

RADIATE

Reg. No. / Nr L9569 Act No. 36 of 1947 / Wet Nr 36 van 1947
N-AR 1540

GROUP 4 HERBICIDE

READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

A residual, water soluble, systemic herbicide acting through the leaves, roots and cut surfaces, for the control of certain woody plants as listed, in grazing, conservation areas and on non-crop land.

'n Nawerkende, wateroplosbare, sistemiese onkruidodder wat deur blare, wortels en gesnyde oppervlaktes werk, vir die beheer van sekere houtagtige plante, soos aangetoon, in weidings, bewaringsgebiede en op lande waarop gewasse nie verbou word nie.

Active Ingredient / Aktiewe Bestanddeel

Picloram 240 g a.i. per l Pikloram
(as the Potassium salt) (as die Kalium sout)



WARNING

Hazard Statements

May be harmful if swallowed and enters airways.
Causes severe skin burns and eye damage.
Causes serious eye irritation.
May cause respiratory irritation.
May cause damage to organs.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

Do not breathe fumes/gas/mist/vapours/spray.
IF SWALLOWED: Get emergency medical help immediately.
IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.



REGISTRATION HOLDER / REGISTRASIEHOUER:

Agritech Bioscience (Pty) Ltd / (Edms) Bpk t/a Carabiner
Reg. No. 2008/004392/07
6 Antwerp Street, Apex, Benoni,
1540
South Africa / Suid-Afrika



Batch No./Date manufactured/Expiry date: Refer to details printed on container

UN No. / VN Nr. Not regulated

Net volume L Netto Volume

In case of poisoning, call the following numbers:

Poisons Information Helpline: +27 861 555 777
EMERGENCY NUMBER: +27 82 446 8946

WARNINGS

- GHS Hazard statements

May be harmful if swallowed and enters airways.
Causes severe skin burns and eye damage.
Causes serious eye irritation.
May cause respiratory irritation.
May cause damage to organs.
Toxic to aquatic life with long lasting effects.

- Store under lock and key in a cool, dry place away from food, feed, fertilizer, and other agricultural products.
- Keep out of reach of children, uninformed persons, and animals.
- **RE-ENTRY:** Do not enter the treated area within 1 day, unless wearing protective clothing.
- **In case of poisoning immediately call a physician and make this label available to him/her.**
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not apply over water bodies and ensure that spray drift will not contaminate areas not under treatment.

Grazing Restrictions:

- Meat animals grazing up to two weeks after treatment must be removed from the treated area three days prior to slaughter.
- Do not graze any lactating dairy animals on treated area within two weeks after treatment.

Grazing poisonous plants: Herbicide application may increase the palatability of certain poisonous plants. Do not graze the treated areas until the poisonous plants are dry and no longer palatable to livestock.

DISCLAIMER

Although this remedy has been tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic- and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds against the remedy concerned as well as by the method, time, and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal, or for lack of performance of the remedy concerned due to occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

- GHS Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read carefully and follow all instructions.
Do not breathe dust/fumes/gas/mist/vapours/spray.
Wash hands thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear eye protection/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get emergency medical help immediately.
IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Get emergency medical help immediately.
Specific treatment (see First Aid Treatment on this label).
Do NOT induce vomiting.
If eye irritation persists, get medical help.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material-damage.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with national regulations.

- OPERATOR PROTECTION

- Handle with care.
- Do not inhale fumes or spray mist.
- Should eye contact occur, flush the eyes with plenty of clean water for 15 minutes holding eyelids open. Remove contact lenses after 1-2 minutes of irrigation. **Seek medical attention.**
- Wash with soap and water immediately after use and accidental skin contact as well as contact with contaminated clothing.
- Wash contaminated clothing after use.
- Do not eat, drink, or smoke while mixing or applying the product, or before washing hands and face and changing clothes.
- Avoid skin and contact with eyes by wearing face shield and rubber gloves when mixing the product.

- ENVIRONMENTAL PROTECTION

- Prevent spray drift onto other non-target vegetation, crops, grazing, rivers, dams, or areas not under treatment.
- Do not contaminate dams, rivers, lakes, or any other water sources.
- Clean the applicator with clean water directly after use. Dispose of the rinsate where it will not contaminate crops, grazing, rivers, dams, and boreholes.

