# DIRECTIONS FOR USE ENCLOSED Batch Number:

### Herbicide



## **GRAINWATCH 400 WDG**

Reg. No. L 10719 Act No. 36 of 1947

3: 4/8/2022 - Nov2022



A water dispersible granular herbicide for the control of weeds in crops as indicated

#### **ACTIVE INGREDIENT**

carfentrazone (triazolinone)

400 g/kg

**GROUP** 

14

**HERBICIDE** 



DANGER

#### Hazard Statements:

May be harmful in contact with skin. Causes serious eye damage. Causes mild skin irritation. May cause respiratory irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

Avoid breathing dust, fume, gas, mists, vapours or spray.

Avoid release into the environment. Store in a well-ventilated place.

Keep container tightly closed.



Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD. Co. Reg. No. 1983/008184/07 P.O. Box 801, Kempton Park, 1620 Tel. (011) 396 2233

# Website: www.villacrop.co.za 24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

#### **GRAINWATCH 400 WDG**

Reg. No. L 10719 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 14

#### **ACTIVE INGREDIENT:**

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#### **WARNINGS**

#### Withholding periods:

Minimum number of days between the last application and harvest:		
Wheat & Barley	GRAINWATCH 400 WDG in a tank mixture with MCPA 400 SL and/or Alterate 600 WDG	42 days

#### **NOTE**

ABOVE-MENTIONED WITHHOLDING PERIODS REFER TO COMPLIANCE WITH LOCAL MAXIMUM RESIDUE LIMITS (MRL'S). HOWEVER, IT IS IMPORTANT TO NOTE THAT IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE TREATED CROP WILL BE EXPORTED, FIRST CONSULT THE RELEVANT IMPORTER OR EXPORTING BODY REGARDING THE USE OF THIS PRODUCT, MRL'S AND RECOMMENDED WITHHOLDING PERIODS.

#### **Hazard statements:**

May be harmful in contact with skin.
Causes serious eye damage.
Causes mild skin irritation.
May cause respiratory irritation.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Store away from food, feeds, seeds, fertilizers and other agricultural chemicals.
- Keep out of the reach of children, animals and uninformed persons.
- Re-entry: Do not enter treated area within one hour after treatment unless wearing protective clothing.

Although this product 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 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 concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

#### **PRECAUTIONS**

#### **Precautionary statements:**

Avoid breathing dust, fume, gas, mists, vapours or spray.

Wash hands and face thoroughly after handling. Do not touch eyes.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Use only outdoors in a well-ventilated area.

Avoid release into the environment.

IF ON SKIN: Get medical help.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical help if you feel unwell.

If skin irritation occurs: get medical help.

GRAINWATCH 400 WDG Page 2 of 6

Collect spillage.	
Store in a well-ventilated place. Keep container tightly closed.	
Store locked up.	
Dispose of contents/container to suitable landfill in accordance with local regulations.	

- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing, applying or before washing hands and face or change of clothing.
- Prevent drift onto adjacent susceptible crops, plants or grazing as this may cause serious 'off-target' damage.
- Extremely toxic to fish or aquatic life. Do not contaminate rivers, dams or areas not under treatment and to nearby water sources.
- Clean the applicator before using with other products dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- Cleaning of spray equipment:
  - Immediately after application, drain the spray tank and spray system and flush completely with a water plus ammonia solution. Thereafter, remove all nozzles and strainers and clean in a separate bucket with clean water. Replace the nozzles and strainers and flush the system again with clean water.
- TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Rinse the container three times with a volume of water equal to a quarter of that of the container. Puncture the triple rinsed container/bag and dispose of via an approved collector or recycler <a href="www.croplife.co.za">www.croplife.co.za</a>. Do not bury, burn, or donate the container/bag to any other parties that may use it as a container for food or beverages.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Carfentrazone-ethyl 400		
Sodium Dodecyl Sulfate	< 100 g/kg	
Ethylenediaminetetraacetic acid	< 100 g/kg	
disodium salt		

#### **RESISTANCE WARNING**

**GRAINWATCH 400 WDG** is a group code 14 herbicide. Any weed population may contain individuals naturally resistant to **GRAINWATCH 400 WDG** and other group code 14 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **GRAINWATCH 400 WDG** or any other group code 14 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.

#### Mode of Action:

**GRAINWATCH 400 WDG** is a selective, contact herbicide, absorbed by foliage with limited translocation. It acts through the inhibition of protoporphyrinogen oxidase (PPO) resulting in accumulation of photosensitizing porphyrins; these react with oxygen, in light, to form reactive species that cause lipid peroxidation and membrane disruption.

