DIRECTIONS FOR USE ENCLOSED

# **PROZAMIDE 500 SC**

**HERBICIDE** 



Reg. No. L9491, Act/Wet No. 36 of/van 1947 Namibian Reg. No. N-AR 2102

1: 26/02/2014

A suspension concentrate herbicide for use against annual winter grasses and certain broadleaf weeds in canola. grapes, leguminous pastures and orchards (as indicated) in the Winter Rainfall Region.

'n Suspensiekonsentraat onkruiddoder vir gebruik teen eeniariae winterarasse en sekere breëblaaronkruide in kanola, druiwe, peulaewasweidinas en boorde (soos aangedui), in die Winterreënvalgebied.

HRAC HERBICIDE GROUP CODE

**K**1

HRAC ONKRUIDDODERGROEPKODE

#### **ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL**

Propyzamide (benzamide)

500g/ℓ

Propisamied (bensamied)

Registration Holder / Registrasiehouer Meridian Agrochemical Company (Ptv.) Ltd. / (Edms.) Bpk. Reg. No. 2000/010819/07 P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid- Afrika

24 HR EMERGENCY NUMBERS Griffon Poison Information Centre: +27 82 446 8946 24 Hr Transport / Spill emergency no Envirosure +27 31 205 4918 (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

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UN Number: 3082

# By WINFIELD UNITED









#### **PROZAMIDE 500 SC**

Reg. No. L 9491 / N-AR 2102, Act/Wet No. 36 of/van 1947 HRAC HERBICIDE GROUP CODE / HRAC ONKRUIDDODER GROEPKODE: k1

#### **ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**

Registration holder / Registrasiehouer:

Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.

Reg. No. 2000/010819/07

P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid-Afrika

#### **WARNINGS**

- After pasture treatment with PROZAMIDE 500 SC, a waiting period of 15 days should be allowed between treatment and re-use of the pasture for grazing purposes.
- · Harmful when swallowed.
- · Irritating to the eyes, skin and respiratory tract.
- · Avoid contact with eyes.
- · Store away from food and feeds.
- · Keep out of reach of children, animals and uninformed persons.
- · Handle with care.
- Store under lock and key in a dry, cool place out of direct sunlight away from food and feeds.
- Re-entry Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity 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 weed against the remedy, 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 by 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**

- · Do not inhale spray mist.
- Wear rubber gloves and a face shield when handling the concentrate.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- · In the case of eye contact, wash with copious amounts of water.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face or changing clothes.
- · Avoid drift of the spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean the applicator after use. Dispose of the rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- · Prevent contamination of food, feeds, drinking water and eating utensils.
- 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). Do not bury, burn or donate the container to any other
  parties that may use it as a container for food or beverages.
- Destroy the empty container and do not use it for any other purpose.
- When **PROZAMIDE 500 SC** is used in combination with other products, consideration should be given to the instructions and crop rotation requirements of those particular products.

#### **USE RESTRICTIONS**

- Do not use PROZAMIDE 500 SC in nurseries or on nursery stock.
- The following crops should not be planted on PROZAMIDE 500 SC treated soil within 6 months following the date of application.
  - Brassica's (Broccoli, Brussels sprouts, Cabbage, Canola, Cauliflower), Beans, Onions and Potatoes.

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• For cereals (Wheat, Barley, Oats, Rye) consult the following table:

CULTIVATION METHOD	PLANTING METHOD	WAITING PERIOD
No Till	Planted with a planter	10 months
No Till	Broadcast sown	18 months
Till	Planted with a planter	18 months
Till	Broadcast sown	18 months

- A waiting period of 12 months from the date of PROZAMIDE 500 SC application should be allowed for all other crops not mentioned above.
- High temperatures and low or no rainfall shortly after application can have a negative influence on the effectiveness of **PROZAMIDE 500 SC**.
- Do not apply **PROZAMIDE 500 SC** to any crop or situation not mentioned in this label.

#### **RESISTANCE WARNING**

For resistance management, **PROZAMIDE 500 SC** is a group code K1 herbicide. Any weed population may contain individuals naturally resistant to **PROZAMIDE 500 SC** or other group code K1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **PROZAMIDE 500 SC** or any other group code K1 herbicide.

#### To delay herbicide resistance

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered products from other herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep the treated crops under close observation. If treatment is not effective following the use of **PROZAMIDE 500 SC** as recommended, a resistant population may be present. If a resistant population is positively identified, consideration should be given to the prompt use of a herbicide with a different mode of action for which there is no record of resistance to the relevant pest. For specific information on resistance management, contact the registration holder of this product.

#### MODE OF ACTION

**PROZAMIDE 500 SC** is a soil-acting herbicide with uptake occurring through the roots of germinating and newly emerged sensitive grasses. Sufficient rain or irrigation (≥15 mm) in one precipitation within 5 days of application is essential to leach the **PROZAMIDE 500 SC** into the root zone of sensitive weeds.

