# Bentazone 480 SL

Reg. No. L7720 Act No. 36 of 1947

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

HRAC GROUP C3

Betazone 480 SL is a water-soluble concentrate, selective contact herbicide for use as a post-emergence treatment on annual and perennial weeds.



#### HAZARD STATEMENTS:

Harmful if swallowed. May cause allergic skin reaction. Causes serious eye irritation. May cause long lasting harmful effects to aquatic life.

**PRECAUTIONARY STATEMENTS:** Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product.

ACTIVE INGREDIENT

Bendioxide (thiadiazine)

480 g/l



HERBICIDE

Registered and Manufactured by: Rolfes Agri (Pty) Ltd. (Reg. No. 1998/013411/07) • 288 Mundt Street, Waltloo, 0184 Gauteng, RSA. • Tel: (012) 803-0145

#### Spill Response and Transport incidents

Spill Tech, Oil and chemical pollution control Tel: +27 (86) 100 0366 / +27 (83) 253 6618 www.spilltech.co.za



Emergency contact details Office Hour Poisoning Helpline Rolfes Agri (Pty) Ltd. Tel: +27 (12) 803 0145

#### WARNINGS:

- The use of BENTAZONE 480 SL on leguminous crops, planted with an organophosphate insecticide granular formulation, is not recommended because crop damage may occur. Consult the supplier for advice.
- Planting any crop other than maize in the same season, on land treated with a mixture of BENTAZONE 480 SL and atrazine, can lead to crop injury. Read atrazine label for use restrictions.
- RE-ENTRY INTERVAL: Do not enter treated area until spray deposit has dried unless wearing
  protective clothing.

#### DISCLIMER:

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 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:

- · If medical advice is needed, have container or label at hand.
- Keep out of reach of children.
- · Read carefully and follow all instructions.
- Avoid breathing gas/mist/vapours/spray.
- · Wash affected area thoroughly after handling.
- . Do not eat, drink or smoke when using this product.
- · Contaminated work clothing should not be allowed out of the workplace.
- · Avoid release to the environment.
- · Wear safety goggles, and face shield when handling this product.
- Specific treatment: For eye contamination, flush eyes immediately with water. Irrigate each
  eye continuously with 0.9% saline (NS) during transport. If dermal or ocular irritation persists,
  medical attention should be obtained without delay.
- Rinse mouth.
- IF SWALLOWED, get medical help.
- IF ON SKIN: Wash with soap and plenty of water.
- If eye irritation persists 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 or rash occur: get medical help.
- Take off contaminated clothing and wash it before reuse.
- Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler. Do not use empty containers for any other purpose.

### RELEVANT SUBSTANCES:

This product contains Bendioxide 480 g/Ł

# RESISTANCE WARNING:

For resistance management, **BENTAZONE 480 SL** is a group code C3 herbicide. Any weed population may contain individuals naturally resistant to **BENTAZONE 480 SL** and other group code C3 herbicides. The resistant individuals can eventually dominate the weed population if

these herbicides are used repeatedly. These resistant weeds may not be controlled by **BENTAZONE 480 SL** or any other group code C3 herbicide.

To prevent herbicide resistance:

 Avoid excessive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered products from different herbicide group codes.

Integrate other control methods (chemical, cultural, biological) into weed control programs.
 For specific information on resistance management contact the registration holder of this product.

## DIRECTIONS FOR USE: Use only as directed.

- BENTAZONE 480 SL does NOT control grasses and Red nutsedge (Cyperus rotundus).
- If danger of frost is imminent and/or the crop is under cold stress, do NOT use BENTAZONE
   480 SL.
- Apply BENTAZONE 480 SL to young and actively growing weeds, early post-emergence.
- Thorough wetting of the weeds is essential, because BENTAZONE 480 SL is a contact herbicide. The effect of BENTAZONE 480 SL may be cancelled out by rainfall or overhead irrigation within 8 hours after application.
- Use hollow cone or flat fan nozzles with a minimum spray pressure of 350 kPa.
- Apply BENTAZONE 480 SL in a minimum of 300 ℓ water per hectare.

## RECOMMENDATIONS FOR BROADLEAF WEED CONTROL:

- Late germinating weeds and nutsedge tubers which have not germinated at the time of spraying will not be controlled, and require re-spraying.
- Good weed control will be obtained under warm and humid weather conditions. Drought conditions before, during and after application will lead to poor weed control.

