

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Herbicide



SUNDRY 500 WP

Reg. No. L 9299 Act/Wet No. 36 of/van 1947

1: 22/7/2013–Aug2019

A wettable powder herbicide for pre-emergence control of annual broadleaf weeds in crops as listed. Registered also for use in forestry plantations/areas.

'n Benatbare poeier onkruidodder vir voorpoms beheer van eenjarige breëblaaronkruid in gewasse soos aangedui. Geregistreer ook vir gebruik in bosbouplantasies/areas.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

flumioxazin (N-phenylimide) 500 g/kg flumioksasin (N-fenielimied)

HRAC HERBICIDE GROUP CODE **E** HRAC ONKRUIDDODER GROEPKODE

kg

villa



Registration holder / Registrasiehouer:

Universal Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1983/008184/07

PO Box / Posbus 801, Kempton Park, 1620

Tel: 011 396 2233

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24 HR EMERGENCY NUMBERS:

Griffon Poison Information Centre: +27 82 446 8946

Villa Crop Protection Emergency number: +27 63 698 0668

24 Hr Transport / Spill emergency no: Envirosure +27 31 205 4911

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(Client: Villa Crop Protection)

UN Number: 3077

Willow Set & Print 011 394-4486



CAUTION
VERSIGTIG



SUNDRY 500 WP

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UNIVERSAL CROP PROTECTION (PTY) LTD.

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P.O. Box / Posbus 801

KEMPTON PARK, 1620 Tel. (011) 396 2233

CAUTION / VERSIGTIG**WARNINGS**

- **Risk of crop injury:** **SUNDRY 500 WP** may adversely affect groundnuts or soybeans under certain climatic conditions. In certain scenarios yield and quality may be affected adversely. These conditions include wet conditions (>20 mm rain), especially in combination with cold temperatures, sandy soils (< 10 % clay) and/or overcast weather within 28 days after planting. However, the exact parameters causing such damage cannot be determined accurately due to yearly variation between farms and fields and cultivar susceptibility. **By using this product, the user is therefore warned that he accepts risk of crop injury.**
- Handle with care.
- Harmful when swallowed.
- May irritate eyes and skin.
- Store in a cool, dry, well-ventilated place in tightly closed original container.
- Store away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Toxic to fish and other aquatic organisms.
- Do not spray over or allow drift to contaminate water or adjacent areas.
- 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 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

- Do not inhale the dust or spray mist.
- Wear rubber gloves and face shield when handling the concentrate.
- Avoid contact with skin, eyes and clothing. In case of contamination flush immediately with water.
- Wash contaminated clothing daily.
- Wash with soap and water after use or accidental skin contact.
- In case of eye contact, rinse immediately with running water.
- Do not eat, drink or smoke whilst mixing, applying the product or before washing hands and face or change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Do not apply where roots of desirable plants can absorb the chemical.
- Do not mix or load within at least 15 metres of boreholes, streams, rivers and dams. Do not apply within at least 15 metres from boreholes, streams and rivers. Do not apply within at least 60 metres from dams.
- Clean the applicator before using with other material and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.

- To clean the spray tank:
 1. Drain the spray tank completely and then flush the tank, boom and hoses with clean water. Drain again.
 2. Fill the tank with clean water and add household ammonia (3 % active) at the rate of 1 litre per 100 litres water. Circulate the ammonia solution through the tank, boom and hoses for at least 15 minutes.
 3. To remove traces of ammonia, rinse the tank with clean water and flush through booms and hoses.
 4. Repeat steps 2 and 3.
 5. Nozzles and filters must be removed and cleaned separately with an ammonia solution at the same concentration as above.
 6. Remove any contamination on the outside of the spraying equipment by washing with clean water.
- Containers and packages must be completely emptied before being disposed of. Shake out thoroughly into the applicator and destroy the empty container/bag thereafter in the described manner.
- Destroy the empty container/bag by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container/bag for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

RESISTANCE WARNING

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

GENERAL PRODUCT INFORMATION

- **SUNDRY 500 WP** is a pre-emergence herbicide and will only control weeds that have not germinated at the time of application. Thus, if existing weeds are present at time of application, these may have a detrimental effect on the efficacy of **SUNDRY 500 WP**.
- **SUNDRY 500 WP** is activated by moisture and optimal weed control is achieved when applied to a moist soil on a fresh seedbed, followed by \pm 15 mm rainfall or irrigation within one week of application. **However**, note that flood irrigation can result in reduced weed control.