The best results are obtained when **PROZAMIDE 500 SC** is applied to a soil surface which is moist and has settled (due to rain or irrigation breaking up soil clods or smoothening loose soil caused by cultivation processes). The soil surface should be relatively fine, even and firm without large clods and it should be free of excessive organic and surface material (dead or rotting weeds, leaves, plant cuttings etc.)

Note that **PROZAMIDE 500 SC** should only be applied in winter as the product is more active in cool conditions. Warmer conditions promote product degradation and shorter residual effects.

# DIRECTIONS FOR USE Use only as directed.

#### **MIXING INSTRUCTIONS**

Half-fill the spray tank with suitable water, then mix the required amount of **PROZAMIDE 500 SC** with water in a bucket or mixing tank. Add the **PROZAMIDE 500 SC** mixture and the balance of the water to the spray tank while agitating.

Maintain constant, thorough agitation throughout mixing and spraying. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** The spraying equipment must be thoroughly flushed out at the end of the spraying operation.

The choice and arrangement of flat fan nozzles must be such that an even distribution and optimum recovery of the **PROZAMIDE 500 SC** on the soil is obtained. Apply **PROZAMIDE** 

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**500 SC** broadcast in a sufficient spray volume of at least 150 liters per hectare in order to ensure that the product reaches the soil surface as an evenly distributed spray. Too low a volume will result in the spray mix being intercepted by the foliage of the crop and/or weeds, or being affected by the wind or groundspeed, resulting in an uneven and/or inadequate distribution of **PROZAMIDE 500 SC** on the soil surface. Even and adequate distribution of **PROZAMIDE** 

500 SC on the soil surface is stressed above, as without achieving this poor weed control is likely to result.

#### **COMPATIBILITY**

The compatibility of **PROZAMIDE 500 SC** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time and the water quality may vary from farm to farm, it is recommended that a physical compatibility test be done prior to the tank mixture being made. **PROZAMIDE 500 SC** is compatible with post-emergence herbicides such as **Bounty SL** (L. 7268), **Bounty 500 WSG** (L. 6698), **Scorcher** (L 9085) or **Nirvana** (L 9838).

#### **APPLICATION METHODS**

Make use of only correctly calibrated spray equipment that has effective strong agitation in the spray tank and that is checked regularly during application in order to ensure even and accurate application. Any medium or high volume equipment may be used. A spray volume of at least 150  $\ell$ /ha should be used for application and can be applied via flat fan-type nozzles, preferably the low drift type to avoid fine droplets. **Constant agitation throughout the spray operation is essential.** Only clean water should be used.

### **RECOMMENDATIONS**

#### ONLY FOR APPLICATIONS DURING THE WINTER MONTHS

CROP	DOSAGE	REMARKS
Apples, peaches (including nectarines), pears and grapes  In the winter rainfall area only. Apply PROZAMIDE 500 SC preferably in the dormant stage of orchards and vineyards. When applied after bud burst, the spray should be directed to the soil – do not apply PROZAMIDE 500 SC over any crop parts after bud burst.  DO NOT apply PROZAMIDE 500 SC to any nursery stock.  DO NOT apply PROZAMIDE 500 SC to any orchards or vines within ten (10) months	1.5 – 3 ℓ/ha (See remarks)	Apply PROZAMIDE 500 SC in winter, pre-emergence to early post-emergence of annual winter grasses. Direct the spray to the soil surface and do not spray over the trees or vines. A pre-emergence application is preferable.  The lower rate of 1.5 \(\extit{ PROZAMIDE 500 SC }\) ha should only be considered in situations when annual grass weeds have not emerged yet and where the soil surface is clean and free of organic plant material.  For post-emergence application use the higher rate of 3.0 \(\extit{ PROZAMIDE 500 SC}\). For the best results the annual grasses should not be beyond the 3 leaf stage and the area to be treated should be relatively free (< 10% of soil surface) of organic material or surface litter coverage (dead or decaying weeds, leaves, mowing clippings, etc.).  PROZAMIDE 500 SC is not absorbed through the leaves and acts mainly through root absorption. For the best results water (rain or overhead irrigation) is required within 1-5 days after application. At least 15 mm rain or overhead irrigation is necessary in one precipitation to leach the PROZAMIDE 500 SC into the soil to within the root zone of the germinating annual grasses, and to activate the product.
after transplanting.		gormmaning armual grasses, and to assivate the product.