#### RECOMMENDATIONS FOR YELLOW NUTSEDGE CONTROL:

Favourable conditions before and during the time of spraying are of utmost importance for the control of germinated yellow nutsedge (*Cyperus esculentus*). These conditions include adequate soil moisture for optimum plant growth and warm, humid weather (relative humidity > 65 %). At the time of spraying the majority of yellow nutsedge plants should be beyond the 4-leaf stage. Apply a minimum of 3  $\ell$  **BENTAZONE 480 SL** / ha in not less than 300  $\ell$  water. Increase the rate to 4  $\ell$  **BENTAZONE 480 SL** / ha on tense stands of nutsedge in potatoes, groundnuts, maize, and grain sorghum. In extreme cases the rate should be increased to 5  $\ell$  / ha in a minimum of 500  $\ell$  water / ha. It is advisable to add a surfactant / sticker such as **AQUA-WET**, Reg. No. L6204, Act No. 36 of 1947 under these conditions. It is also recommended to use hollow cone nozzles and a spray pressure of 500 kPa.

The state of germination of yellow nutsedge, as well as the conditions prevailing before, during and after the spray operation as described above will determine the duration and degree of control.

If a second flush of yellow nutsedge has to be controlled or if regrowth occurs, a second application of **BENTAZONE 480 SL** will be necessary.

Apply a mixture of 1  $\ell$  **BENTAZONE 480 SL** in 100  $\ell$  water (1 %) as **spot treatments**, if conditions are favourable as described above. Ensure thorough wetting of plants, but do not exceed the dosage rate per area, as recommended in the Application Tables.

Under **less favourable** conditions yellow nutsedge will only be suppressed and regrowth might occur. It is advisable to add a surfactant / sticker such as **AQUA-WET**, Reg. No. L6204, Act No. 36 of 1947 under these conditions. Furthermore, a second application of **BENTAZONE 480 SL** 7 – 10 days later may be necessary.

Under adverse conditions, e.g. drought, cold weather, dry windy conditions and low air humidity, BENTAZONE 480 SL will not control yellow nutsedge.

#### APPLICATION TABLE RECOMMENDATIONS

CROP	APPLICATION Rate	RECOMMENDATIONS			
Maize, Sorghum, Wheat and other small grain crops Broadleaf weeds	2 — 3 ℓ / ha	BENTAZONE 480 SL may be sprayed on cereals at any stage of their development, provided that weed growth corresponds to the growth stage as listed in the Application table.			
Yellow nutsedge	3 — 5 ℓ / ha	For further information see notes on yellow nutsedge control.			
Groundnuts See WARNINGS Broadleaf weeds	2 — 3 ℓ / ha	Apply <b>BENTAZONE 480 SL</b> from the 1 <sup>st</sup> trifoliate leaf stage onwards. A second application may be made if there are problems with late germinating weeds are encountered.			
Yellow nutsedge	3 — 5 ℓ/ ha	For further information see notes on yellow nutsedge control.			
Beans (Dry beans, *green beans) See WARNINGS Broadleaf weeds	2 — 3 ℓ / ha	Use 2 $\ell$ /ha before beans have reached the 2 <sup>st</sup> trifoliate leaf stage. Thereafter up to 3 $\ell$ / ha may be sprayed. Do not spray before the 1 <sup>st</sup> trifoliate leaf is fully expanded. <b>BENTAZONE 480 SL</b> may cause transient scorch on green beans that can be prolonged with later applications, but will have no depressing effect on the yields.			
		Note: *Green beans: In the inland regions and especially under weather conditions with very high sun intensity, green beans must NOT be sprayed with more than 2 <sup>2</sup> / ha BENTAZONE 480 SL, as higher rates can cause crop damage.			
Yellow nutsedge	3 ℓ / ha	For further information see notes on yellow nutsedge control. The rate of 3 ℓ / ha must not be exceeded as higher rates may cause crop damage.			
<b>Soyabeans</b> See WARNINGS Broadleaf weeds	2 – 3 ℓ / ha	Apply <b>BENTAZONE 480 SL</b> from the 2 <sup>rd</sup> trifoliate leaf stage onwards. A second application may be made if problems with late germinating weeds. <b>BENTAZONE 480 SL</b> may cause transient scorch on soyabeans that can be prolonged with later applications, but will not have a depressing effect on the yields.			
Yellow nutsedge	3ℓ/ha	For further information see notes on yellow nutsedge control. The rate of 3 $\ell$ / ha per application must not be exceeded as higher rates can cause crop damage.			
<b>Peas</b> Broadleaf weeds	2 – 3 ℓ / ha	BENTAZONE 480 SL may be sprayed on peas when they are 50 - 150 mm high, provided that weed growth corresponds to the growth stage as listed in the Application table. Do not use <b>BENTAZONE 480 SL</b> on frost-damaged peas and/or if crop is under stress (cold, drought) or if frost is expected.			
Yellow nutsedge	3 ℓ / ha	For further information see notes on yellow nutsedge control. The rate of 3 $\ell$ / ha per application must not be exceeded as higher rates can cause crop damage.			
Potatoes Only cultivars Up-to-date, BP1 and Van der Plank Broadleaf weeds	2 — 3 ℓ/ ha	<b>BENTAZONE 480 SL</b> should be applied after the potatoes have fully emerged and a good stand of plants has been obtained, but before the flower bud-stage of the crop. <b>BENTAZONE 480 SL</b> will cause transient scorch on the leaves but this will not depress the yield. Do not apply on large potato plants as this will reduce weed control due to the shading effect.			
Yellow nutsedge	3 — 5 ℓ / ha	For further information see notes on Yellow nutsedge control.			