USE RESTRICTIONS

- Follow-up crops To avoid injury to follow-up crops, the following waiting periods should be heeded:
Groundnuts and soybeans - 2 weeks
All other crops - 4 months (a test planting is recommended).
- **DO NOT EXCEED** the specified dosage rates of any of the products **SUNDRY 500 WP**, **Alachlor 384 EC** or **Palladium 960 EC** as crop injury may result – ensure **STRICT ADHERENCE** to the specified rates.
- Do not apply **SUNDRY 500 WP** to poorly drained soils with a compaction layer. Water logging in the presence of herbicides may lead to yield reduction due to stand reduction and/or stunted growth.
- **SUNDRY 500 WP** may not be applied through any type of irrigation system.
- Do not spray **SUNDRY 500 WP** with alkaline water – use a buffer/acidifier to lower water pH if necessary.
- The application of lime to soils onto which **SUNDRY 500 WP** was applied, may lead to desorption of the **SUNDRY 500 WP** molecules from the soil particles. This may increase the possibility of crop damage.
- **Do not apply SUNDRY 500 WP to any groundnut or soybean fields if any triazine containing herbicide was applied to a preceding crop, unless not more than 750 g triazine active ingredient per hectare was applied and at least 9 months have passed after the triazine application.**
- Spray drift due to wind, air currents or incorrect spraying equipment etc. coming into contact with green chlorophyll containing plant tissue will result in herbicide damage. It is therefore important to ensure that **SUNDRY 500 WP** applications will not come into contact with chlorophyll containing plant tissue on deciduous fruit or citrus fruit trees, vines or adjacent non-target crops.
- **SUNDRY 500 WP** shall only be applied to vines, deciduous fruit or citrus trees as a pre-blossom application, due to the inability of applicators to prevent drift.

GROUNDNUTS AND SOYBEANS

- All “**USE RESTRICTIONS**” above are applicable to both groundnuts and soybeans.
- **Plant depth:** The optimum planting depth must be observed for the crop as recommended by ARC-Grain Crops Institute:
Groundnuts: 50 to 75 mm (depending on seedbed and soil conditions)
Soybeans: 20 to 60 mm (depending on seedbed and soil conditions)
- On lands subjected to wind erosion, two scenarios may occur:
 - Poor weed control due to wind transfer of the herbicide.
 - Sand blasting damage/weakening of seedlings, therefore making them more susceptible to herbicide damage.
- Apply **SUNDRY 500 WP** pre-emergence on groundnuts or soybeans 2 weeks prior to planting, during planting or immediately after planting the crop to be treated.
- Only use high quality, fresh (preceding season) fungicide treated, certified seed with good viability. Observe standard ARC-Grain Crop Institute recommendations for fungicide seed treatment and addition of trace element e.g. molybdenum.
- The occurrence of seedling diseases leads to germination and seedling vitality losses, which will be aggravated by herbicide(s).
- Any of the above factors listed or combinations there-of, will increase the risk of damage caused by the herbicide(s).
- The treatment of the crop’s seed with *Rhizobium* inoculant at time of planting is recommended to obtain stronger healthier plants.

DIRECTIONS FOR USE: Use only as indicated.

Compatibility:

SUNDRY 500 WP is compatible with **ALACHLOR 384 EC** (L 4348 / N-AR 1342), **PALLADIUM 960 EC** (L 9360 / W 130772), **Scat® 360 SL** and **SKOFFEL® 200 SUPER** (L 6328 / W 130059 / N-AR 1097). However, as the formulation of other products may change without the knowledge of this registration holder and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

Mixing Instructions:

- Half-fill the spray tank with clean water and ensure agitation.
- First add the required amount of **SUNDRY 500 WP** in the form of water-soluble sachets and then add the rest of the water. Agitation must be maintained at all times during mixing and application.
- When tank-mixing **SUNDRY 500 WP** with another herbicide, read the label of the complementary herbicide and adhere closely to the manufacturer’s recommendations:
 - First add the required amount of **SUNDRY 500 WP** in the form of water-soluble sachets.
 - Continue filling the spray tank with water and add the required amount of complimentary herbicide just before the tank is filled to its full level. Keep the chemicals in continuous suspension by maintaining agitation.
- Tank mixtures must be sprayed out immediately and should not be allowed to stand in the spray tank overnight.

Application:

- Only use accurately calibrated conventional spray equipment that is in good working order for the application of **SUNDRY 500 WP**. Good results are obtained with flat-fan spray nozzles, to ensure even spray distribution.
- Where there is a danger of fine droplets drifting onto susceptible non target plants/crops, use low drift air-mix type or equivalent nozzles. Use 200 to 300 litres per hectare total spray volume for overall ground application.
- Apply **SUNDRY 500 WP** onto an even, well-prepared seedbed which is free of clods, trash and weeds.
- If dry weather conditions should prevail for a period of 7 to 10 days after application, weeds may germinate and develop. If this happens, use shallow cultivation with a rotary harrow to control these weeds and to mix the herbicide with the top 10 to 20 mm of soil. Deeper cultivation should be avoided as untreated soil may be brought to the surface and reduced efficacy could result.

