

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Herbicide



UNIZONE 750 WDG

Reg. No. L 8363 Act/Wet No. 36 of/van 1947

3:2/6/2015 – June/2017

A water dispersible granular herbicide for the selective control of broadleaf weeds and grasses as listed, in Ratoon Sugarcane fields and for non-selective use in Sugarcane verges and breaks, as well as the selective control of various weeds, as indicated, in Pine plantations. Forestry use is restricted to the Southern Cape region only, bounded by Mossel bay in the west, Stutterheim in the east and the Natal interior.

'n Water disperseerbare korrelonkruidoder vir die selektiewe beheer van grasse en breëblaaronkruid soos gelys, in Ratoon Suikerriet en vir nie-selektiewe gebruik in bane tussen en langs Suikerrietlande, asook vir die selektiewe beheer van verskeie onkruid, soos gelys, in Denneplantasies. Gebruik in plantasies is beperk tot die Suidkaapstreek, begrens deur Mosselbaai in die weste, Stutterheim in die ooste, en die Natalse binneland.

ACTIVE INGREDIENT / AKTIEWE BESTANDEDEEL

hexazinone (triazinone) **750 g/kg** heksasinoon (triasinoon)

HRAC HERBICIDE GROUP CODE **C1** HRAC ONKRUIDODDER GROEPPKODE



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
Website / Webblad: www.villacrop.co.za

UN Number: 3077

Willow Set & Print 011 394-4486



**HARMFUL
SKADELIK**



GERBUIKSAANWYSINGS INGESLUIT

VERWYS NA BESONDERHEDE
GEDRUK OP HOUER/SAK

Date formulated:
Formuleringsdatum:

REFER TO DETAILS PRINTED
ON CONTAINER/BAG

DIRECTIONS FOR USE ENCLOSED

Batch number:
Lotnommer:

UNIZONE 750 WDG

Reg. No. L 8363 Act/Wet No. 36 of/van 1947

HRAC HERBICIDE GROUP CODE / HRAC ONKRUIDDODER GROEPKODE: C1

ACTIVE INGREDIENT/ AKTIEWE BESTANDDEEL:

hexazinone (triazinone) / heksasinoon (triasinoon) 750 g/kg

Registration holder / Registrasiehouer:

UNIVERSAL CROP PROTECTION (PTY) LTD

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

P.O. Box / Posbus 801

KEMPTON PARK, 1620 Tel: (011) 396 2233

**HARMFUL****SKADELIK****WARNINGS**

- Handle with care.
- Harmful if swallowed.
- Direct contact with the product may cause irreversible eye damage.
- May irritate nose, throat and skin.
- Store under lock and key in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- **In case of poisoning call a doctor and make this label available to him/her.**

Aerial application:

Notify all inhabitants in the immediate vicinity of the lands to be sprayed, and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

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 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

- Avoid inhalation of the spray mist.
- Wear protective clothing: a face shield and rubber gloves when handling actions favour exposure to eyes.
- Wash contaminated clothing after use.
- Wash with soap and water immediately after use or after accidental skin contact.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Thoroughly clean the application equipment after use to remove all traces of herbicide. Remove nozzle tips and screens and clean separately, then flush tank, pump, hoses and boom with clean water.
- Disposal of containers:
 - containers must be completely emptied before being disposed of,
 - shake out thoroughly into the application hopper before destroying the empty container,
 - **never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Do not use close to desirable plants, e.g. windbreaks or ornamental trees or shrubs on road edge.
- Do not apply where product can reach the roots of such plants, or leach, or wash into contact with the roots.

- Do not apply if other crops at risk are to be grown in the area in the near future.
- Any application not in accordance with the directions on the label, including using higher dosage rates as recommended, may cause stunting or other undesirable effects.

SYMPTOMS OF HUMAN POISONING

The acute toxicity to technical triazinones for humans is thought to be low and no adverse health effects from exposure to these herbicides have been reported. In view of the toxicity induced in experimental animals the product may cause skin irritation, rash, damage to the eyes and effect on the liver (if large amounts are ingested).