- STORAGE AND DISPOSAL

- Store under lock and key in the original container in a cool, dry place out of direct sunlight.
- Store away from food, feed, fertilizer, and seed.
- **KEEP OUT OF SIGHT AND REACH OF CHILDREN**, uninformed persons, untrained personnel, unauthorised personnel and animals.
- Do not allow access to this product by children, uninformed persons, untrained personnel, unauthorised personnel, or animals under any circumstances.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Containers and packages must be completely emptied before disposal.
- **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. Destroy the triple rinsed container by perforation and flattening and do not use for any other purpose. Store appropriately until it can be disposed of via an approved collector or recycler authorised to recycle or destroy waste in terms of the National Environmental Management: Waste Act,

2008 (Act No. 59 of 2008) and the relevant waste management regulations. Empty containers and product should not be burnt. Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

- **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.**

RELEVANT SUBSTANCES

Hazardous Ingredients	Concentration (w/v)
Picloram	≤ 25%
Potassium hydroxide	≥ 7 - <8%

FIRST AID TREATMENT

If medical advice is needed, have product container or label at hand. Provide medical personnel with the container label, product name or safety data sheet (SDS) when seeking medical attention.

General Information: Remove patient from exposed area. Never give fluids or induce vomiting if the patient is unconscious or is having convulsions.

Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). **Seek medical attention.**

Skin contact: Immediately flush body and clothes with large amounts of clean water and soap. Remove contaminated clothing and footwear. Wash affected areas with soap and clean water. Do not rub skin. Persons providing first aid must wear gloves to avoid self-contamination. **Seek medical attention immediately.**

Eye contact: Flush eyes with plenty of clean, room temperature water for at least 15 minutes holding eyelids open. Remove contact lenses if present, after first 1-2 minutes, and then continue rinsing. **Seek medical attention.**

Ingestion: Rinse mouth immediately with clean water and have the patient sip a glass of water if the patient is alert and able. Do NOT induce vomiting unless instructed to do so by a medical professional. Never induce vomiting or give anything by mouth to a victim who is unconscious or is having convulsions. **Seek medical attention.**

Treat symptomatically and supportively.

RESISTANCE MANAGEMENT WARNING STATEMENT

For resistance management, **RADIATE** is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **RADIATE** and other group code 4 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **RADIATE** or any other group code 4 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 different herbicide group codes. Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be taken to prevent seed set of these survivors.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

- Refer to the Herbicide Resistance Action Committee for information regarding any applicable resistance management of group 4 herbicides at <https://hracglobal.com/> for more information.
- Avoid distribution of the resistant species to adjacent fields by implements during the cultivation period.

As the occurrence of resistance cannot be forecast, users are advised to keep all treated crops under close observation. If the treatment is not effective following the use of **RADIATE** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to the prompt use of a herbicide with a different mode of action against which no record of resistance exists.

For specific information on resistance management, contact the registration holder of this product.

The presence of resistant weeds is difficult to detect prior to use and, therefore, neither the Registration Holder nor the Distributor can accept responsibility for any losses as a result of **RADIATE** not controlling resistant weeds. Do not apply **RADIATE** alone in situations where weed resistance has been confirmed. Sub-standard application of **RADIATE** will lead to inferior weed control and may assist in development of herbicide resistance. It is of the utmost importance to inspect treated areas at regular intervals in order to identify the occurrence of herbicide-resistant weeds timeously.

MODE OF ACTION

RADIATE is a selective, systemic herbicide, which is absorbed rapidly by the roots and leaves and translocated both acropetally and basipetally, accumulating in new growth.

DIRECTIONS FOR USE - Use only as directed.

NOTICE TO USER: This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under Act No. 36 of 1947 to use this agricultural remedy for any purpose or in any manner contrary to the directions on the label.

TIMING OF APPLICATION

Poison leaf:

- For optimum control apply **RADIATE** only when the **CURRENT SEASON'S GROWTH IS FULLY DEVELOPED**, but before the leaves start to turn yellow in the early autumn.
- In this respect, it is recommended that spraying should not be done before November, by which time most of the new stems will have emerged and would have produced mature leaves.
- Spraying earlier in the spring (when most of the new growth present consists of recently emerged stems with immature leaves) will result in unsatisfactory control.
- Do not apply **RADIATE** if more than 25% of the foliage has been destroyed by caterpillars or other insects.
- Any re-growth which is found in the second season after application should be re-sprayed.
- When spraying old stems that have not yet produced leaves, also spray the surrounding soil for at least 30 cm from the stem.

Other species:

- Apply **RADIATE** only on actively growing plants and when the soil moisture is favourable for plant growth.
- Apply only when the trees are in the correct growth stage as indicated below:
 - Only spray trees where the leaves have fully developed.

