the growth and competition ability of susceptible weeds.

Compatibility:

- The compatibility of **DISGRAN 750 WDG** in a tank mixture with other products is influenced by the formulations of these products, as well as quality of the spray water. It is recommended that a physical compatibility test always be performed prior to application as the formulation of other products can be altered, and the quality of water can vary from area to area.
- **DISGRAN 750 WDG** has been found compatible with **Campatop® 225 EC**, **Metsulfuron-methyl**, **Trifluralin 480 EC** and **Wrestler 800 EC**.

Mixing Instructions:

- Half fill the spray/mixing tank with clean water and ensure agitation. Add the recommended amount of **DISGRAN 750 WDG** water-soluble sachets to the tank. Fill the tank to the desired final volume whilst agitating.
- If **DISGRAN 750 WDG** is to be tank mixed with other agricultural chemicals, ensure that the **DISGRAN 750 WDG** is completely mixed and in suspension, before adding the other compounds.
- The spray mixture must be sprayed immediately after mixing and not be allowed to stand over for a prolonged period of time, e.g. overnight.

APPLICATION INSTRUCTIONS

Ground application:

It is important that **DISGRAN 750 WDG** is applied with accurately calibrated spray equipment that is in good working order. **DISGRAN 750 WDG** can be applied with standard medium or high volume spraying

equipment, equipped with a good agitation system that can provide even distribution and sufficient coverage. It is recommended to apply at a spray volume of 200 litres per hectare, using flat fan nozzles to obtain best results. Ensure agitation of spray mixture during application.

Aerial application:

Aerial application of **DISGRAN 750 WDG** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS 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 to 35 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 aurally at a lower volume rate than recommended above.
- Droplet coverage: 30 to 40 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 300 to 350 micron is recommended. Limit the production of fine droplets, less than 150 micron (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 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.
- The use of a suitable drift retardant adjuvant and/or low drift nozzles (e.g. straight stream nozzles) is recommended. In the case of fixed-wing aircraft flying at a speed faster than 130 mph, the maximum deflection angle of the nozzles or spray stream, as measured from a horizontal straight backwards orientation, may not exceed 30 degrees. In the case of slower flying fixed wing aircraft the maximum deflection angle, as described above, may not exceed 55 degrees.
- 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 15 km per hour.
- 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

TABLE 1: Pre-emergence application rate for **DISGRAN 750 WDG** in wheat.

<i>Crop</i>	<i>Dosage rate / ha</i>	<i>Remarks</i>
<u>Wheat</u>	37.5 g	Ground application.

TABLE 2: Post-emergence application rates of **DISGRAN 750 WDG** in wheat, oats and barley.

<i>Crop</i>	<i>Dosage rate / ha</i>	<i>Remarks</i>
<u>Wheat, Oats & Barley</u>	13 g	Ground application: Apply when wheat, oats or barley are in the 2- to 6-leaf stage.
	13 g to 15 g	Aerial application: Use 13 grams per hectare if Wild radish is not bigger than the 4-leaf stage.

TABLE 3: Post-emergence application rates of **DISGRAN 750 WDG** used in tank mixture with other herbicides.

<i>Crop</i>	<i>Dosage rate / ha</i>	<i>Remarks</i>
<u>Wheat, Oats & Barley</u>	13 g PLUS 0.6 to 0.75 ℓ / ha Campatop® 225 EC	Ground application: Use the 0.6 litre per hectare Campatop® 225 EC rate in the Western and Eastern Cape, when Spiny emex is in the cotyledon to 3-leaf stage. Use the 0.75 litre per hectare Campatop® 225 EC rate in the Western and Eastern Cape and Eastern Free State when Spiny emex is past the 3-leaf stage. Aerial application NOT recommended.
<u>Wheat & Barley</u>	13 g to 15 g PLUS 7 g Metsulfuron-methyl 20 WG	Apply DISGRAN 750 WDG in a tank mixture with Metsulfuron-methyl for control of Spiny emex. Use the lower dosage rate for ground application and the higher for aerial application.

TABLE 4: Application of **DISGRAN 750 WDG** for control of broadleaf weeds in a resistant Rye grass control programme with **Trifluralin 480 EC** and **Wrestler 800 EC**.

Crop	Dosage rate / ha	Remarks
Wheat and Barley Pre plant application:	1.5 ℓ Trifluralin 480 EC PLUS 30 g DISGRAN 750 WDG PLUS 2.0 ℓ Wrestler 800 EC	Apply pre-plant, pre-emergence.
Split pre & post plant application:	1.5 ℓ Trifluralin 480 EC pre-plant followed post plant* by 30 g DISGRAN 750 WDG PLUS 2.0 ℓ Wrestler 800 EC	Recommended under high rye grass infestation pressure and for improved control of weeds within the row. Apply Trifluralin 480 EC pre-plant and follow-up within 3 days after planting with Wrestler 800 EC , pre-emergence of weeds. Add DISGRAN 750 WDG to the post-plant application for improved broadleaf weed control.
* - Post-plant application (within 2 to 3 days after planting), but still pre-emergence of weeds and crop.		