FIRST AID TREATMENT

- **Inhalation:** Remove source of contamination, or move person to fresh air. Keep person calm and at rest. Treat symptomatically and supportively.
- **Skin contact:** Remove contaminated clothing, shoes and leather goods (e.g. watch bands and belts). Gently wipe off excess chemical. Wash affected skin areas gently and thoroughly with water and non-abrasive soap. Do not rub the skin. If irritation persists, seek medical advice. Persons who become sensitized may require specialized medical attention with anti-inflammatory agents or cortisone-containing emulsions.
- **Eye contact:** Direct contact with the product may cause irreversible eye damage. Immediately flush the contaminated eye(s) with gently flowing lukewarm water for 15 to 20 minutes, occasionally lifting the upper and lower lid(s). Remove contact lenses, if present, after the first 5 minutes. **If irritation persists, seek medical advice.**
- **Ingestion:** Have the patient rinse his/her mouth thoroughly with clean water. Do not induce vomiting. If the patient is alert and conscious, give him/her a glass of water to drink. **Do not give anything by mouth to an unconscious person. In serious cases, seek medical advice immediately.**

NOTE TO PHYSICIAN

No symptoms of triazinone poisoning are known or expected in humans. Treat symptomatically when required. When large amounts have been ingested, the administration of activated charcoal with water may be indicated. Probable mucosal damage may, however, contraindicate the use of gastric lavage.

RESISTANCE WARNING

UNIZONE 750 WDG is a group code C1 herbicide. Any weed population may contain individuals naturally resistant to **UNIZONE 750 WDG** and other group code C1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **UNIZONE 750 WDG** or any other group code C1 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.

USE RESTRICTIONS

Classify any area intended for spraying with **UNIZONE 750 WDG** as follows:

Vulnerability of area	Soil characteristics	Rate (kg ai* / ha / year)	Remarks
High	<ul style="list-style-type: none"> < 0.5 % organic matter, > 60 % sand, water table < 2 m below surface, > 1000 mm annual rainfall 	≤ 2	Apply using banded application and rotate with other herbicides for required weed control. Do not use more than 2 kg UNIZONE 750 WDG active ingredient per hectare per year.
Moderate	At least 2 of the above-mentioned are not present	≤ 6	Use of banded applications is recommended. Do not use more than 6 kg UNIZONE 750 WDG active ingredient per hectare per year.
Low	At least 3 of the aforementioned are not present	≤ 10	Do not use more than 10 kg UNIZONE 750 WDG active ingredient per hectare per year.

* ai = active ingredient

Environmental restrictions:

- Do not apply directly over water or allow spray mist to drift over water or wetlands.
- Do not apply where water will be contaminated by runoff from the treated area.
- Do not apply within 10 meters of permanent water.
- Do not mix or load within 20 meters of any water source, including a well, unless on an impermeable place to prevent contamination of groundwater.
- When filling spray tank, use an anti-siphoning device or an air break between water hose and contents of spray tank, to avoid back-siphoning and contamination of a well.
- Prevent unnecessary overlaps of spray swaths, as well as double spraying.

Follow-on crops:

- Crops, other than sugarcane, should not be planted within 12 months of a **UNIZONE 750 WDG** application.
- Thoroughly plough and harrow soil before planting any other crop.

Use restrictions in SUGARCANE:

- UNIZONE 750 WDG** should only be used on ratoon sugarcane and not sprayed directly over the crop, but rather between rows to prevent wetting the foliage as far as possible.
- UNIZONE 750 WDG** should not be applied to plant cane crops.

Use restrictions in FORESTRY:

- Do not use the product in nurseries.
- Do not apply to trees, which show poor growth due to insect, disease, frost, drought or water logging injury, or any other cause.
- Do not apply product where soils are poorly drained, gravelly or have a high leaching index.
- Do not exceed recommended application rates and, unless specifically recommended so on this label, do not repeat an application in the same season.
- Do not use surfactants if **UNIZONE 750 WDG** is applied directly over the top of *Pinus radiata* (Radiata pine, Monterey pine).
- Do not use surfactants or additives, other than those recommended on this label.

DIRECTIONS FOR USE: RATOON SUGARCANE: Use only as directed:**General Properties:**

- UNIZONE 750 WDG** is a herbicide with a long-lasting residual action, absorbed through leaves and roots. Apply to weeds prior to or during the period of active growth.
- The herbicidal activity of **UNIZONE 750 WDG** will be enhanced by rainfall within a few weeks after application, but the visible effects of the product on existing weeds may only appear after several weeks. Dosage rate, rainfall and soil type will determine the degree and period of weed control.