#### WEEDS CONTROLLED BY BENTAZONE 480 SL ONLY

		LEAF STAGES			DEGOLIMENDATIONS
BOTANICAL NAME	COMMON NAME	1,5 <i>l /</i> ha	2 { / ha	3 { / ha	RECOMMENDATIONS
Acanthospermum hispidum	Upright starbur *	< 4	6	8	
Argemone subfusiformis	Mexican poppy	-	4	6	
Bidens pilosa	Common blackjack *	< 4	4	6	
Chenopodium album	White goosefoot	-	2	4	
Cleome monophylla	Single-leaved cleome	-	4	6	
Commelina benghalensis	Bengal wandering Jew	-	-	4	See <b>NOTE</b> below.
Datura stramonium	Common thorn apple *	< 4	6	8	
Datura ferox	Large thorn apple *	< 4	6	8	
Galinsoga parviflora	Small-flowered quickweed	-	4	6	
Hibiscus trionum	Bladder hibiscus	-	4	6	
Ipomoea purpurea	Morning glory	-	-	4	
Nicandra physaloides	Apple of Peru *	< 4	4	6	
Portulaca oleracea	Common purslane	-	4	6	
Raphanus raphanistrum	Wild radish	-	4	6	
Ricardia brasiliensis	Mexican richardia	-	-	2	See NOTE below.
Schkuhria pinnata	Dwarf marigold	-	2	4	See <b>NOTE</b> below.
Senecio consanguineus	Rag wort	-	4	6	
Sida spinosa	Sida	-	4	6	
Tagetes minuta	Tall khaki weed	-	4	6	
Tribulus terrestris	Common dubbeltjie	-	2	4	See <b>NOTE</b> below.
Xanthium strumarium	Large cockle bur *	< 4	6	8	

If growing conditions are extremely favourable, only the weeds marked with (\*) can be controlled effectively with a lower rate of 1,5  $\ell$  / ha BENTAZONE 480 SL, if they have not reached the 4 - leaf stage.

#### NOTE:

The degree of control of these weeds can vary considerably according to local conditions. Improve control in maize and grain sorghum by adding atrazine to the spray mixture. See <u>Application Table</u> below.

#### APPLICATION TABLE BENTAZONE 480 SL + atrazine

CROP	SOIL TYPE	APPLICATION RATE / HA	RECOMMENDATIONS
<b>Maize</b> Broadleaf weeds	All types	2 & <b>BENTAZONE 480 SL</b> + 2 & atrazine 500 g/& SC	Apply recommended mixture for better control of Pigweed, Mexican richardia, Dwarf marigold and Common dubbeltjie. Weeds must be at the 4 - leaf stage. Refer to the WARNINGS on this label and USE RESTRICTIONS on the atrazine labels.
Grain Sorghum Broadleaf weeds	Only on soils with $> 16$ % clay.	2 & <b>BENTAZONE 480 SL</b> + 2 & atrazine 500 g/& SC	

## ADDITIONAL WEEDS CONTROLLED BY A TANK MIXTURE OF BENTAZONE 480 SL + ATRAZINE 500 g / ℓ SC

ONLY MAIZE AND GRAIN SORGHUM		APPLICATION RATE 2ℓ/ha + 2ℓ/ha		
BOTANICAL NAME	COMMON NAME	LEAF STAGE		
Amaranthus deflexus	Pigweed	4		
Amaranthus hybrides	Cape pigweed	4		
Amaranthus spinosus	Thorny pigweed	4		

AQUA-WET, Reg. No. L6204, Act No. 36 of 1947, Rolfes Agri (Pty) Ltd.