CROP RECOMMENDATIONS**Groundnuts and Soybeans:**

- Application timing:
 - Apply **SUNDRY 500 WP** or **SUNDRY 500 WP** plus **Scat® 360 SL** 2 weeks before the intended planting date, or
 - Apply **SUNDRY 500 WP** on its own or in a tank mixture with **Alachlor 384 EC** or **Palladium 960 EC** at planting or within 48 hours after planting.
- Banded applications of **SUNDRY 500 WP**: Use proportionately less product per hectare for a band versus a broadcast application.

Forestry:

- Refer to “**USE RESTRICTIONS**” and “**APPLICATION**” for more detail.
- If applied to existing weeds, a tank mixture with **Skoffel® 200 Super** or **Scat® 360 SL** should be used, or the site should be cleared using chemical or mechanical means prior to the application of **SUNDRY 500 WP**.
- Prevent overlapping of the spray swaths.
- Apply in 200 to 400 litres water per hectare.

APPLICATION RATES

Refer to “**USE RESTRICTIONS**”, “**DIRECTIONS FOR USE**” and “**CROP RECOMMENDATIONS**” above.

Crop	% Clay	Dosage per hectare	Remarks
<u>Groundnuts</u>	0 to >30	100 g SUNDRY 500 WP OR 100 g SUNDRY 500 WP PLUS 1.0 to 3.0 ℓ Scat® 360 SL 100 g SUNDRY 500 WP	Apply 2 weeks prior to the intended date of planting.
	11 to >30	OR 70 to 80 g SUNDRY 500 WP PLUS 3.0 ℓ Alachlor 384 EC OR 0.65 to 1.0 ℓ Palladium 960 EC	Apply at planting, or within 48 hours after planting.

Crop	% Clay	Dosage per hectare	Remarks
Soybeans	0 to >30	100 g SUNDRY 500 WP OR 100 g SUNDRY 500 WP PLUS 1.0 to 3.0 ℓ Scat® 360 SL	Apply 2 weeks prior to the intended date of planning.
	11 to 20	80 to 100 g SUNDRY 500 WP PLUS 4.0 to 4.5 ℓ/ha Alachlor 384 EC OR 0.65 to 1.0 ℓ Palladium 960 EC	
	21 to 30	80 to 100 g SUNDRY 500 WP PLUS 4.0 to 5.0 ℓ/ha Alachlor 384 EC OR 0.65 to 1.0 ℓ Palladium 960 EC	Apply at planting, or within 48 hours after planting.
	>31	80 to 100 g SUNDRY 500 WP PLUS 5.0 ℓ/ha Alachlor 384 EC OR 0.65 to 1.0 ℓ Palladium 960 EC	

NOTES

- When **SUNDRY 500 WP** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on these labels, must be adhered to.
- Seed size: Smaller sized seed may be more susceptible to herbicide damage than larger seeds.
- **SUNDRY 500 WP** may be applied 2 weeks prior to planting. By doing this, the risk of crop injury will be reduced but the residual efficacy of the **SUNDRY 500 WP** and the control of weeds in the planting row may be compromised. Existing weeds can be controlled by adding 1.0 to 3.0 litres of **Scat® 360 SL** to the **SUNDRY 500 WP**.

Crop	Dosage rate per hectare	Remarks
Afforestation Pine (<i>Pinus patula</i>) Wattle (<i>Acacia mearnsii</i>) Bluegum (<i>Eucalyptus grandis</i>)	200 g	Pre-plant treatment: Apply prior to the transplant of the seedlings in at least 250 litres water per hectare. To obtain optimum weed control, ensure minimal disturbance of the soil during the transplanting.
IMPORTANT		
<p>1. If applied to existing weeds, 1.5 to 5.0 litres Skoffel® 200 Super OR 1.0 to 3.0 litres Scat® 360 SL must either be added to the SUNDRY 500 WP, or the area to be treated must be cleared of weeds by chemical or mechanical means, prior to the application of SUNDRY 500 WP.</p> <p>2. Do not apply SUNDRY 500 WP to trees grown in any growth medium but soil.</p>		
Pine (<i>Pinus patula</i>) Blue gum (<i>Eucalyptus grandis</i>)	200 g/ha	Post transport of seedlings: Apply in at least 250 litres water per hectare. SUNDRY 500 WP may be applied over the top of the seedlings.
IMPORTANT		
<ul style="list-style-type: none"> • Ensure that seedlings are of good quality and free of disease and insect injury. • Slight scorching of the leaves or needles may occur when SUNDRY 500 WP is applied over the top of the seedlings. This is of a transient nature and will be soon outgrown. • Blue gums affected with <i>Botrytis</i> may be severely scorched, or even killed. Do not apply to trees which were grown in any other growth medium than soil. 		

