

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

Herbicide



# CIRCUIT 750 WDG

Reg. No. L 11287 Act No. 36 of 1947

2: 17/01/2023 - Aug2024

A water dispersible granule herbicide used for the selective post-emergence control of weeds in wheat.

GROUP 2 HERBICIDE

## ACTIVE INGREDIENT

sulfosulfuron (sulfonyl urea)

750 g/kg



WARNING

### Hazard Statements:

Causes mild skin irritation.  
Causes serious eye irritation.  
Harmful if inhaled.  
Very toxic to aquatic life with long lasting effects.

### Precautionary Statements:

Avoid release into the environment.  
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

kg

**villa**

UN Number: 3077

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](http://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)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

**CIRCUIT 750 WDG**

Reg. No. L 11287 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: 2

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**WARNINGS****Withholding periods:**

Minimum number of days between the last application and harvest:		
<b>CIRCUIT 750 WDG</b> solo	Wheat	0 days
<b>CIRCUIT 750 WDG</b> in a tank mixture with <b>Bromoxynil 225 EC</b>	Wheat	40 days
<b>CIRCUIT 750 WDG</b> in a tank mixture with <b>Flumetsulam 800 WDG</b>	Wheat	30 days

**Hazard statements:**

Causes mild skin irritation.
Causes serious eye irritation.
Harmful if inhaled
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- **Do not** exceed dosage rate as it may result in crop damage.
- 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 remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until after spray deposit has dried unless wearing protective clothing.
- **In case of poisoning immediately call a doctor and make this label available to him/her.**

**Aerial application:**

Notify all inhabitants in the immediate vicinity of the lands to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further 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 event of any uncertainty.**

## PRECAUTIONS

### Precautionary statements:

Avoid breathing dust, mists, vapours or spray.
Wash hands thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: get medical help.
If eye irritation persists: Get medical help.
Collect spillage.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Do not handle until all safety precautions have been read and understood.
- Wash with soap and water after use and after accidental skin contact.
- Wash contaminated clothing after use.
- Sustain herbicide-use application records and documentation for all fields for future reference.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Thoroughly clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- The applicator should not be used for applying chemicals other than herbicides.
- **TRIPLE RINSE EMPTY PLASTIC BAG AS FOLLOWS** Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces 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 bag to any other parties that may use it as container for foodstuffs.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain. Thereafter rinse the empty container three (3) 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.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Sulfosulfuron	75 %
Sodium dodecyl sulfate	<5%
Sodium phosphate dodecahydrate	<5%

## FIRST AID MEASURES

- **General advice:** Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.
- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. **Obtain medical attention.**
- **Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation occurs.**
- **Eyes:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Obtain medical attention if eye irritation persists.**
- **Ingestion:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

- **Advice to physician:** Treat symptomatically and supportively. No specific antidote known.

### **RESISTANCE WARNING**

**CIRCUIT 750 WDG** is part of the sulfonylurea group of herbicides, that function by inhibiting the acetolactate synthase enzyme (ALS inhibitors). Certain weeds have developed resistance to these ALS inhibiting herbicides. These resistant weeds will not be controlled after a **CIRCUIT 750 WDG** application and because it is not possible to determine whether the population you are treating is resistant or not, Universal Crop Protection will not take responsibility for poor control obtained on these resistant weeds.

**CIRCUIT 750 WDG** is a group code 2 herbicide. Any weed population may contain individuals naturally resistant to **CIRCUIT 750 WDG** and any other group code 2 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **CIRCUIT 750 WDG** or any other group code 2 herbicides.

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:**

Sulfosulfuron is a selective, systemic herbicide, absorbed by roots and leaves, translocated acropetally and basipetally in the phloem and xylem to meristem tissues. Branched chain amino acid synthesis inhibitor. Inhibition of acetolactate synthase (ALS, also known as acetohydroxy acid synthase, AHAS), blocking the biosynthesis of the amino acids valine, leucine and isoleucine, hence stopping cell division and plant growth.

### **USE RESTRICTIONS**

- Avoid excessive overlapping of spray swaths and double spraying.
- Over-application, application at the incorrect growth stage, or any other use not in accordance with the directions on this label may cause crop damage.
- When **CIRCUIT 750 WDG** is applied on soils with a pH higher than 7 and/or in soils with free lime, the residual activity of the product can be extended and result in crop damage of crops other than wheat.
- Only to be used in the Western, Southern and Eastern Cape.
- **CIRCUIT 750 WDG** should not be applied together with a fertiliser or 1 week before/after fertilisation.
- Weed control may be negatively influenced by one or more of the following conditions:
  - use of the herbicide on light sandy soils.
  - use of the herbicide on stony soil surfaces.
  - use of the herbicide on soils with high organic content.
  - use of the herbicide where the soil has a low pH.
  - use of the herbicide with no follow up rain/irrigation.
  - use of the herbicide under low wheat plant stand.
  - use of the herbicide onto wet or dew-covered leaves that may lead to run-off.
  - use of the herbicide during cold and dry conditions.
  - use of the herbicide when the weeds are frost damaged or under any other stress.

### **DIRECTIONS FOR USE: Only use as directed.**

#### **Re-cropping intervals \*:**

The following waiting periods should lapse between application of **CIRCUIT 750 WDG** and the planting of follow-up crops so as to prevent damage

<b>Wheat</b>	<b>0 days</b>
<b>All other crops</b>	<b>18 months</b>

\* re-cropping interval = time period between the last application of **CIRCUIT 750 WDG** and the anticipated date of planting of a follow-up crop.