- Use **UNIZONE 750 WDG** as recommended and do not exceed dosage rates.
- Do not use adjuvants not specified on this label.

Compatibility:

- The compatibility of **UNIZONE 750 WDG** with other products may be influenced by various factors. As variables may vary, a physical compatibility test must always be performed before such a tank mixture is sprayed.
- **UNIZONE 750 WDG** is compatible with **Diuron 800 SC**, **Extend 800 WDG**, **Discipline 700 WDG** and **Ametryn 500SC**.
- The adding of an adjuvant will improve foliar uptake in post-emerge weed situations when added to **UNIZONE 750 WDG** and the tank-mixtures.
- Mineral oil will reduce drift of spray mixture and enhance foliar activity when **UNIZONE 750 WDG** and the tank-mixtures are applied via a Controlled Droplet Applicator.
- The activity of **UNIZONE 750 WDG** can be severely limited if poor quality water is used for application. Therefore, do not use water with high conductivity and pH, or high content of soil particles.
- When **UNIZONE 750 WDG** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label.

APPLICATION

General Application Conditions:

- **Weed Growth Stages:**
 - Pre-emergence of weeds: **UNIZONE 750 WDG** may be applied on its own, or tank-mixed with **Diuron 800 SC** and **Ametryn 500SC**.
 - Early post-emergence of weeds: **UNIZONE 750 WDG** should be tank-mixed with **Diuron 800 SC** and **Ametryn 500SC**.
 - **UNIZONE 750 WDG** should be applied to broadleaf weeds not taller than 8 to 10 cm and to grasses before a strong root system has developed and prior to tillering. Under normal circumstances, **UNIZONE 750 WDG** should control weeds for a period of 8 to 12 weeks.
- **Crop Growth Stage:**
 - Pre-emergence of new ratoon leaves: Apply overall.
 - Post-emergence of new ratoon leaves: Direct application between rows. Do not apply to the growing points.
 - If **UNIZONE 750 WDG** comes in contact with foliage during hot, humid conditions at the active growing stage, it can cause yellowing and temporary stunting of the crop.
- **Climatic Conditions:**
 - **Ametryn 500SC** should be added to the tank-mix when conditions are cool and dry, such as during spring.
 - **Diuron 800 SC** is the preferred tank-mix additive when conditions are warm and wet, and plants are actively growing.
- **UNIZONE 750 WDG**, and tank-mixtures thereof, are most efficacious when the soil is moist, the climate is warm and weeds are actively growing.
- Always add **Diuron 800 SC** or **Ametryn 500SC** to the product if *Panicum maximum* and *Cyperus esculentus* are identified as problems.

Aerial application:

Aerial application of **UNIZONE 750 WDG** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray mixture during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Recommended rate should be increased by 10 %.
- Aerial application must be made before the ratoon re-growth has reached 15 cm high.
- Volume: The following spray mixture volumes are recommended: **Pre-emergence** - 30 litres per hectare. **Post-emergence** - 30 to 35 litres per hectare. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aurally at a lower volume rate than recommended above.
- Droplet coverage: The following number of droplets per cm² must be recovered at the target area: **Pre-emergence** - 20 to 30; **Post-emergence** - 35 to 45.

- **Droplet size:** The following droplet spectra are recommended: **Pre-emergence** - VMD of 350 to 400 micron. **Post-emergence** - VMD of 300 to 350 micron. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 kilometres per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

Ground application:

1. **Controlled Droplet Application (CDA) Equipment:**

- CDA generally refers to battery-operated sprays using the spinning disc principle of droplet production.
- **UNIZONE 750 WDG**, and/or the tank mixtures described above, should not be applied in less than 50 litres per hectare water volume using this equipment.
- Application of **UNIZONE 750 WDG** and its tank mixtures with CDA equipment are generally only recommended for pre-emergence or very early post-emergence application, and not where weeds are in the late post-emergence stage.