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CROP	DOSAGE	REMARKS
Leguminous pastures (Established pastures in the Winter Rainfall area)	1.0 – 1.5 <b>ℓ</b> /ha	Annual grasses should be pre-emergence (preferably) to early post- emergence (not past the 3 leaf stage) at the time of the application.
	(See remarks)	Apply just after the first meaningful winter rain, when the soil is moist and the soil temperatures are cooler. Sufficient rainfall of 15 mm or more within 5 days after application is essential to leach the <b>PROZAMIDE 500 SC</b> to the root zone of the weeds or poor annual grass control could result.
		The lower dosage rate should only be applied if all of the following conditions apply:  • Where no tillage has taken place (undisturbed soils).  • Under conditions of high rainfall early in the season, and  • Before the grasses have reached the 2-leaf stage.
		<ul> <li>The higher dosage rate should only be applied if all of the following conditions apply:</li> <li>Where tillage has taken place (loose soils).</li> <li>Under conditions of low rainfall and,</li> <li>When the annual grasses are beyond the 2-leaf stage but not past the 4 – 5 leaf stage, as poor grass weed control may result.</li> </ul>
		A high and thick stand of pastures must first be grazed down before application takes place in order to allow access of the <b>PROZAMIDE 500 SC</b> onto the soil surface.
		<b>NOTE: PROZAMIDE 500 SC</b> can be used with safety in the normal <i>Medicago</i> spp. and <i>Trifolium</i> spp. pasture mixtures used in the Winter Rainfall Region.
Leguminous pastures (Newly established	1.5 <b>ℓ</b> /ha	NEWLY ESTABLISHED LEGUMINOUS PASTURES OR CANOLA IN WINTER RAINFALL AREA
pastures in the Winter Rainfall area)		Apply only after the crop has emerged and has formed $2-3$ true leaves. (Crop plants younger than this stage could be damaged or even killed).
Canola (In the Winter Rainfall		In order to expect effective control, the annual grasses must not be older than the 3 leaf development stage.
area)		After planting under either moist or dry soil conditions, sufficient follow up rains are required in order to ensure breaking up of clods and settling of the seedbed, with the resultant even germination of the crop and grasses. Following application of <b>PROZAMIDE 500 SC</b> , at least 15 mm sprinkler irrigation or rain in one precipitation within 5 days is required in order to leach the <b>PROZAMIDE 500 SC</b> to the root zone of the germinating grasses.
		Planting under dry conditions with very low or no sub-soil moisture can cause a cloddy seedbed. Combined with insufficient follow up rain/irrigation, this could result in an uneven germination of crop and/or grasses. In this case application should be postponed until 100 % of the crop has emerged and developed 2 – 3 true leaves. Application should not be considered under such conditions unless at least 20 mm rain is expected within 5 days of applications. The user should be aware of the fact that grasses germinating afterwards from

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big soil clods not yet broken up, or grasses that have been developed past the 3 leaf stage at the time of application might not be controlled.
Failure to follow the guidelines as above could result in poor annual grass control.  Poor control may also result when:  • Annual grasses germinate from deeper than the level to which the PROZAMIDE 500 SC has leached (especially after a deep cultivation);  • Annual grasses have already developed a strong root system;  • Large soil clods present as a result of the cultivation or planting
process have not yet broken up at the time of spraying.

CROP	DOSAGE	REMARKS
Lucerne (under irrigation in the Karoo)	1.5 <b>{</b> /ha	PROZAMIDE 500 SC can be applied to established or newly planted Lucerne. For established Lucerne apply in winter. Apply preemergence (preferably) up to early post-emergence (up to 3 leaf stage) of annual winter grasses. On newly planted Lucerne, application of PROZAMIDE 500 SC should not be made until after the third trifoliate leaf is fully developed. Irrigate with sprinklers (15 – 20 mm) immediately after application of PROZAMIDE 500 SC and, if no rain has fallen within a month, repeat irrigation.
		<b>Note:</b> Poor control of deep germinating annual grasses may occur, especially in heavy soil or where large clods were formed during the cultivation or planting process in newly planted Lucerne.

## WEED SPECIES NORMALLY CONTROLLED BY PROZAMIDE 500 SC

BOTANICAL NAME	COMMON NAME
Arctotheca calendula	Cape marigold
Avena fatua**	Common wild oats
Bromus diandrus**	Ripgut brome
Bromus catharticus**	Rescue grass
Lolium spp.	Ryegrass
Malva parviflora	Small mallow
Phalaris canariensis	Canary seedgrass
Triticum aestivum	Volunteer wheat
Vulpia myuros	Ratstail fescue

<sup>\*\*</sup>Note: Annual grasses e.g. *Avena* and *Bromus* spp. which germinate from soil depths deeper than the **PROZAMIDE 500 SC** layer will be poorly controlled.

The registration holder does not accept any liability in respect of the control of unlisted weeds.

## **ACKNOWLEDGEMENT OF TRADEMARKS**

<b>Bounty 500 WSG</b> (L 6698)	Meridian Agrochemical Company (Pty) Ltd
<b>Bounty SL</b> (L 7268)	Meridian Agrochemical Company (Pty) Ltd
Nirvana (L. 9838)	Meridian Agrochemical Company (Pty) Ltd
Scorcher (L 9085)	Meridian Agrochemical Company (Pty) Ltd

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