#### **USE RESTRICTIONS**

- Serious crop injury may occur if spray or spray drift comes into contact with foliage of broadleaf crops, fruit and/or immature bark of trees, vines or adjacent non-target crops that are not under treatment.
- Do not apply GRAINWATCH 400 WDG to crops under stress due to drought, water logging, cold, pests
  or diseases, nutrient or lime deficiency or other factors reducing plant growth and crop stand. Crop
  competition is vital for weed control with GRAINWATCH 400 WDG, MCPA 400 SL and Alterate 600
  WDG.
- Do not spray GRAINWATCH 400 WDG to cereals under sown with legumes, clovers or pastures.
- Grass herbicides must not be applied within seven (7) days after a GRAINWATCH 400 WDG application.
- DO NOT apply by air.
- **GRAINWATCH 400 WDG** could, under certain circumstances, cause some temporary leaf speckling and necrosis, however the crop will outgrow these symptoms under good growing conditions. This will not have an impact on yield. The circumstances whereby phytotoxicity could occur is as follows:

GRAINWATCH 400 WDG Page 3 of 6

- DO NOT apply GRAINWATCH 400 WDG in tank mixtures with products other than the ones mentioned on the label.
- ii. **DO NOT** apply with fungicides.
- iii. **Prevent** spraying on wet leaves i.e., early in the morning when dew is present.

#### Re-cropping intervals and crop rotation guidelines:

- There is no restriction on the planting of any succeeding or rotational crop after the application of GRAINWATCH 400 WDG. All crops can be sown one (1) month after an application of GRAINWATCH 400 WDG.
- Full consideration should be given to the minimum re-cropping intervals of any partner herbicide used in tank mixture with **GRAINWATCH 400 WDG**.

Re-cropping Intervals\*:

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The following waiting periods should lapse between application of GRAINWATCH 400 WDG and the		
planting of follow-up crops so as to prevent damage.		
	Follow-up crops	Waiting period
Tank mixture with MCPA 400 SL	Grass crops	Nil
Tank mixture with Alterate 600 WDG / Alliante 600 WDG	Wheat	5 months
	Barley, Oats	6 months
	Maize, Sunflowers	10 months
	All other crops	12 months

<sup>\*</sup> Re-cropping interval = time period between the last application of GRAINWATCH 400 WDG and the anticipated date of planting of a follow-up crop.

#### **DIRECTIONS FOR USE:** Use only as directed.

#### **General** information:

- **GRAINWATCH 400 WDG** works by contact and rapidly 'burns' / scorches the leaves of the targeted weeds which then become necrotic and die shortly after being treated. It is thus required to achieve an even overall droplet coverage / distribution on the targeted weed plants.
- For optimum results, apply **GRAINWATCH 400 WDG** when weeds are young and actively growing i.e., weeds growing in moist soils.
- Weeds growing under stress conditions may be less susceptible to GRAINWATCH 400 WDG.
- The time period for final die-back of weeds varies according to the weed species and prevailing environmental conditions.
- The ideal pH for spray water is between 5 and 7, thus if using alkaline water, the use of a suitable buffer is required such as **Commodobuff / Aquabuff**.

#### Compatibility:

- GRAINWATCH 400 WDG is compatible with Slash 710 SG / Glygran 710 SG / Lynch 710 SG, CLASS ACT NG<sup>®</sup> (L 10477), Alliante 600 WDG / Alterate 600 WDG, MCPA 400 SL and INTERLOCK<sup>®</sup> (L 10254 / W 130875 / N-AR 1856).
- The compatibility of **GRAINWATCH 400 WDG** with other products may be influenced by various factors. As variable factors are inconsistent, a physical compatibility test must always be performed before such a tank mixture is sprayed.
- Only use GRAINWATCH 400 WDG in tank mixtures with the recommended products listed on the label.
- Do not mix **GRAINWATCH 400 WDG** with grass herbicides when used in cereal crops.

#### Mixing instructions:

- Half fill the spray tank with clean water and ensure agitation.
- Mix the required quantity of GRAINWATCH 400 WDG in a small quantity of water to make a smooth cream.
- Add this to the spray tank and fill with water to the required final volume while adding the partner herbicide product.
- Maintain continuous suspension in the spray tank by means of proper agitation.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g., overnight.

#### Application:

 Apply by means of a calibrated tractor-mounted boom sprayer or knapsack sprayer, in good working order, equipped with flat fan nozzles, which delivers at least 200 litres spray mixture per hectare.

GRAINWATCH 400 WDG Page 4 of 6

#### Cleaning spray equipment

• It is essential to rinse the spray tank and all hoses with the recommended rate of **Protank® liquid cleaner** according to the product label. Allow this solution to stand in the spray equipment for 15 minutes; empty the spray equipment; repeat the rinsing for 15 minutes; rinse all equipment with water. Nozzles and fitters must be cleaned individually. Rinse water and solution should be drained in a cesspool or drain where it will not contaminate any water source.