2. **Knapsack and Tractor-mounted Sprayers:**

- Apply between 150 to 400 litres per hectare water volume using conventional equipment.
- TF-VS range of low drift nozzles is recommended when applying the lower water volume, but factors such as operating pressure and speed, and row spacing, will determine the final choice of nozzle.
- Water volumes may be lowered to 150 litres per hectare for application pre-emergence of weeds.
- Higher water volumes are recommended for post-emergence of weeds, where the latter are more developed or of variable height.
- It is recommended that drop arms be used with tractor-mounted sprayers, to ensure that product is applied down the inter-row.

Mixing instructions:

- Use enough water to dissolve the required amount of **UNIZONE 750 WDG** granules.
- Half fill the spray tank with clean water.
- Add the pre-mixed **UNIZONE 750 WDG** through a sieve into the tank.
- Premix the recommended amount of **Diuron 800 SC** or **Ametryn 500SC** with water into a thin slurry, then add to the spray tank.
- **For CDA:** add the mineral oil at the recommended rate at this stage and top up to the required volume with water, while agitating continuously.
- **For conventional ground equipment and aerial application:** top up to the required volume, while continuously agitating, and keep agitated to ensure adequate and uniform mixing.

FORESTRY

UNIZONE 750 WDG can be applied as:

- a broadcast, band or spot application,
- pre- or post-planting of tree seedlings, and
- pre- or post-emergence of weeds.
- If vegetation is not actively growing or under stress, foliar activity may be reduced.
- **UNIZONE 750 WDG** is activated by moisture.
- **Application:**
 - Correctly calibrated ground application equipment, either knapsack or tractor-mounted, may be used to apply **UNIZONE 750 WDG**.
 - Where possible, use Teejet TK-type Floodjet nozzles or equivalent and restrict the operating pressure to a maximum of 1 Bar.

VILLA 51 at 0.15 % of the total spray volume is recommended as a suitable surfactant/penetrant.

APPLICATION RATES**IMPORTANT**

- Refer to **USE RESTRICTIONS** and **DIRECTIONS FOR USE** above.
- Contact your supplier if any uncertainty exists regarding use of **UNIZONE 750 WDG**.

1. SUGARCANE (RATOON CANE ONLY)**1.1 UNIZONE 750 WDG plus Diuron 800 SC or Ametryn 500SC**

<i>Time of Application</i>	<i>Soil Type</i>	<i>Clay %</i>	<i>Pre-Emergence of Weeds</i>	<i>Post-emergence of Weeds</i>	
			<i>UNIZONE 750 WDG / ha</i>	<i>PLUS Diuron 800 SC / ha</i>	<i>OR Ametryn 500SC / ha</i>
Early season	Light to Loamy Sands	5 to 15 %	0.5 to 0.7 kg	1 ℓ	3 ℓ
	Loamy sands to Sandy clay loams	16 to 35 %	0.7 to 0.9 kg	1.0 to 1.5 ℓ	3 to 4 ℓ
	Sandy clay to Clay or soils with High organic matter	> 35 %	0.8 to 1.0 kg (Refer to notes below)	1.5 to 2.0 ℓ (Refer to notes below)	4 ℓ (Refer to notes below)
Mid-season	Light to Loamy Sands	5 to 15 %	0.5 to 0.6 kg	1 ℓ	3 ℓ
	Loamy sands to Sandy clay loams	16 to 35 %	0.6 to 0.7 kg	1.0 to 1.5 ℓ	3 to 4 ℓ
	Sandy clay to Clay or soils with High organic matter	> 35 %	0.7 to 0.8 kg (Refer to notes below)	1.5 to 2.0 ℓ (Refer to notes below)	4 ℓ (Refer to notes below)
Late season	Light to Loamy Sands	5 to 15 %	0.3 to 0.4 kg	1 ℓ	3 ℓ
	Loamy sands to Sandy clay loams	16 to 35 %	0.6 kg	1.0 to 1.5 ℓ	3 to 4 ℓ
	Sandy clay to Clay or soils with High organic matter	> 35 %	0.7 kg (Refer to notes below)	2 ℓ (Refer to notes below)	4 ℓ (Refer to notes below)

IMPORTANT NOTES

- Post-emergence weeds: foliar uptake will be improved by the addition of an adjuvant.

