

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



Herbicide

# HORNET 480 SL

Reg. No. L 7708 Act No. 36 of 1947  
N-AR 1338 / W 1301415

3: 18/01/2023 – Nov2023

A selective contact soluble liquid herbicide for the post-emergence control of certain annual broad-leaved weeds and Yellow nutsedge in crops as indicated.

## ACTIVE INGREDIENT

bendioxide 480 g a.i./ℓ

GROUP

6

HERBICIDE



DANGER

### Hazard Statements:

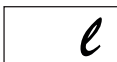
May be harmful if swallowed.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Harmful to aquatic life with long lasting effects.

### Precautionary Statements:

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

DIRECTIONS FOR USE ENCLOSED

Batch Number:  
Date of Manufacture:



**villa** 

UN Number: 1760

Registration holder: VILLA CROP PROTECTION (PTY) LTD.  
Co. Reg. No. 1992/002474/07  
65 Botes Road, Glen Marais, Kempton Park, 1619  
Tel. (011) 396 2233  
Website: [www.villacrop.co.za](http://www.villacrop.co.za)

IN CASE OF POISONING / 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)

**HORNET 480 SL**

Reg. No. L 7708 Act No. 36 of 1947

N-AR 1338 / W1301415

HRAC HERBICIDE GROUP CODE: 6

**ACTIVE INGREDIENT:**

bendioxide .....480 g a.i./ℓ

Registration holder:

**VILLA CROP PROTECTION (PTY) LTD.**

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

65 Botes Road, Glen Marais, Kempton Park, 1619

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**WARNINGS****Hazard statements:**

May be harmful if swallowed.
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Harmful to aquatic life with long lasting effects

- Do not contaminate dams, rivers, lakes or any other water sources.
- Store in a cool, dry, well-ventilated area.
- 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 within 1 day after treatment unless wearing protective clothing.
- **In case of poisoning immediately call a physician and make this label available to him/her.**

**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:**

Do not breathe fume mists or vapour.
Wash hands and face thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical help.
IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Get emergency medical help immediately.
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 emergency medical help immediately.
See specific treatment on this label.
If skin irritation or rash occurs: Get medical help.
Wash contaminated clothing before use.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Do not eat, drink or smoke while mixing and applying, 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.

- Clean applicator after use and dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** 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 (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.

<b>Relevant hazardous components</b>	
<b>Bendioxide</b>	480 g/l
Caustic soda	<10 g/l

### **SYMPTOMS OF POISONING**

Symptoms of intoxication can include nausea, diarrhoea, trembling, weakness and irregular breathing.

### **FIRST AID TREATMENT**

**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 if needed. Get medical help.

**Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap for at least 15 to 20 minutes. Do not rub the skin. **Get emergency medical help immediately.**

**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. **Get emergency medical help immediately.**

**Ingestion:** **Get medical help** 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 and give the person a glass of water to drink.

### **ADVICE TO PHYSICIAN**

No antidote available. Treat symptomatically and supportively. In cases of ingestion of large amounts, gastric lavage may be indicated.

### **RESISTANCE WARNING**

**HORNET 480 SL** is a group code 6 herbicide. Any weed population may contain individuals naturally resistant to **HORNET 480 SL** and other group code 6 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **HORNET 480 SL** or any other group code 6 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**

Bendioxide is a photosynthetic electron transport inhibitor at the photosystem II receptor. It is a selective contact herbicide, absorbed mainly by the foliage, with very little translocation, but also absorbed by the roots, with translocation acropetally in the xylem.

### **USE RESTRICTIONS**

- **Potatoes:** Only use on cultivars **Up to date, BP 1** and **Van der Plank**. **HORNET 480 SL** may cause temporary leaf burn, but will not adversely affect the yield.
- If **HORNET 480 SL** is applied as a tank mixture with **Atrazine**, follow-up crops other than maize, may be damaged. Consult the **Atrazine** label for details.
- **HORNET 480 SL** may harm legume crops if an organophosphate insecticide was applied to the soil during planting.
- If frost or very cold temperatures occur, or are expected, it is advised not to apply **HORNET 480 SL** since the crop may be harmed.
- **HORNET 480 SL DOES NOT** control grasses and Purple nutsedge (*Cyperus rotundus*).