NOTE

- Consult the labels of **Campatop® 225 EC**, **Metsulfuron-methyl**, **Wrestler 800 EC** and **Trifluralin 480 EC** for **USE RESTRICTIONS**, **WARNINGS** (including **RESISTANCE WARNINGS**), **PRECAUTIONS** and **DIRECTIONS FOR USE**.

WEED SPECIES CONTROLLED OR SUPPRESSED BY PRE-EMERGENCE APPLICATION OF DISGRAN 750 WDG (EASTERN AND WESTERN CAPE):	
Weeds controlled:	
Pimpernel	<i>Anagallis arvensis</i>
Cape marigold	<i>Arctotheca calendula</i>
Fumitory	<i>Fumaria muralis</i>
Narrow-leaved ribwort	<i>Plantago lanceolata</i>
Weeds controlled irregularly:	
Wild radish	<i>Raphanus raphanistrum</i>
Weeds suppressed*:	
Spiny emex	<i>Emex australis</i>
Italian ryegrass	<i>Lolium multiflorum</i>
Sorrel	<i>Oxalis</i> spp.

(* Weed suppression is a visual reduction of the weed population and/or vigour, when compared with an untreated area).

Notes regarding pre-emergence weed control:

- Weeds not controlled successfully by means of pre-emergence application of **DISGRAN 750 WDG** (e.g. Wild radish) must be treated post-emergence with a herbicide from another chemical group (e.g. **Bromoxynil** or **MCPA**).
- Do not use any other sulphonyl-urea herbicide for follow-up herbicide applications.

WEED SPECIES CONTROLLED BY POST-EMERGENCE APPLICATION OF DISGRAN 750 WDG (EASTERN AND WESTERN CAPE):	
Weeds controlled:	
Cape wild mustard	<i>Sisymbrium capense</i>
Wild radish	<i>Raphanus raphanistrum</i>
Gunpowder weed	<i>Silene gallica</i>
Nettle leafed goosefoot	<i>Chenopodium murale</i>
Chickweed	<i>Stellaria media</i>
Stinkweed	<i>Pentzia</i> spp.
Weeds suppressed*:	
Yellow sorrel	<i>Oxalis pes-caprae</i>
Vetch	<i>Vicia</i> spp.
Corn spurry	<i>Spergula arvensis</i>
Fumitory	<i>Fumaria muralis</i>

(* Weed suppression is a visual reduction of the weed population and/or vigour, when compared with an untreated area).

Notes on post-emergence weed control:

- A tank mixture of **DISGRAN 750 WDG** and **Campatop® 225 EC** can be used if Spiny emex (*Emex australis*) and/or Cape marigold (*Arctotheca calendula*) is present in the Eastern and Western Cape, or Climbing knotweed (*Bilderdykia convolvulus*) in the eastern Free State.
- *Emex australis* can also be controlled with a tank mixture of **DISGRAN 750 WDG** and **Metsulfuron-methyl** in the Eastern and Western Cape.

The following products mentioned in this label may be replaced with equivalent products:

- **DISGRAN 750 WDG** (L 7473) = **TRIASON 750 WDG** (L 7472) = **TRIASULFURON 75 WDG** (L 10038),
- **CAMPATOP® 225 EC** (L 5320 / N-AR 1115) = **BROMOXYNIL 225 EC** (L 4466 / W 130530) = **BROMOXYNIL 225 EC** (L 8340),
- **WRESTLER 800 EC** (L 8758) = **PROCARB 800 EC** (L 8746) (**Prosulfocarb**) and
- **TRIFLURALIN 480 EC** (L 4555) = **RIFLE 480 EC** (L 8137).

TRIASULFURON 75 WDG and/en **BROMOXYNIL 225 EC** are registered products of / is geregistreeerde produkte van
CROPASURE (PTY) LTD.

CAMPATOP® 225 EC is a registered trade mark of / is 'n geregistreeerde handelsmerk van
VILLA CROP PROTECTION (PTY) LTD.

DISGRAN 750 WDG, WRESTLER 800 WDG and/en **RIFLE 480 EC** are registered products of / is geregistreeerde produkte van
VILLA CROP PROTECTION (PTY) LTD.

TRIFLURALIN 480 EC, PROCARB 800 WDG, BROMOXYNIL 225 EC and/en **TRIASON 750 WDG** are registered products of / is geregistreeerde produkte van
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