- The addition of **Diuron 800 SC** or **Ametryn 500SC** at the indicated rates are recommended if *Panicum maximum* has developed beyond seedling stage when applied.
- For light, less adsorptive soils (low cation exchange capacity): always use the lower rate.
- For heavy soils (usually with a high cation exchange capacity): confirm actual dose rate with technical advisor.

1.2 UNIZONE 750 WDG plus Extend 800 WDG tank mixture packs

Crop	Dosage rate kg / ha	Remarks
<p>Sugarcane (Ratoon crops only)</p> <p><u>Pre- and Early post-emergence in tank mixtures with other herbicides</u></p>	<p>“PACK” TANK MIXTURE OPTIONS:</p> <p>1.0 PLUS 1.0 kg Extend 800 WDG (OPTION 1/PACK 1)</p> <p>OR</p> <p>0.8 PLUS 1.6 kg Extend 800 WDG (OPTION 2/PACK 2)</p> <p>OR</p> <p>1.0 PLUS 2.0 kg Extend 800 WDG (OPTION 3/PACK 3)</p>	<p>Total contents of each pack treats 1 hectare.</p> <p><u>Pre- or Early post-emergence:</u> For post-emergence applications, add Summit Super at 0.15 % (150 ml per 100 litres) to the spray mixture.</p> <ul style="list-style-type: none"> • Weed size and weed growth: <ul style="list-style-type: none"> - Broadleaf weeds must not be taller than 8 to 10 cm at the time of application. - If grasses are present the application should be made prior to tillering or prior to the development of a strong root system. • Crop growth stage: <ul style="list-style-type: none"> - Pre-emergence of new ratoon leaves: overall application can be made. - Post-emergence of new ratoon leaves: direct application across the inter-row and away from the growing points. <p>Contact with the foliage during hot, humid conditions can cause yellowing and temporary stunting to the crop during actively growing situations.</p>

1.3 Pre-emergence application of UNIZONE 750 WDG & Discipline 700 WDG in ratoon cane only

Time of Application	Soil Type	Clay %	UNIZONE 750 WDG / ha	PLUS Discipline 700 WDG
Early season	Light to Loamy Sands	10 to 15 %	0.5 kg	1.5 kg
	Loamy sands to Sandy clay loams	16 to 35 %	0.8 kg	
	Sandy clay to Clay or soils with High organic matter	> 35 %	1.0 kg (Refer to notes below)	

IMPORTANT NOTES

- Apply evenly onto soil soon after harvesting.
- For improved suppression of *Cyperus esculentus* and control of grasses such as *Panicum maximum*, apply the highest dosage rate of **UNIZONE 750 WDG** allowed for the soil type.

1.4 **RECOMMENDATIONS FOR SUGARCANE VERGES AND BREAKS**

- **UNIZONE 750 WDG** should be applied:
 - at post-emergence of weeds in 200 to 400 litres water per hectare, as a uniform overall spray.
 - prior to, or during the stage of active growth of the weeds, and
 - at early stages of grass development.
- Not all weeds will be completely destroyed; some may only be severely stunted, but growth will be retarded. The weeds listed below will be controlled for an extended period.

Dosage rates for verges of sugarcane fields and breaks:

Soil type	Clay %	Dosage / ha	Spot treatment (per 10 m²)	Remarks
Sandy and sandy loam	≤ 20 %	2.4 kg	2.4 g	To avoid wetting the leaves of the sugarcane, apply as a directed spray.
Sandy clay loam	21 to 35 %	3.6 kg	3.6 g	
Sandy clay to clay	> 35 %	4.8 kg	4.8 g	

WEEDS NORMALLY CONTROLLED:	
Botanical name	Common name
Grasses:	
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Digitaria</i> spp.	Finger grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Panicum subalbidum</i>	Elbow buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
Broadleaf Weeds:	
<i>Ageratum conyzoides</i>	Invading Ageratum
<i>Argemone mexicana</i>	Yellow-flowered Mexican poppy
<i>Bidens formosa</i>	Cosmos
<i>Bidens pilosa</i>	Blackjack
<i>Chenopodium murale</i>	Nettle-leaved goosefoot
<i>Datura stramonium</i>	Thorn apple
<i>Emex australis</i>	Spiny emex
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Hibiscus trionum</i>	Bladder weed
<i>Nicandra physaloides</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane
<i>Sigesbeckia orientalis</i>	St Paul's wort
<i>Solanum nigrum</i>	Nightshade
Sedges:	
<i>Bulbostylis hispidula</i>	Slender sedge
<i>Cyperus distans</i>	Slender Cyperus
<i>Cyperus esculentus</i>	Yellow nutsedge (post-emergence only)
<i>Fimbristylis dichotoma</i>	Fringe sedge