- Warm and humid weather is required for optimal weed control. A decrease in efficacy can be expected under dry conditions.
- Weeds and Yellow nutsedge that have not yet emerged at the time of application will not be controlled.

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

**Compatibility:**

**HORNET 480 SL** is compatible with **Atrazine 500 SC, Cantron® 480 SC, Terbuweed 600 WDG/Terbucide 600 WDG, TERBUSIEN SUPER 600 SC (L 5435 / N-AR 1110), Villa 51 and Summit Super.**

**Application:**

- Apply **HORNET 480 SL** as an early post-emergence application when weeds are young and actively growing.
- Good coverage of the weeds is essential since **HORNET 480 SL** is a contact herbicide. Rain or irrigation within 8 hours after application may adversely affect the effectiveness of the **HORNET 480 SL** treatment.
- Apply **HORNET 480 SL** in a minimum of 300 litres water per hectare. Use flat fan or hollow cone nozzles at a pressure of 350 kPa.
- Use accurately calibrated equipment with suitable correctly spaced nozzles and an effective agitation mechanism.

**APPLICATION RATES**

**1.1 VARIOUS CROPS: APPLICATION RATES FOR HORNET 480 SL FOR THE CONTROL OF BROAD-LEAVED WEEDS.**

<b>Crop</b>	<b>Dosage</b>	<b>Remarks</b>
<b><u>Beans</u></b> (Dry and green beans)	2 to 3 ℓ / ha	Apply at 2 litres per hectare after the beans have reached first trifoliate stage, but before reaching the second trifoliate stage. Thereafter the 3 litres per hectare rate can be used. Temporary leaf burn may occur, but will not adversely affect yield.  In the interior areas, especially with a high sun- and light intensity, do not exceed the 2 litres per hectare rate on green beans as it may cause crop damage.
<b><u>Groundnuts</u></b>	2 to 3 ℓ / ha	Apply after the first trifoliate stage has been reached. A follow-up application can be performed if late germinating weeds are a problem.
<b><u>Soybeans</u></b>	2 to 3 ℓ / ha	Apply after the second trifoliate stage has been reached. A follow-up application can be performed if late germinating weeds are a problem. Temporary leaf burn may occur, but will not adversely affect yield.
<b><u>Peas</u></b>	2 to 3 ℓ / ha	Apply when the crop has reached a height of 5 to 15 cm. The size of the weeds must correspond with the growth stages as listed in the “ <b>WEED CONTROL</b> ” table below.
<b><u>Potatoes</u></b>	2 to 3 ℓ / ha	Apply after the crop has fully emerged and a good population density has been attained, but before flower buds develop. Shading of the weeds by large potato plants can reduce weed control.
<b><u>Maize, Grain sorghum, Wheat &amp; other Small Grain Crops</u></b>	2 to 3 ℓ / ha	<b>HORNET 480 SL</b> can be applied at any growth stage of grain crops. The size of the weeds must correspond with the growth stages as listed in the “ <b>WEED CONTROL</b> ” table below.

**1.2 VARIOUS CROPS: APPLICATION RATES FOR HORNET 480 SL FOR THE CONTROL OF CONTROL OF YELLOW NUTSEDGE.**

- Yellow nutsedge (*Cyperus esculentus*) that have emerged can be controlled if the following favourable conditions existed before and during application: warm, humid weather (relative humidity above 65 %) and sufficient soil moisture.

- A large percentage of Yellow nutsedge plants must have developed beyond the 4-leaf stage at the time of application.
- Apply a minimum dosage of 3 litres per hectare in at least 300 litres water per hectare. Refer to the table below for specific crops.
- In case of high Yellow nutsedge population densities in maize, grain crops, groundnuts and potatoes, the dosage rate must be increased to 4 litres per hectare. In extreme cases it can be increased to 5 litres per hectare. Use 500 litres water per hectare for these increased dosage rates. It is advised to make these applications with hollow cone nozzles at a pressure of 500 kPa with the addition of a suitable wetting or sticking agent.
- The period of weed control depends on the germination success of the Yellow nutsedge, as well as the conditions before, during and after application.
- A **second application** of **HORNET 480 SL** must be performed if re-growth or late germination of Yellow nutsedge occurs.
- A **second application** of **HORNET 480 SL**, 7 to 10 days after the first treatment, may also be necessary if the Yellow nutsedge has only been suppressed due to less favourable conditions and re-growth occurs. The addition of a suitable wetting or sticking agent is advised under these conditions.
- **HORNET 480 SL** will not control Yellow nutsedge under **unfavourable conditions** (drought, cold weather, dry windy conditions and low humidity).