- Spray only onto healthy and vigorously growing trees.
- Spray only onto trees with full foliage cover.
- Do not apply onto wet foliage.
- Do not spray after a late frost.
- Deciduous plants may drop their leaves when stressed. Do not spray target plants showing signs of stress or when signs of drought are evident. Caution must be exercised when applying foliar applications to deciduous plants during autumn, in order to prevent rapid leaf drop as a combination of stress and herbicide application. Should this happen, provision should be made for follow-up treatments.

USE RESTRICTIONS

RADIATE is toxic to some plants at very low concentrations, therefore, the precautions which must be followed in order to avoid injury to non-target plants are:

- **Do not apply RADIATE in any way contrary to this label.**
- **Do not permit the spray mist to drift** or to come into contact with sensitive broadleaf crops including, but not limited to, lucerne, beans, melons, potatoes, soyabeans, sunflowers, tobacco, tomatoes, cotton, fruit trees, grape vines, ornamentals, soil containing roots of these plants, soil in which such plants are to be grown, grain varieties in a susceptible stage of growth or grazing, or any other area not under treatment.
- **Do not contaminate water which is intended for irrigation or domestic purposes.** In order to avoid injury to crops or other desirable plants, do not treat or allow the spray, spray drift or spray run-off, to fall onto the banks or the bottoms of irrigation ditches, canals, streams, dams, rivers, either dry or containing water, that may be used for irrigation or domestic purposes or may carry water to an irrigation facility.
- **Do not make any application when the circumstances favour movement from the treatment site.**
- **Do not apply to any areas that may be rotated to any broadleaf crop.**
- **Do not use any manure** from animals grazing treated areas on land used for growing already established, or yet to be established, broadleaf crops, ornamentals, orchards, or other susceptible crops. The manure may contain enough picloram to cause injury to susceptible plants.
- **Do not use grass or sprayed plants** from a treated area for composting or mulching of susceptible broadleaf plants or crops.
- **Do not transfer livestock** from any treated grazing areas (or feeding of treated grass), onto sensitive broadleaf crop areas without first allowing 7 days of grazing of an untreated grass pasture. Otherwise, the urine or faeces may contain enough picloram to cause injury to sensitive broadleaf plants.
- **Do not use on flood-irrigated lands or fields.**
- **Do not apply if the loss of forage legumes, including clover, cannot be tolerated.** Any new legume seedlings may take years to re-establish.
- **Do not move any treated soil** to areas other than sites for which **RADIATE** is registered for use.
- **Do not apply through a mist-blower.**
- **Do not apply to land nearby to desirable broadleaved plants** or land onto which such plants are to be grown, or grain varieties in a susceptible stage of growth. **RADIATE** may however, be applied in the **VICINITY** of desirable broadleaved plants, or soil or land onto which such plants are to be grown, or grain varieties in a susceptible stage of growth, **PROVIDED THAT ADEQUATE PRECAUTIONS ARE TAKEN IN ORDER TO AVOID SPRAYDRIFT** (See the wind speed table below) **OR CONTAMINATION OF RUN-OFF AREAS.**
- Apply the product strictly according to the application directions.

Do not apply by air in KwaZulu Natal.

The wind speed and direction at the time of application will determine the distance which must separate the closest edge of the area to be sprayed from susceptible plants and crops.

WIND SPEED km/h	GROUND APPLICATION	AERIAL APPLICATION
2 - 15	2.0 km downwind 2.0 km crosswind 1.0 km upwind	5.0 km downwind 5.0 km crosswind 2.0 km upwind
Above 15	Prohibited	Prohibited

- Do not apply to any crop or situation not mentioned in this label.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Agritech Bioscience (Pty) Ltd t/a Carabiner accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Carabiner representative was consulted beforehand.
- By buying this product, the buyer undertakes that the user is fully aware of and suitably trained on the hazards associated with the preparation and use of this product. By selecting this product voluntarily, the user assumes responsibility for his or her own personal protection whilst storing, mixing, and applying the product in the approved manner according to the instructions for use. The user also confirms to have consulted the SDS of this product and he/she is aware of the potential health hazards which could arise out of use and misuse of this product. Users are encouraged to keep records of all procedures followed and which personal protection equipment was used at all times. All personal protection equipment used must be kept clean and in good working order according to the manufacturer's specifications. Agritech Bioscience (Pty) Ltd. t/a Carabiner accepts no responsibility for any adverse effects whatsoever resulting from improper use of this product or the use of unsuitable personal protection equipment. The user has selected to use this product at his/her own free will and risk.
- **Do not use RADIATE if the above-mentioned use restrictions cannot be adhered to.**

MIXING INSTRUCTIONS

Mix **RADIATE** with water and add an adjuvant such as Actipron Super (L5506) according to the instructions for the different plants. Once the spray mixture has been mixed, no further agitation is needed. Do not use brackish water.

Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight. Spraying equipment must be thoroughly flushed out at the end of the spraying operation. Ensure that spray premixes and/or final spray mixtures are kept out of reach of children, uninformed persons, untrained personnel, unauthorised personnel and animals.

APPLICATION INSTRUCTIONS

FOLIAR APPLICATION

A. AERIAL

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

Equipment

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 60-75% of the wingspan to prevent droplets from entering the wingtip vortices.

Application Parameters

- A minimum volume of 30 – 35 l spray mixture per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage of 30 – 40 droplets per square cm must be recovered at the target.
- A droplet spectrum with a VMD of 300 – 350 microns is recommended. Ensure that the production of fine droplets, with a VMD less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn, or during a dive, or when banking.

Meteorological Conditions

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions nor during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer) as this may lead to the following:
 1. Reduced efficacy due to suspension and evaporation of small droplets in the air (leading to inadequate coverage).
 2. Damage to other sensitive crops and/or non-target areas via the movement of the suspended spray cloud away from the target area.
- Do not spray when the wind speed exceeds 15 km per hour.

General

- Ensure that fields are accurately marked and 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 the relevant data will be compiled in a logbook and kept.

B. GROUND

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. Only clean water should be used

a) Knapsack & Tractor Application

Knapsack: Avoid fine droplet size - use a knapsack sprayer with a solid cone nozzle, e.g., Spraying Systems TG1 (or an equivalent type) that will ensure even coverage of the target area.

Maintain a constant pressure of between 200 - 250 kPa.

Maintain a distance of approximately 50 cm from the target for the best coverage.

Knapsack or Tractor: For linear application with a knapsack or tractor and boom, apply in sufficient water per hectare to ensure even coverage. This will be 250 – 350 litres spray mix

per hectare depending on the plant height and weed species. Consult your local distributing agent for further advice.

b) High Volume Application (Only with a foaming agent)

Use a motorized pump that is capable of applying pressures of 1000 - 1200 kPa - use a Spraying Systems Foam jet FJ 0006 aspirating nozzle, (or an equivalent type.) Add a commercially available foaming agent as a temporary spray application marker.

c) General

Apply **RADIATE** as a complete cover spray to leaves and stems.

Use **RADIATE** only on actively growing plants, up to 2 metres in height, with full leaf cover.

Apply sufficient spray mixture to wet the foliage until just before the point of run-off.

Do not apply if it is likely to rain within 3 hours of application.

Do not apply to wet foliage.

Do not apply if the wind velocity exceeds 15 km/h (as measured by handheld wind recorder approved by the Registrar: Act No. 36 of 1947). The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.

CUT STUMP TREATMENT

- Preferably apply immediately after felling but definitely within 3 hours.
- **RADIATE** should not be applied to the stump if the surface is wet from rain or dew.
- Apply **RADIATE** with a knapsack, as a coarse spray using solid cone nozzle tips (e.g., Spraying Systems TG-1, Delavan CE 1, or equivalent type) at 100 kPa, low pressure.
- Do not exceed a spray height of 20 cm above the target. Do not apply if the wind velocity exceeds 15 km/h (as measured by handheld wind recorder). The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.
- Apply **RADIATE** according to directions in the table below.

FRILL METHOD

Using an axe, make horizontal, downward angled cuts through the bark in order to penetrate, but not go deeper, than into the sapwood. Immediately apply the spray mixture into every cut, taking care that it is not wasted on the bark. The cuts should be connected and made around the entire circumference of the trunk as close to the soil surface as possible. Re-treat as necessary.

Warning:

If top kill is obtained but re-growth occurs from the crown, apply TrimaxE (L7666) or **RADIATE** as a foliar spray.

- In the case of trees with multiple stems, treat each stem separately.
- Check for adequate sap flow and bleeding.

APPLICATION INSTRUCTIONS

FOLIAR APPLICATION

TABLE 1: CONTROL OF BUSH / SHRUB SPECIES USING AERIAL APPLICATION

BUSH / SHRUB SPECIES	RATE / HA	REMARKS
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Sickle bush (<i>Dichrostachys cinerea</i>)	2.0 ℓ	See DIRECTIONS FOR USE above. Apply RADIATE in 30 ℓ water per hectare.
	2.0 ℓ	<u>CDA application:</u> Mix 2.0 ℓ RADIATE with 2.0 ℓ Actipron Super and 6.0 ℓ water. Apply 10 ℓ of the spray mixture per hectare.