#### **APPLICATION RATES**

APPLICATION RATES			
Crop	Dosage rate	Remarks	
Arable land Pre-plant "burn down" weed control application	40 to 70 g / ha <b>PLUS</b>	Apply <b>GRAINWATCH 400 WDG</b> when weeds are actively growing. Complete coverage of the weeds is important.	
	1.0 to 1.5 kg / ha <b>Slash 710 SG</b>	Use the higher dosage rate when high infestation pressure exists and/or to control difficult to control species and/or when conditions are not favourable for weed control	
	PLUS	(refer "NOTES" below). The addition of Interlock® (at a rate of 200 to	
	1.0 <i>l</i> / 100 <i>l</i> water (1.0 % V/V)  Class Act NG®	300 mℓ per hectare) is important where drift management is important.	
Small grains Wheat & Barley	25 g / ha	Apply the tank mixture as a post-emergence application of both crop and weeds. Apply as	
	PLUS	an overall application (at least 200 litres of water per hectare), ensuring even droplet	
	500 mℓ / ha <b>MCPA 400 SL</b> *	distribution and thorough overall coverage of the target weeds.	
	25 g / ha	Wheat: Application must be between growth stages 7 and 13 according to the list of growth stages	
	PLUS	issued by the ARC-Small Grain Centre, Bethlehem.	
	500 mℓ / ha <b>MCPA 400 SL</b>	Barley: Application should be made when the crop is	
	PLUS	in the 5- to 6-leaf stage.	
	3.5 g / ha Alterate 600 WDG*	<b>DO NOT</b> apply later than six (6) weeks after weed emergence.	
Tree crops & Vines Apples, Pears, Peaches,			
Plums, Nectarines, Citrus, Coffee, Olives, Pecan Nuts, Macadamia Nuts, Avocado, Mango, Guava, Banana, Papaya, Litchi, Kiwi Fruit, Tree nuts (Almonds, Cashews, Chestnuts, Hazelnuts, Macadamia nuts,	25 g / ha	Shield young vines/trees/bushes with immature bark during application or use a	
	PLUS	covered sprayer.  Apply as a directed interrow spray for the	
	1.5 kg / ha <b>Slash 710 SG</b>	control of difficult to control weeds when actively growing (ideal stage when weeds are 10 to 20 cm in height).	
	PLUS	The addition of <b>Interlock</b> ® (at a rate of 200 to	
Pecans, Pistachio nuts, Walnuts, Coconut, Brazil nuts and Pine nuts), Granadilla, Hops, Wine & Table Grapes	1.0 <i>t</i> / 100 <i>t</i> water (1.0 % V/V)  Class Act NG®	300 m/ per hectare) is imperative where drift management is important, to minimize risk with contact with foliage, fruit and bark.	

GRAINWATCH 400 WDG Page 5 of 6

WEED SPECIES NORMALLY CONTROLLED BY GRAINWATCH 400 WDG IN TANK MIXTURE WITH SLASH 710 SG AT RECOMMENDED DOSAGE RATES		
Amaranthus hybridus	Common pigweed	
Acanthospermum hispidum	Upright starbur	
Argemone ochreuleuca	White flowered Mexican poppy	
Bidens pilosa	Common blackjack	
Crotalaria sphaerocarpa	Mealie Crotalaria	
Datura ferox	Large thorn apple	
Digitaria sanguinalis	Crab finger grass	
Eleusine coracana (= E.indica / africana)	Goose grass	
Portulaca oleracea	Purslane	
Tagetes minuta	Khaki weed	

WEED SPECIES NORMALLY CONTROLLED BY GRAINWATCH 400 WDG IN TANK MIXTURE WITH MCPA 400 SL AND/OR ALTERATE 600 WDG AT THE RECOMMENDED DOSAGE RATES		
Emex australis	Spiny emex	
Erodium moschatum	Musk heron's bill	
Exomis microphylla	Dogbush	
Malva parviflora	Small mallow	
Pentzia suffruticosa	Karoobush	
Raphanus raphanistrum*	Wild radish	
Sonchus oleraceus	Sowthistle	
Trifolium repens	White clover	
Urtica dioica	Stinging nettle	

<sup>\*</sup> Variable control of weed application should be made before the 4-leaf stage.

#### Important notes on weeds controlled:

- Weeds germinating after the application of GRAINWATCH 400 WDG plus Slash 710 SG or MCPA 400 SL tank mixture will not be controlled.
- Other weeds species, not present during the development trials of **GRAINWATCH 400 WDG**, may also be controlled successfully. However, the registration holder cannot guarantee control of unlisted weed species or when application was made under adverse conditions such as (but not limited to) drought, flood stress, extreme temperatures, weeds that have grown beyond susceptible stage, etc.).

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

- SLASH 710 SG (L 8450 / W 130058 / N-AR 2190) = GLYGRAN 710 SG (L 8449) = LYNCH 710 SG (L 8670) (Glyphosate),
- COMMODOBUFF (L 5390 / N-AR 1107) = AQUABUFF (L 5451 / W 130060),
- MCPA 400 SL (L 5795 / W 130452 / N-AR 1092) = MCPA 400 SL (L 5793 / N-AR 1092) and
- ALTERATE 600 WDG (L 9915) = ALLIANTE 600 WDG (L 9917) (Metsulfuron-methyl).

SLASH 710 SG, MCPA 400 SL and ALTERATE 600 WDG are registered products of Universal Crop Protection (Pty) Ltd.

GLYGRAN 710 SG, COMMODOBUFF, AQUABUFF, MCPA 400 SL and ALLIANTE 600 WDG are registered products of Villa Crop Protection (Pty) Ltd.

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GRAINWATCH 400 WDG Page 6 of 6