#### Application rates of HORNET 480 SL for the control of Yellow nutsedge.

Crops	Dosage	Remarks
<b>Green and Dry beans, Soybeans &amp; Peas</b>	3 ℓ / ha	Do not apply more than 3 litres per hectare, since higher dosage rates may cause damage to the crops.
<b>Maize and Grain crops, Groundnuts &amp; Potatoes</b>	3 to 5 ℓ / ha	

#### 2.1 **MAIZE AND GRAIN SORGHUM: APPLICATION RATES FOR HORNET 480 SL FOR THE CONTROL OF BROAD-LEAVED WEEDS.**

##### Application rates of HORNET 480 SL plus Atrazine 500 SC.

Crop	Soil type	Dosage	Remarks
<b>Maize</b>	All soils	2 ℓ <b>HORNET 480 SL</b> <b>PLUS</b> 2 ℓ <b>Atrazine 500 SC</b> / ha	For improved control of Pigweed, Mexican Richardia, Dwarf marigold and Common dubbeltjie. Observe the warnings and restrictions on the <b>Atrazine 500 SC</b> label.
<b>Grain sorghum</b>	Only above 16 % clay		

#### WEEDS CONTROLLED BY HORNET 480 SL:

Botanical name	Common name	Leaf stage and Dosage	
		2 ℓ / ha	3 ℓ / ha
<i>Acanthospermum hispidum</i> *	Upright starbur	6	8
<i>Argemone subfusiformis</i>	Mexican poppy	4	6
<i>Bidens pilosa</i> *	Common blackjack*	4	6
<i>Chenopodium album</i>	White goosefoot	2	4
<i>Cleome monophylla</i>	Single leaved cleome	4	6
<i>Commelina benghalensis</i> **	Bengal commelina**		4
<i>Cyperus esculentus</i>	Yellow nutsedge	Refer "Control of Yellow nutsedge" above	
<i>Datura stramonium</i> *	Common thorn apple*	6	8
<i>Datura ferox</i> *	Large thorn apple*	6	8
<i>Galinsoga parviflora</i>	Small-flowered quickweed	4	6
<i>Hibiscus trionum</i>	Bladder hibiscus	4	6
<i>Ipomoea purpurea</i>	Morning glory		4
<i>Nicandra physaloides</i> *	Apple of Peru*	4	6
<i>Portulaca oleracea</i>	Common purslane	4	6
<i>Raphanus raphanistrum</i>	Wild radish	4	6
<i>Richardia brasiliensis</i> **	Mexican richardia**		2

<b>WEEDS CONTROLLED BY HORNET 480 SL:</b>			
<b>Botanical name</b>	<b>Common name</b>	<b>Leaf stage and Dosage</b>	
		<b>2 l / ha</b>	<b>3 l / ha</b>
<i>Schkuhria pinnata</i> **	Dwarf marigold**	2	4
<i>Senecio consanguineus</i>	Rag wort	4	6
<i>Sida spinosa</i>	Sida	4	6
<i>Tagetes minuta</i>	Tall khaki weed	4	6
<i>Tribulus terrestris</i> **	Common dubbeltjie**	2	4
<i>Xanthium strumarium</i> *	Large cockle bur*	6	8

\* If conditions are favourable, and the weeds are smaller than 4-leaf stage, these listed weeds can be controlled at 1.5 litres **HORNET 480 SL** per hectare.

\*\* These weeds are controlled variably.

