## Herbicide



# SYMPHONY 500 WP

Reg. No. L 9300 Act No. 36 of 1947

2: 18/01/2023 - May2023



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

#### **ACTIVE INGREDIENT**

flumioxazin (N-phenylimide)

500 g/kg

GROUP 1

4 | H

HERBICIDE



#### WARNING

#### **Hazard Statements:**

May be harmful in contact with skin. Causes mild skin irritation. Causes serious eve irritation.

Suspected of damaging fertillity or the unborn child.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

#### Precautionary Statements:

Avoid release into the environment.
Store locked up.



UN Number: 3077

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
P.O. Box 801, Kempton Park, 1620
Tel. (011) 396 2233
Website: www.villacroo.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)

#### **SYMPHONY 500 WP**

Reg. No. L 9300 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 14

**ACTIVE INGREDIENT:** 

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD.

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#### **WARNINGS**

#### Hazard statements:

May be harmful in contact with skin.

Causes mild skin irritation.

Causes serious eye irritation.

Suspected of damaging fertillity or the unborn child.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

- Risk of crop injury: SYMPHONY 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.</li>
- Handle with care.
- Harmful when swallowed.
- 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.
- 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**

#### **Precautionary statements:**

Obtain, read and follow all safety instructions before use.

Wash hands and face thoroughly after handling. Do not touch eyes.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

IF ON SKIN: 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 exposed or concerned, get medical advice.

If eye irritation persists: Get medical help.

Collect spillage.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

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- Do not inhale the dust or spray mist.
- Wash contaminated clothing daily.
- 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.
- 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 <a href="www.croplife.co.za">www.croplife.co.za</a>. 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.

Revevant hazardous components		
Flumioxazin	50 %	
Terwet 1004	< 5%	
Amorphous Silica	< 5%	

#### FIRST AID TREATMENT

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 as needed. Seek medical attention if irritation occurs.
- <u>Skin:</u> Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation persists.**
- **Eyes:** Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**
- <u>Ingestion:</u> Seek medical attention 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.

#### **RESISTANCE WARNING**

**SYMPHONY 500 WP** is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **SYMPHONY 500 WP** and other group code 15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **SYMPHONY 500 WP** or any other group code 15 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.

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#### MODE OF ACTION

**SYMPHONY 500 WP** is a selective, pre-emergence, contact herbicide. The active ingredient, **flumioxazin** inhibits protoporphyrinogen oxidase (PPO) resulting in accumulation of photosensitizing porphyrins; these react with oxygen, in light, to form reactive species that cause lipid peroxidation and membrane disruption.

#### **GENERAL PRODUCT INFORMATION**

- **SYMPHONY 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 **SYMPHONY 500 WP**.
- **SYMPHONY 500 WP** is activated by moisture and optimal weed control is achieved when applied to a moist soil on a fresh seedbed, followed by ± 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).
- <u>DO NOT EXCEED</u> the specified dosage rates of any of the products <u>SYMPHONY 500 WP</u>, <u>Alachlor 384 EC or Palladium 960 EC</u> as crop injury may result ensure <u>STRICT ADHERENCE</u> to the specified rates
- Do not apply **SYMPHONY 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.
- SYMPHONY 500 WP may not be applied through any type of irrigation system.
- Do not spray SYMPHONY 500 WP with alkaline water use a buffer/acidifier to lower water pH if necessary.
- The application of lime to soils onto which SYMPHONY 500 WP was applied, may lead to desorption of the SYMPHONY 500 WP molecules from the soil particles. This may increase the possibility of crop damage.
- Do not apply SYMPHONY 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
  SYMPHONY 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.
- **SYMPHONY 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.
- <u>Plant depth</u>: 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 SYMPHONY 500 WP pre-emergence on groundnuts or soybeans two (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.

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#### **DIRECTIONS FOR USE:** Use only as indicated.

#### Compatibility:

**SYMPHONY 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 **SYMPHONY 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 **SYMPHONY 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 **SYMPHONY 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 SYMPHONY 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 airmix type or equivalent nozzles. Use 200 to 300 litres per hectare total spray volume for overall ground application.
- Apply SYMPHONY 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 SYMPHONY 500 WP or SYMPHONY 500 WP plus Scat® 360 SL 2 weeks before the intended planting date, or
  - Apply **SYMPHONY 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 **SYMPHONY 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 SYMPHONY 500 WP.
- Prevent overlapping of the spray swaths.
- Apply in 200 to 400 litres water per hectare.