WEEDS NOT NORMALLY CONTROLLED:		
Botanical name	Common name	Remarks
<i>Cynodon dactylon</i>	Common couch	Not controlled
<i>Cyperus rotundus</i>	Purple nutsedge	Not controlled
<i>Panicum maximum</i> (tillering and post-tillering)	Common buffalo grass	Not well controlled
<i>Sorghum bicolor</i> subsp. <i>arundinaceum</i>	Common wild sorghum	Not well controlled

2. FORESTRY

2.1 Conditions and rates for eradication of Black wattle (*Acacia mearnsii*) seedlings (in *Pinus* plantations of Cape and Natal and non-crop areas elsewhere, where Black wattle occurs)

Basal soil treatment with automatic refill syringe:

- **High-density stands:** have 5 to 20 seedlings per square meter, but not more than 20, with a stem diameter < 25 mm. Apply 2 ml doses of 1 kg **UNIZONE 750 WDG**, diluted in 3 litres water, in a 0.5 m x 0.5 m grid pattern.
- **Low density stands:** have stem diameters less than 100 mm. Apply 2 ml doses of 1 kg **UNIZONE 750 WDG**, diluted in 3 litres water, according to the table below. Product should be applied close to stem of wattle tree, and spaced around the stem if 2 or more doses are applied.
- Continuously agitate mixture during both the above applications.
- The size of the original seedlings should be used as guide for follow-up treatment of re-growth.

Stem diameter	Number of 2 ml doses
< 10 mm	1 x 2 ml dose
11 to 25 mm	2 x 2 ml doses
26 to 50 mm	3 x 2 ml doses
51 to 75 mm	4 x 2 ml doses
> 75 mm	6 x 2 ml doses

Ground application:

- Use **UNIZONE 750 WDG** for the control of Wattle seedlings up to 3 m high.
- Apply **UNIZONE 750 WDG** at concentrations of 1.6 to 2.4 kg per hectare in a total spray volume of 300 litres per hectare water using ground application equipment. For seedlings taller than 2 m, use the higher dosage.
- **Villa 51**, at 0.15 % of the total spray volume, is recommended as a suitable surfactant/penetrant.
- **NOTE**
The size of the original seedlings should be used as guide for follow-up treatment of re-growth.

Aerial application:

- Apply **UNIZONE 750 WDG** at 2.6 to 3.2 kg per hectare.
- Refer "**Aerial application**" above for more information.

2.2 Conditions and application rates in *Pinus* plantations

Application conditions for *Pinus radiata* plantations (Cape Region only):

- Apply **ONLY** to post-plant trees older than 3 months
- Apply **ONLY** as an overall, band or spot application.
- **Do not** apply over the top of trees during bud break.
- Apply **only** as a directed spray during bud break and avoid direct contact of the product with the primary growth point. **Do not** use a surfactant.

Application conditions for *Pinus elliottii* plantations (Cape and Natal Regions):

- Apply **ONLY** to post-plant trees and **ONLY** as a band or spot application.
- **Do not** apply over the top of trees of *P. elliottii*.

- **Do not** spray on the primary growth point and lower branches, but only as a directed spray.
- **Southern Cape region:** Only apply to trees older than **12 months** as a post-plant application.
- **Natal interior:** Only apply to trees older than **24 months**, on soils of more than 30 % clay. Apply as a banded or spot application and prevent direct contact of the spray mixture with the primary growth point.

2.3 Rates for control of perennial grasses, broadleaf weeds, herbaceous and woody shrubs in Pinus plantations: (Cape and Natal regions as specified above)

Ground application:

- Apply with ground equipment at 1.9 to 2.6 kg per hectare in a total spray volume of 300 litres per hectare.
- For larger target weeds and heavier soils, use higher recommended rate.
- **Villa 51**, at 0.15 % of the total spray volume, is recommended as a suitable surfactant/penetrant.