<b>ADDITIONAL WEED SPECIES CONTROLLED BY A TANK MIXTURE OF HORNET 480 SL AND ATRAZINE 500 SC:</b>		
<b>Botanical name</b>	<b>Common name</b>	<b>Leaf stage and Dosage</b>
		<b>2 l / ha + 2 l / ha</b>
<i>Amaranthus brasiliensis</i>	Pigweed	4
<i>Amaranthus hybridus</i>	Cape pigweed	4
<i>Amaranthus spinosus</i>	Thorny pigweed	4

<b>IMPROVED CONTROL OF THE FOLLOWING WEED SPECIES BY A TANK MIXTURE OF HORNET 480 SL AND ATRAZINE 500 SC:</b>		
<b>Botanical name</b>	<b>Common name</b>	<b>Leaf stage and Dosage</b>
		<b>2 l / ha + 2 l / ha</b>
<i>Richardia brasiliensis</i>	Mexican richardia	4
<i>Schkuhria pinnata</i>	Dwarf marigold	4
<i>Tribulus terrestris</i>	Common dubbeltjie	4

**Post-emergence application of HORNET 480 SL plus Cantron® 480 SC plus Terbuweed 600 WDG/ Terbucide 600 WDG or Terbusien Super 600 SC plus Villa 51 or Summit Super for the control of Yellow nutsedge and certain broadleaf weeds in maize:**

#### **NOTES**

- Apply this post-emergence application as a follow up to a pre-emergence application of **Cantron® 480 SC** in tank mixture with **Metolachlor 800 EC** or **Metolachlor 915 EC/Platinum Plus 915 EC** or **Leap 840 EC/Premium 840 EC** as indicated on the registered labels.
- The adjuvants **Villa 51** or **Summit Super** must be used with all post-emergence applications of **HORNET 480 SL** plus **Cantron® 480 SC** plus **Terbuweed 600 WDG/Terbucide 600 WDG** or **Terbusien Super 600 SC** as indicated on the registered product labels.
- For optimum control of Nutsedge, apply **HORNET 480 SL** plus **Cantron® 480 SC** plus **Terbuweed 600 WDG/Terbucide 600 WDG** or **Terbusien Super 600 SC** on actively growing Nutsedge under moist conditions, 3 to 5 weeks after planting. Ensure that the application is made after the majority of the Nutsedges have germinated but before flowering. New germination of Nutsedge may occur if application was performed too early. Later applications, when the Nutsedges is in flower, will also give sub-optimal results.
- Refer to the **Cantron® 480 SC**, **Terbuweed 600 WDG/Terbucide 600 WDG** or **Terbusien Super 600 SC** label for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>HORNET 480 SL</b> 2000 to 2500 mℓ/ ha	<b>PLUS</b>	<b>PLUS</b>		<b>PLUS</b>
	<b>Cantron® 480 SC</b> 210 to 260 mℓ/ ha	<b>Terbuweed 600 WDG/ Terbucide 600 WDG</b> 800 g / ha	<b>OR</b> <b>Terbusien Super</b> <b>600 SC</b> 800 mℓ/ ha	<b>Villa 51</b> <b>0.1 %</b> <b>OR</b> <b>Summit Super</b> <b>0.15 to 0.3 %</b>
<b>WEEDS CONTROLLED</b>				
<b>THE FOLLOWING WEEDS ARE NORMALLY CONTROLLED AT THE DOSAGE RATE AS INDICATED ABOVE:</b>				
<b>Botanical name</b>		<b>Common name</b>		
<i>Bidens pilosa</i>		Common blackjack		
<i>Cyperus esculentus*</i>		Yellow nutsedge		
<i>Tagetes minuta</i>		Khaki bush		

**NOTES**

- Higher dosage rates of **Terbusien Super 600 SC** or **Terbuweed 600 WDG/Terbucide 600 WDG**, may be applied for control of additional broadleaf weed species, difficult to control weeds, high weed pressure situations and longer residual control of broadleaf weeds. Refer to the **Terbusien Super 600 SC** or **Terbuweed 600 WDG/Terbucide 600 WDG** labels for dosage rates, and a list of additional weeds controlled by this product.
- Consult the **Cantron® 480 SC** labels for additional broadleaf weeds that may also be controlled.