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APPLICATION RATES
Refer to "USE RESTRICTIONS", "DIRECTIONS FOR USE" and "CROP RECOMMENDATIONS" above.

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

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Crop	% Clay	Dosage per hectare	Remarks
Soybeans	0 to >30	100 g SYMPHONY 500 WP  OR  100 g SYMPHONY 500 WP  PLUS	Apply 2 weeks prior to the intended date of planting.
	11 to 20	1.0 to 3.0 ℓ Scat <sup>®</sup> 360 SL  80 to 100 g SYMPHONY 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 SYMPHONY 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 SYMPHONY 500 WP  PLUS  5.0 l/ha Alachlor 384 EC  OR  0.65 to 1.0 l Palladium 960 EC	

### **NOTES**

- When **SYMPHONY 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.
- SYMPHONY 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 SYMPHONY 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 SYMPHONY 500 WP.

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Сгор	Dosage rate per hectare	Remarks
Afforestation Pine (Pinus patula) Wattle (Acacia mearnsii) Blue gum (Eucalyptus grandis)	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**

- 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 SYMPHONY 500 WP, or the area to be treated must be cleared of weeds by chemical or mechanical means, prior to the application of SYMPHONY 500 WP.
- 2. Do not apply **SYMPHONY 500 WP** to trees grown in any growth medium but soil.

Pine ( <i>Pinus patula</i> ) Blue gum ( <i>Eucalyptus grandis</i> )	200 g/ha	Post-transplant of seedlings: Apply in 250 litres of water as a directed spray. Ensure that spray mixture does not come into contact with the seedlings.
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#### **IMPORTANT**

- Ensure that seedlings are of good quality and free of disease and insect injury.
- Slight scorching of the leaves or needles may occur when **SYMPHONY 500 WP** if comes into contact with the seedlings. This will be of a transient nature and will be soon outgrown.
- Blue gums affected with *Botrytis* may be severely scorched, or even be killed, if the spray mixture comes into contact with the seedlings. Do not apply to seedlings which were grown in any other growth medium than soil.

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

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WEEDS NORMALLY CONTROLLED WITH 200 to 400 g SYMPHONY 500 WP per hectare:		
Weeds listed above PLUS:		
Acalypha ecklonii	False nettle-brush	
Cenia turbinata	Goose daisy	
Fumaria muralis	Fumitory	
Hydrocotyle americana	Navelwort	
Oenothera rosea	Rose evening primrose	
Plantago lanceolata	Narrow-leaved ribwort	
Portulaca oleracea	Purslane	
Setaria verticillata	Sticky bristle grass	
Sonchus oleraceus	Sow thistle	
Weeds controlled variably:		
Bidens pilosa	Common blackjack	
Chenopodium album	White goose foot	
Conyza floribunda	Fleabane	
Euphorbia helioscopia	Umbrella milkweed	
Polygonum aviculare	Prostrate knotweed	
Tagetes minuta	Khakiweed	

WEEDS NORMALLY CONTROLLED IN GROUNDNUTS AND SOYBEANS WITH A TANK MIXTURE OF 80 g SYMPHONY 500 WP per hectare PLUS Alachlor 384 EC / Palladium 960 EC:		
Annual grasses:		
Eleusine indica	Goose grass	
Broadleaved weeds:		
Amaranthus hybridus	Common pigweed	
Chenopodium album	White goosefoot	
Chenopodium carinatum	Green goosefoot	
Crotalaria sphaerocarpa	Mealie Crotalaria	
Schkuhria pinnata	Dwarf marigold	
Tribulus terrestris	Devil's thorn	
Weeds controlled variably:		
Datura ferox	Large thorn apple	
Tagetes minuta	Khakiweed	

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

#### NOTE

As **SYMPHONY 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).
- PALLADIUM 960 EC (L 9360 / W 130772 N-AR 2242) = PENTIUM 960 EC (L 9830) = PARTISAN 960 EC (L 9964) (S-Metolachlor).

SCAT® 360 SL and SKOFFEL® 200 SUPER are registered trademarks of UNIVERSAL CROP PROTECTION (PTY) LTD.

ALACHLOR 384 EC, PENTIUM 960 EC and SLASH 360 SL are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

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# PALLADIUM 960 EC and PANGA 360 SL are registered products of VILLA CROP PROTECTION (PTY) LTD.

PARTISAN 960 EC is a registered product of CROPASURE (PTY) LTD.

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