Aerial application:

- Apply **UNIZONE 750 WDG** at concentrations of 2.6 to 3.2 kg per hectare.
- Refer to “**Aerial application**” above for more information.

WEEDS NORMALLY CONTROLLED:	
Botanical name	Common name
<i>Chrysanthemoides monilifera</i>	Brother berry
<i>Ehrharta subspicata</i>	Keurgras
Fynbos spp.	Fynbos
<i>Gleichenia polypodioides</i>	Creeping fern
<i>Pennisetum clandestinum</i>	Kikuyu
<i>Restio triticeus</i>	Broom reed/Cape reed
<i>Stoebe plumose</i>	Slangbos
<i>Virgilia oroboides</i>	Snowdrop tree

2.4 Rates for the control of annual broadleaf weeds and grasses in Pinus plantations: (Cape and Natal Regions as specified above)

Ground application:

- Apply **UNIZONE 750 WDG** with ground equipment at 1.3 to 1.9 kg per hectare in a total spray volume of 300 litres per hectare.
- For larger target weeds and heavier soils, use higher recommended rate.
- **Villa 51**, at 0.15 % of the total spray volume, is recommended as a suitable surfactant/penetrant.

Aerial application:

- Apply **UNIZONE 750 WDG** at concentrations of 1.6 to 2.4 kg per hectare.
- Refer to “**Aerial application**” above for more information.

WEEDS NORMALLY CONTROLLED:	
Botanical name	Common name
Grasses:	
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Digitaria</i> spp.	Finger grass
<i>Eleusine indica</i>	Goose grass
<i>Lolium</i> spp.	Rye grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Panicum subalbidum</i>	Elbow buffalo grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Setaria pallide-fusca</i>	Red bristle grass

WEEDS NORMALLY CONTROLLED:	
Botanical name	Common name
Broadleaf weeds:	
<i>Ageratum conyzoides</i>	Invading Ageratum
<i>Argemone mexicana</i>	Yellow-flowered Mexican poppy
<i>Bidens formosa</i>	Cosmos
<i>Bidens pilosa</i>	Blackjack
<i>Chenopodium murale</i>	Nettle-leaved goosefoot
<i>Datura stramonium</i>	Thorn apple
<i>Emex australis</i>	Spiny emex
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Hibiscus trionum</i>	Bladder weed
<i>Nicandra physaloides</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane
<i>Sigesbeckia orientalis</i>	St Paul's wort
<i>Solanum nigrum</i>	Nightshade
Sedges:	
<i>Bulbostylis hispidula</i>	Slender sedge
<i>Cyperus distans</i>	Slender Cyperus
<i>Cyperus esculentus</i>	Yellow nutsedge (post-emergence only)
<i>Fimbristylis dichotoma</i>	Fringe sedge

WEEDS NOT NORMALLY CONTROLLED:		
Botanical name	Common name	Remarks
<i>Cynodon dactylon</i>	Common couch	Not controlled
<i>Cyperus rotundus</i>	Purple nutsedge	Not controlled
<i>Panicum maximum</i> (tillering and post-tillering)	Common buffalo grass	Not well controlled
<i>Sorghum bicolor</i> subsp. <i>arundinaceum</i>	Common wild sorghum	Not well controlled

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

- **VILLA 51** (L 8050 / N-AR 1090 / W 130454) = **WEN 51** (L 8315),
- **AMETRYN 500SC** (L 7743) = **AMETRYN 500 SC** (L 7742),
- **DISCIPLINE 700 WDG** (L 9440) = **DIRECTION 700 WDG** (L 9439) (**Amicarbazone**) and
- **EXTEND 800 WDG** (L 9108) = **DEVELOP 800 WDG** (L 9109) (**Diuron**).

AMETRYN 500SC, DISCIPLINE 700 WDG and/en **EXTEND 800 WDG** are registered products of / is
geregistreerde produkte van
UNIVERSAL CROP PROTECTION (PTY) LTD.

AMETRYN 500SC, VILLA 51, DIRECTION 700 WDG, DEVELOP 800 WDG and/en **WEN 51** are registered
products of / is 'n geregistreerde produkte van
VILLA CROP PROTECTION (PTY) LTD.