**SUGARCANE**

- POST-EMERGENCE APPLICATION OF HORNET 480 SL PLUS CANTRON® 480 SC PLUS VILLA 51 OR SUMMIT SUPER FOR THE CONTROL OF YELLOW NUTSEdge AND CERTAIN BROADLEAF WEEDS IN SUGARCANE.**

**NOTES**

- The adjuvants **Villa 51** or **Summit Super** must be used with all post-emergence applications of **HORNET 480 SL** plus **Cantron® 480 SC** as indicated on the registered product labels.
- For optimum control of Nutsedge, apply **HORNET 480 SL** plus **Cantron® 480 SC** on actively growing Nutsedge under moist conditions, 3 to 5 weeks after planting. Ensure that the application is made after the majority of the Nutsedges have germinated but before flowering. New germination of Nutsedge may occur if application was performed too early. Later applications, when the Nutsedges is in flower, will also give sub-optimal results.
- Refer to the **Cantron® 480 SC** label for **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

<b>HORNET 480 SL</b> 2000 to 2500 mℓ/ ha	<b>PLUS</b>	<b>PLUS</b>	<b>OR</b>
	<b>Cantron® 480 SC</b> 260 mℓ/ ha	<b>Villa 51</b> <b>0.1 %</b> (100 mℓ/ 100 litres)	<b>Summit Super</b> <b>0.3 %</b> (300 mℓ/ 100 litres)
<b>WEEDS CONTROLLED</b>			
<b>THE FOLLOWING WEEDS ARE NORMALLY CONTROLLED AT THE DOSAGE RATE AS INDICATED ABOVE:</b>			
<b>Botanical name</b>		<b>Common name</b>	
<i>Ageratum conyzoides</i>		Invading Ageratum	
<i>Amaranthus thunbergii</i>		Red pigweed	
<i>Bidens pilosa</i>		Common blackjack	
<i>Commelina benghalensis</i>		Bengal commelina	
<i>Cyperus esculentus</i>		Yellow nutsedge	
<i>Galinsoga parviflora</i>		Gallant soldier	
<i>Ipomoea obscura</i>		Obscure morning glory	
<i>Portulaca oleracea</i>		Purslane	
<i>Sida cordifolia</i>		Flannel weed	
<i>Solanum nigrum</i>		Black nightshade	
<i>Tagetes minuta</i>		Khaki bush	

Consult the **Cantron® 480 SC, Metolachlor 800 EC, Leap 840 EC/Premium 840 EC, Terbusien Super 600 SC, Terbuweed 600 WDG/ Terbucide 600 WDG, Metolachlor 915EC/Platinum Plus 915 EC, Villa 51 and Summit Super** labels for **WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE.**

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

- **CANTRON® 480 SC** (L 8365 / N-AR 1323 / W 130651) = **ASTRON® 480 SC** (L 8366) = **CANONNE 480 SC** (L 8735), (**Mesotrione**),
- **TERBUWEED 600 WDG** (L 8800) = **TERBUCIDE 600 WDG** (L 8799 / W 1301046) = **TERBUMAIS 600 WDG** (L 8798), (**Terbuthylazine**),
- **METOLACHLOR 800 EC** (L 7137) = **METOLACHLOR 800 EC** (L 7433),
- **METOLACHLOR 915 EC** (L 7841 / N-AR 1361 / W 1301418) = **PLATINUM PLUS 915 EC** (L 7844),
- **LEAP 840 EC** (L 8064 / N-AR 1103 / W 1301419) = **PREMIUM 840 EC** (L 8066) (**Acetochlor**),
- **VILLA 51** (L 8050 / N-AR 1090 / W 130454) = **WEN 51** (L 8315) and
- **SUMMIT SUPER** (L 8539) = **BENEFIT PLUS** (L 8538).

**ASTRON® 480 SC, METOLACHLOR 800 EC, METOLACHLOR 915EC, PREMIUM 840 EC and TERBUCIDE 600 WDG and TERBUMAIS 600 WDG** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**

**CANTRON® 480 SC, TERBUWEED 600 WDG, METOLACHLOR 800 EC, PLATINUM PLUS 915 EC, LEAP 840 EC, TERBUSIEN SUPER 600 SC, BENEFIT PLUS, VILLA 51, WEN 51 and SUMMIT SUPER** are registered products of **VILLA CROP PROTECTION (PTY) LTD.**

**CANONNE 480 SC** is a registered product of **CROPASURE (PTY) LTD.**

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