

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

Herbicide



# DIFLUDE 500 SC

Reg. No. L 9458 Act No. 36 of 1947

3: 11/8/2022 – Nov2022

A suspension concentrate pre- and post-emergence herbicide for the selective control of certain broadleaf weeds in wheat and lupins in the Winter Rainfall Region.

## ACTIVE INGREDIENT

diflufenican (nicotinanilide)

500 g/l

GROUP

12

HERBICIDE



**DANGER**

### Hazard Statements:

Causes mild skin irritation.  
Causes serious eye damage.  
Harmful if inhaled.  
Suspected of causing cancer.  
Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

### Precautionary Statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
Avoid breathing dust, fume, gas, mists, vapours or spray.  
Avoid release into the environment.

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**villa**



UN Number: 3082

Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

P.O. Box 10413, Aston Manor, 1630

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)

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

**DIFLUDE 500 SC**

Reg. No. L 9458 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: 12

**ACTIVE INGREDIENT:**

diflufenican (nicotinilide) .....500 g/l

Registration holder:

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

Co. Reg. No. 1992/002474/07

P.O. Box 10413, ASTON MANOR, 1630,

Tel. (011) 396 2233

**WARNINGS****ALLOW A MINIMUM OF 120 DAYS BETWEEN APPLICATION AND GRAZING, FEEDING AND/OR HARVEST.****Hazard statements:**

Causes mild skin irritation.
Causes serious eye damage.
Harmful if inhaled.
Suspected of causing cancer.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Store in a cool, dry place out of direct sunlight.
- Store away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Should the recommended dosage be exceeded, crop damage may result with consequent yield reduction.
- Re-entry: Do not enter treated area within one (1) day after treatment unless wearing protective clothing.
- **DIFLUDE 500 SC** is safe to all important varieties and no significant phytotoxicity in the form of yield reduction has been recorded under normal growing conditions. More susceptible cultivars may be released in future which need to be tested; for this apply **DIFLUDE 500 SC** to a limited test area before commercial applications are made or contact your distributor.
- In case of any uncertainty, contact your distributor.
- **In case of poisoning call a doctor 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 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 event of any uncertainty.

**PRECAUTIONS****Precautionary statements:**

Obtain, read and follow all safety instructions before use.
Avoid breathing dust, fume, gas, mists, vapours or spray.
Wash hands and face 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.
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned, get medical advice.

If skin irritation occurs: get medical help.
Collect spillage.
Store locked up.
Dispose of contents/container in accordance with local regulations.

- Wash with soap and water after use and after accidental skin contact.
- Wash contaminated clothing after use.
- 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.
- **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 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.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.

Relevant hazardous components	
Diflufenican	500 g/l
Dispersant	< 100 g/l
Wetting agent	< 50 g/l
Anti-foamer agent	< 10 g/l
Anti-freezing	< 5 g/l

### USE RESTRICTIONS AND NOTES

- Leaf scorch, stunting or yellowing could occur on lupins after the use of **DIFLUDE 500 SC** (especially the yellow lupin (*Lupinus luteus*) and sweet narrow leaf lupin (*L. angustifolius*) types). The crop usually outgrows these symptoms and yields are not affected adversely. However, severe crop injury can occur when the crop is under stress due to drought, cold, nutrient deficiency, or insect/nematode damage and also on lupins infected with *Phytophthora* spp.
- Necrosis may occur on wheat foliage after application of **DIFLUDE 500 SC**. The plants usually outgrow these symptoms and yields are not affected adversely. Crop damage may increase if the crop is stressed due to drought, cold, nutrient deficiency, or insect/nematode damage.
- Inconsistent or poor weed control will be obtained when weeds are older than or larger than specified for a specific dosage rate at time of application.
- Poor weed control may result if **DIFLUDE 500 SC** is applied when the weeds have been subjected to moisture stress or any other stress factors. Apply only during moist conditions when the weeds are actively growing.
- Ensure thorough coverage of weeds when post-emergence applications are made.
- If annual grass weeds are a problem in lupins, use a registered pre-emergence or post-emergence grass killer. **DIFLUDE 500 SC** must not be applied in a tank mixture with such grass killer as crop injury may occur. It is recommended to apply a post-emergence grass herbicide 7 days before or after the application of **DIFLUDE 500 SC**.
- Do not plant any crop besides lupins for three (3) months following application of **DIFLUDE 500 SC**. After a period of 3 to 6 months, the soil needs to be cultivated adequately prior to the planting of any other crop.
- Ensure that adequate soil moisture is present for the germination of the lupins if **DIFLUDE 500 SC** is to be applied pre-emergence.
- **DIFLUDE 500 SC** may be harmful if applied directly onto germinating/partly germinating lupin seeds lying on the soil surface.
- Follow all recommendations and restrictions on the label of any product applied in combination with **DIFLUDE 500 SC**.

**RESISTANCE WARNING**

**DIFLUDE 500 SC** is a group code 12 herbicide. Any weed population may contain individuals naturally resistant to **DIFLUDE 500 SC** and other group code 12 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **DIFLUDE 500 SC** or any other group code 12 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.

**Additional notes on resistance:**

- It is impossible to predict the occurrence of resistant weed biotypes prior to use and therefore the Registration Holder cannot accept responsibility for any adverse effects/yield losses due to **DIFLUDE 500 SC** not controlling resistant weeds.
- Do not apply **DIFLUDE 500 SC** alone in situations where weed resistance has been confirmed.
- Ineffective application of **DIFLUDE 500 SC** will lead to inferior weed control and may assist in development of herbicide resistance.