WEEDS NORMALLY CONTROLLED WITH 100 g SUNDRY 500 WP per hectare:	
Annual broadleaf weeds:	
<i>Ageratum conyzoides</i>	Invading Ageratum
<i>Amaranthus hybridus</i>	Common pigweed
<i>Conyza bonariensis</i>	Flax-leaf fleabane
<i>Crotalaria sphaerocarpa</i>	Mealie crotalaria
<i>Erodium moschatum</i>	Musk heron's bill
<i>Flumaria officinalis</i>	Common fumitory
<i>Ipomoea purpurea</i>	Morning glory
<i>Oenothera stricta</i>	Evening primrose
<i>Oxalis latifolia</i>	Red garden sorrel
<i>Raphanus raphanistrum</i>	Wild radish
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Tribulus terrestris</i>	Devil's thorn
Weeds controlled variably:	
<i>Datura ferox</i>	Large thorn apple
<i>Tagetes minuta</i>	Khaki weed
<i>Bidens pilosa</i>	Common blackjack

**WEEDS NORMALLY CONTROLLED WITH
200 to 400 g SUNDRY 500 WP per hectare:**

Weeds listed above PLUS:

<i>Acalypha ecklonii</i>	False nettle-brush
<i>Cenia turbinata</i>	Goose daisy
<i>Fumaria muralis</i>	Fumitory
<i>Hydrocotyle americana</i>	Navelwort
<i>Oenothera rosea</i>	Rose evening primrose
<i>Plantago lanceolata</i>	Narrow-leaved ribwort
<i>Portulaca oleracea</i>	Purslane
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Sonchus oleraceus</i>	Sow thistle

Weeds controlled variably:

<i>Bidens pilosa</i>	Common blackjack
<i>Chenopodium album</i>	White goose foot
<i>Conyza floribunda</i>	Fleabane
<i>Euphorbia helioscopia</i>	Umbrella milkweed
<i>Polygonum aviculare</i>	Prostrate knotweed
<i>Tagetes minuta</i>	Khakiweed

**WEEDS NORMALLY CONTROLLED IN GROUNDNUTS AND SOYBEANS WITH A TANK MIXTURE
OF 80 g SUNDRY 500 WP per hectare PLUS Alachlor 384 EC / Palladium 960 EC:**

Annual grasses:

<i>Eleusine indica</i>	Goose grass
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Broadleaved weeds:

<i>Amaranthus hybridus</i>	Common pigweed
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Tribulus terrestris</i>	Devil's thorn

Weeds controlled variably:

<i>Datura ferox</i>	Large thorn apple
<i>Tagetes minuta</i>	Khakiweed

WEEDS NORMALLY CONTROLLED IN SOYBEANS WITH A TANK MIXTURE OF 100 g SUNDRY 500 WP per hectare PLUS Alachlor 384 EC / Palladium 960 EC:	
Annual grasses:	
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgate</i>	Feathertop Chloris
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Echinochloa crusgalli</i>	Barnyard grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Tragus racemosus</i>	Large carrotseed grass
<i>Urochloa panicoides</i>	Herringbone grass
Broadleaved weeds:	
<i>Amaranthus deflexus</i>	Perennial pigweed
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Cleome menophylla</i>	Spindlepod
<i>Crotalaria sphaerocarpa</i>	Mielie Crotalaria
<i>Flaveria bidentis</i>	Smelter's bush
<i>Portulaca oleraceae</i>	Purslane
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Tribulus terrestris</i>	Devil's thorn
Weeds controlled variably:	
<i>Anthemis cotula</i>	Stink mayweed
<i>Bidens pilosa</i>	Common blackjack
<i>Commelina benghalensis</i>	Bengal wandering jew
<i>Cosmos bipinnatus</i>	Cosmos
<i>Datura ferox</i>	Large thorn apple
<i>Datura stamonium</i>	Common thorn apple
<i>Stellaria media</i>	Chickweed
<i>Tagetes minuta</i>	Khakiweed
<i>Xanthium strumarium</i>	Cocklebur

NOTE

As **SUNDRY 500 WP** controls annual broadleaved weeds, other broadleaved weed species not listed above may be controlled to a greater or lesser extent. The registration holder however does not accept any liability in respect of the control of unlisted weeds.

The following product mentioned in this label is equivalent to the products mentioned below:

- **SCAT® 360 SL** (L 5716 / W 130453) = **SLASH 360 SL** (L 7811 / N-AR 1087) = **PANGA 360 SL** (L 7812) = **GLYPHOSATE 360 SL** (L 8128).

SCAT® 360 SL and/en **SKOFFEL® 200 SUPER** are registered trademarks of / is geregistreerde handelsmerke van

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