#### **Compatibility:**

- **CIRCUIT 750 WDG** is compatible with **Villa 51/Wen 51, INTERLOCK®** (L 10254 / W 130875 / N-AR 1856), **Bromoxynil 225 EC/Campatop 225 EC** and **Flumetsulam 800 WDG/Laurel 800 WDG**.
- The compatibility of **CIRCUIT 750 WDG** may be influenced by several factors. As factors influencing compatibility may vary, a physical compatibility test must always be performed before such tank mixture is sprayed.

- When **CIRCUIT 750 WDG** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label.

#### **Mixing instructions:**

- Half fill the spray tank with clean water.
- Pre-mix the required amount of **CIRCUIT 750 WDG** and other dispersible granular compatible herbicides separately and then add through a 50-mesh sieve to the tank, while agitating.
- Add the required amount of emulsion type compatible herbicides (**Bromoxynil 225 EC**) to the tank and top up with clean water to the desired volume.
- Add the required amount of adjuvants to the mixture (**Interlock® & Villa 51**).
- Fill tank to desired volume.
- Maintain agitation during mixing and application.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g., overnight.

#### **Ground application:**

- A tractor mounted boom sprayer can be used to apply **CIRCUIT 750 WDG**
- The sprayer should be calibrated to spray 200 to 300 litres of water per hectare.
- The equipment should be cleaned before and after application.
- Ensure even distribution of product by applying **CIRCUIT 750 WDG** at a constant speed and pressure. Also use suitable nozzle types such as double outlet flat fan (e.g., Turbo Twinjet) nozzles.

#### **Aerial application:**

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 40 litres per hectare is recommended. As this product has been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** 30 to 40 droplets per cm<sup>2</sup> must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 300 to 400 microns is recommended. Limit the production of fine droplets less than 150 microns 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.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The use of a registered drift retardant and / or low drift aerial spraying nozzle (e.g., straight stream nozzle) is recommended.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wing speed exceeds 10 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.
- 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.

#### **Post Spray Equipment Cleaning**

It is essential to rinse the spray tank and all hoses with a 0.1% solution of either calcium chloride or ammonium hydroxide or 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 with a 0.1 % solution of calcium chloride or ammonium hydroxide 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**

### **WHEAT**

#### **1.1 CIRCUIT 750 WDG applied as a solo product, with adjuvants for post-emergence weed control.**

- Apply when the weeds are fully germinated but not later than the 4-leaf stage (once off / single dose application).
- Apply at least 200 to 300 litres of water per hectare.

<b>CIRCUIT 750 WDG</b> 40 g/ha	<b>Plus</b>	<b>Plus</b>
<b>OR</b>		
20 g (max up to 2 leaf stage of the weed) followed 2 to 3 weeks later with 20 g	<b>Villa 51</b> 0.1 to 0.25 % (100 to 250 m/ha)	<b>Interlock®</b> 200 to 250 m/ha
<b>Weeds controlled</b>		
<i>Arctotheca calendula</i>	Cape marigold	
<i>Bromus diandrus</i>	Ripgut brome	
<i>Cenia turbinata</i>	Mayweed	
<i>Hordeum murinum</i>	Wild barley	
<i>Polygonum aviculare</i>	Prostrate knotweed	
<i>Raphanus raphanistrum</i>	Wild radish	

#### **1.2 CIRCUIT 750 WDG applied in a tank mixture with Bromoxynil 225 EC for weed control in wheat**

- Apply when the weeds are fully germinated but not later than the 4-leaf stage.
- The use of **Bromoxynil 225 EC** in combination with a wetting agent is **not advisable** as this may lead to crop damage.
- Apply at least 200 to 300 litres of water per hectare.
- Refer to the **Bromoxynil 225 EC** label for list of additional weeds controlled by this product, as well as for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>CIRCUIT 750 WDG</b> 40 g/ha	<b>Plus</b>
	<b>Bromoxynil 225 EC</b> 1000 m/ha
<b>Weeds controlled</b>	
<i>Arctotheca calendula</i>	Cape marigold
<i>Bromus diandrus</i>	Ripgut brome
<i>Emex australis</i> *	Spiny emex
<i>Raphanus raphanistrum</i>	Wild radish

\* Weeds will only be controlled if smaller than 3<sup>rd</sup> leaf stage.

#### **1.3 CIRCUIT 750 WDG applied in a tank mixture with Flumetsulam 800 WDG, Villa 51 and Interlock® for weed control in wheat**

- Apply when the weeds are fully germinated but not later than the 4-leaf stage.

- Apply at least 200 to 300 litres of water per hectare.
- Refer to the **Flumetsulam 800 WDG** label for list of additional weeds controlled by this product, as well as for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>CIRCUIT 750 WDG</b> 40 g/ha	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>
	<b>Flumetsulam 800 WDG</b> 6.25 to 10 g/ha	<b>Villa 51</b> 0.1 to 0.25 % (100 to 250 m/ha)	<b>Interlock®</b> 200 to 250 m/ha
<b>Weeds controlled</b>			
<i>Arctotheca calendula</i>	Cape marigold		
<i>Bromus diandrus</i>	Ripgut brome		
<i>Raphanus raphanistrum</i>	Wild radish		

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

- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315),
- **BROMOXYNIL 225 EC** (L 4466 / W 130530) = **CAMPATOP 225 EC** (L 5320 / N-AR 1115 / W1301421) and
- **FLUMETSULAM 800 WDG** (L 8062 / W1301369) = **LAUREL 800 WDG** (L 8061 / N-AR 1339 / W1301422).

**WEN 51, VILLA 51 BROMOXYNIL 225 EC** and **FLUMETSULAM 800 WDG** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**

**CAMPATOP 225 EC** and **LAUREL 800 WDG** are registered products of **VILLA CROP PROTECTION (PTY) LTD.**

**INTERLOCK®** and **PROTANK® LIQUID CLEANER** are registered trademarks of **WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.**