TABLE 2: CONTROL OF ALIEN BUSH / SHRUB SPECIES USING GROUND APPLICATION

Note:

For foliar application using a knapsack sprayer, Actipron Super should be added at a rate of 500 mℓ/100 ℓ spray mix (0.5% mixture).

ALIEN BUSH / SHRUB SPECIES	RATE / 100 ℓ WATER	REMARKS
Bramble (<i>Rubus cuneifolius</i>)	0.75 – 1.0 ℓ	Use the higher rate for older, previously slashed, plants with big stumps.
Lantana (<i>Lantana camara</i>)	500 mℓ	High Volume Application: Add a foaming agent at 500 mℓ/100 ℓ of spray solution.
Saligna gum (<i>Eucalyptus grandis</i>)	375 mℓ	Coppice Application: When coppice is between 1 – 1.5 m in height apply RADIATE to leaves and stems ensuring thorough wetting. Limited re-growth may occur which requires a follow up treatment.

TABLE 3: CONTROL OF INDIGENOUS BUSH / SHRUB SPECIES USING GROUND APPLICATION

INDIGENOUS BUSH / SHRUB SPECIES	RATE / 100 ℓ WATER	REMARKS
Poison leaf (<i>Dichapetalum cymosum</i>)	1.0 ℓ	See DIRECTIONS FOR USE above.
Sickle bush (<i>Dichrostachys cinerea</i>)	350 mℓ	Knapsack Application: Add Actipron Super at a rate of 500 mℓ/100 litre of spray solution.
Umbrella thorn (<i>Vachellia tortilis</i>)	500 mℓ	High Volume Application: Add a foaming agent at a rate of 500 mℓ/100 litre of spray solution.

CUT STUMP

TABLE 4: CONTROL OF ALIEN BUSH / SHRUB SPECIES USING CUT STUMP APPLICATION

ALIEN BUSH / SHRUB SPECIES	RATE / 100 ℓ WATER	REMARKS
Black wattle (<i>Acacia mearnsii</i>)	1.5 ℓ	See DIRECTIONS FOR USE above. Add 500 mℓ Actipron Super/100 ℓ spray mix. Apply the spray mix to low cut stumps (10 – 20 cm high), preferably with a single cut surface.
Bugweed (<i>Solanum mauritianum</i>)	1.0 ℓ	
Paraffin bush (<i>Chromolaena odorata</i>)	1.0 ℓ	
Saligna gum	1.5 ℓ	

(<i>Eucalyptus grandis</i>)		Apply to the completely cut surface of stumps with a diameter of less than 10 cm. Where multiple stumps are present, all cut surfaces must be treated. For larger stumps apply to the cambial region (sapwood) of the cut surface. In all cases, apply to the point of run-off. A follow-up spray as a coppice application may be needed.
Lantana (<i>Lantana camara</i>)	1.0 ℓ	

TABLE 5: CONTROL OF INDIGENOUS BUSH / SHRUB SPECIES USING CUT STUMP APPLICATION

INDIGENOUS BUSH / SHRUB SPECIES	RATE / 100 ℓ WATER	REMARKS
Mopane (<i>Colophospermum mopane</i>)	2.5 ℓ	Add 2.0 ℓ Actipron Super / 100 ℓ spray mix. Apply the spray mix to low cut stumps (10 – 20 cm high). Apply to the completely cut surface of stumps until the point of run-off.
Sickle bush (<i>Dichrostachys cinerea</i>)	2.0 ℓ	Also apply to the root collar area and to the soil immediately in contact with the stump. A follow-up spray as a coppice application may be needed.

FRILL APPLICATION

TABLE 6: CONTROL OF ALIEN BUSH / SHRUB SPECIES USING FRILL APPLICATION

ALIEN BUSH / SHRUB SPECIES	RATE / 10 ℓ WATER	REMARKS
Black wattle (<i>Acacia mearnsii</i>)	600 ml RADIATE + 200 ml Actipron Super	See DIRECTIONS FOR USE above.
Saligna gum (<i>Eucalyptus grandis</i>)	200 ml RADIATE + 50 ml Actipron Super	Apply enough spray mixture to fill the frill without any unnecessary wastage down the bark.

RADIATE controls trees and shrubs. Other trees and shrubs that were not present during the development trials of this product may also be controlled to a certain degree. The registration holder does not accept responsibility for unlisted trees and shrubs.

ACKNOWLEDGEMENT OF TRADEMARK

Actipron Super (L5506)

H & R GSP (Pty) Ltd.