**Mode of Action:** **DIFLUDE 500 SC** is a selective contact and residual herbicide, which is absorbed principally by the shoot of germinating seedlings with limited translocation. It acts by blocking carotenoid biosynthesis, by inhibition of phytoene desaturase.

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

- Half fill the spray tank with clean water (suitable for irrigation and do not use water with high chlorine levels or water with resistance lower than 300 ohms and EC value exceeding 1.0 mS/cm).
- Pre-mix the **DIFLUDE 500 SC** in at least 10 liters of water.
- If necessary, adjust the water's pH to between 6.7 and 7.5.
- Add the required quantity of surfactant to the water in the tank.
- Finally, add the partner remedy as appropriate.
- Fill the spray tank to the desired volume while agitating.
- Should tank mixtures with other agrochemicals be made, follow the respective manufacturers' label recommendations.
- Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.
- Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

**Compatibility:**

- **DIFLUDE 500 SC** is compatible with **Rifle 480 EC** and **Wrestler 800 EC**. The compatibility of **DIFLUDE 500 SC** 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. In the case of uncertainty, contact the supplier or the registration holder.
- When **DIFLUDE 500 SC** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to.
- **DIFLUDE 500 SC** must always be used in conjunction with a Villa approved adjuvant such as **Villa 51**.

**APPLICATION METHODS:****Ground Application:**

- Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application
- Apply with a tractor mounted boom sprayer in a spray volume of approximately 200 liters per hectare using solid- or hollow cone nozzles.
- Ensure continuous agitation throughout the spray operation.
- Prevent overdosing by avoiding overlapping of swaths and closing the nozzles while starting, slow movement, turning and stopping.

## APPLICATION RATES

**Important:** Refer to **RESTRICTIONS AND NOTES ON USE**.

<b>Use</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b><u>Wheat</u></b>	200 ml / ha	<u>Pre-emergence:</u> Apply pre-plant or before broadcast sowing in tank mixture with <b>Rifle 480 EC</b> or <b>Wrestler 800 EC</b> . Refer to the labels for “ <b>DIRECTIONS FOR USE</b> ” and “ <b>USE RESTRICTIONS</b> ”.
	50 ml / ha	<u>Post-emergence:</u> Only apply onto well-established wheat plants. Apply onto wild radish plants smaller than the 2-leaf stage.
	150 ml / ha	Apply before weeds exceed the 4-leaf stage.
<b><u>Lupins</u></b>	150 ml / ha	<u>Pre-emergence:</u> Use this rate on lighter textured soils containing less than 20 % clay. Also refer “ <b>DIRECTIONS FOR USE</b> ” and “ <b>USE RESTRICTIONS</b> ”.
	200 ml	<u>Pre-emergence:</u> Use this rate on lighter textured soils containing more than 20 % clay. Also refer “ <b>DIRECTIONS FOR USE</b> ” and “ <b>USE RESTRICTIONS</b> ”.
	50 to 200 ml / ha	<u>Post-emergence:</u> Consult the tables below and choose the appropriate dose rate for the growth stage/size and species of weeds to be controlled. Also refer “ <b>DIRECTIONS FOR USE</b> ” and “ <b>USE RESTRICTIONS</b> ”.

<b>WEEDS CONTROLLED BY DIFLUDE 500 SC:</b>	
<b><u>Weeds controlled at 150 ml/ha (up to 4-leaf stage):</u></b>	<b><u>Expected level of control:</u></b>
<i>Raphanus raphanistrum</i> (Wild radish)	90 to 100 %
<i>Anagallis arvensis</i> (Pimpernel)	90 to 100 %
<i>Polygonum aviculare</i> (Prostrate knotweed)	80 to 90 %
<i>Chenopodium album</i> (White goosefoot)	80 to 90 %
<b><u>Weeds controlled at 175 ml/ha (up to 6-leaf stage):</u></b>	
<i>Raphanus raphanistrum</i> (Wild radish)	90 to 100 %
<i>Anagallis arvensis</i> (Pimpernel)	90 to 100 %
<i>Polygonum aviculare</i> (Prostrate knotweed)	80 to 90 %
<i>Chenopodium album</i> (White goosefoot)	80 to 90 %
<b><u>Weeds controlled at 200 ml/ha (up to pre-flowering stage):</u></b>	
<i>Raphanus raphanistrum</i> (Wild radish)	90 to 100 %
<i>Anagallis arvensis</i> (Pimpernel)	80 to 90 %

### NOTE

Other weed species that were not present during the development trials with the product, may possibly also be controlled to a certain extent. The Registration holder does not accept responsibility for unlisted weed species.

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

- **RIFLE 480 EC** (L 8137) = **TRIFLURALIN 480 EC** (L 4555) and
- **WRESTLER 800 EC** (L 8758) = **PROCARB 800 EC** (L 8746) (**Prosulfocarb**) and
- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315).

**WRESTLER 800 WDG, RIFLE 480 EC**, are registered products of **VILLA CROP PROTECTION (PTY) LTD.**

**VILLA 51, WEN 51 TRIFLURALIN 480 EC** and **PROCARB 800 EC** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**