Read the label before opening the container. For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

BLATIVE 200 SL

South Africa Reg. No: L11127 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: H

A non-selective, partly systemic contact herbicide formulated as a water soluble concentrate, for the control of certain broadleaf weeds, grasses and sedges in crops as indicated as well as industrial sites and unplanted areas.

ACTIVE INGREDIENT:

Glufosinate-ammonium.....200g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Harmful if inhaled.
- May damage fertility or the unborn child.
- May cause damage to organs through prolonged or repeated exposure.
- Toxic to aquatic life.



DANGER

PRECAUTIONARY STATEMENTS

- Do not eat, drink, or smoke when using this product.
- Use only outdoors or in a well-ventilated area.

enviro™ bio-chem

Registration holder: Enviro Bio-chem (Pty) Ltd
Co. Reg. No: CK 2013/194774/07
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Expiry Date:
Batch No:
Date of Manufacture:

UN No. 3082

WARNINGS:

- Harmful if inhaled.
- May damage fertility or the unborn child.
- May cause damage to organs through prolonged or repeated exposure.
- Toxic to aquatic life.
- Store in cool place away from food, feed, seed or other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Use of **BLATIVE 200 SL** in any other way or time as indicated in the "Directions for use" may lead to plant injury or other negative effects.
- Re-entry – Do not enter treated area within one day after treatment unless wearing protective clothing.
- In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM

Although **BLATIVE 200 SL** has been tested on most important cultivars and no significant phytotoxicity in the form of yield reduction has been recorded under normal growing conditions, this does not mean that a more sensitive cultivar might not be commercialised in the future. Where a new cultivar is encountered, large areas should not be sprayed without prior testing of **BLATIVE 200 SL** on that cultivar.

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 occurence of resistance of the weeds to the remedy concerned as well as by the method, time and accuracy of application. The registraion 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 the label instructions or the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS:

- Do not breathe mist, vapours and spray.
- Wash hands, forearms, and face thoroughly after handling
- Do not eat, drink, or smoke when using this product.
- Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
- Use only outdoors or in a well-ventilated area.
- Do not handle until all safety precautions have been read and understood.
- IF exposed or concerned: Get medical advice/attention.
- Store locked up.
- Prevent spay drift onto other crops, grazing, rivers, dams or other areas not under treatment.
- Prevent contamination of food, eating utensils, feed and drinking water.
- Clean all equipment thoroughly after use and do not pollute the environment with wash water.
- Triple rinse empty container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

RELEVANT SUBSTANCES:

Glufosinate-ammonium 20%
Primary Alcohol Ethoxylate <10 %
Tristylphenol Ethoxylate < 10 %
Calcium Dodecylbenzene Sulfonate < 5 %

SYMPTOMS OF POISONING:

Shivering, disturbance of consciousness, cramps, gastrointestinal complaints, hyperthermia, dyspnoea, bradycardia / tachycardia.

FIRST AID TREATMENT:

INHALATION:	Remove person to fresh air and keep comfortable for breathing.
SKIN CONTACT:	Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
EYE CONTACT:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do continue rinsing.
INGESTION:	Immediately call a POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed:
Vomiting, Diarrhoea, Abdominal pain, Tremors, Hypotension, muscular weakness, Unconsciousness, Coma, Convulsions, respiratory failure, Nausea, Tachycardia. Symptoms may be delayed.

Indication of any immediate medical attention and special treatment needed:
Treatment:
- Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
- In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours.
- However, the application of activated charcoal and sodium sulphate is always advisable. Forced alkaline dieresis and haemodialysis may be considered.
- There is no specific antidote.
- In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, Phenobarbital may be used.
- Contraindication: atropine.
- Oxygen or artificial respiration if needed.
- Keep respiratory tract clear.
- ECG – monitoring (Electrocardiogram).
- EEG – monitoring (Electroencephalogram).
- Monitor: respiratory, cardiac and central nervous system.
- Keep under medical supervision for at least 48 hours.

RESISTANCE WARNING:

For resistance management, **BLATIVE 200 SL** is a **Group Code H** herbicide. Any weed population may contain individuals naturally resistant to **BLATIVE 200 SL** and other Group Code H herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **BLATIVE 200 SL** or any other **Group Code H** herbicides.

Since the presence of resistant weeds is difficult to detect prior to herbicide application, it is of the utmost importance that treated areas be inspected at regular intervals to identify the occurrence of herbicide-resistant weeds timeously. Enviro Bio-Chem (Pty) Ltd. will not accept liability for performance failures in the event of a build-up of resistant weeds resulting from inadequate resistance management practices as indicated on the label.

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 your local Enviro Bio-Chem (Pty) Ltd. representative.

DIRECTIONS FOR USE: Use only as directed
Poisons Helpline: 0861 555 777

Compatibility:
Do not combine **BLATIVE 200 SL** in the spray tank with other chemicals, unless your prior use has shown the combination to be physically compatible and non-injurious.
The compatibility of **BLATIVE 200 SL** with other products may be influenced by the formulation of the other products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of Enviro Bio-Chem (Pty) Ltd. 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:
SHAKE CONTAINER WELL BEFORE USE.
USE CLEAR CLEAN WATER FOR MIXING AND AVOID WATER WHICH IS CONTAMINATED BY MUD, MINERALS OR ORGANIC MATTER.

METHOD OF APPLICATION:

Ground Application:
Use 300 - 500ℓ water / ha depending on size of weeds.
For weeds in the seedling stage (up to 10cm high) use the lower listed dose. For weeds taller than 10cm but less than 50cm use the higher listed dose. For weeds 50cm and taller increase the volume of water to 800ℓ/ha without increasing the dose above that of the highest listed one.

Spot spraying:
Where spot spraying is conducted the same recommendations should be followed as for overall spraying and the same concentration of mixture used (15 - 25 m ℓ/ℓ water). Weeds should be thoroughly wetted with this spray mixture.

TIMING OF APPLICATION:

CROP	APPLICATION TIMING
Citrus, pome fruit, stone fruit and vines in the Winter Rainfall Region	Commence spraying in late winter or early spring, taking the recommendations for specific weeds into consideration. Follow-up sprays may be needed on perennial weeds or problem broadleaf weeds 4 to 6 weeks after the initial spray unless otherwise indicated. Commence spraying before bud burst in bush and low trellised vines. In the case of high trellises do not spray overhanging foliage or green portions of the vines. Do not spray vines which are two years and less in age unless stems are shielded.
Citrus, subtropical fruit, nuts, pome fruit and stone fruit in the Summer Rainfall Region	Commence spraying during late spring when soil moisture is sufficient and weeds are actively growing. Repeat spray 7 - 8 weeks later if necessary.
Industrial sites and unplanted areas in the Summer and Winter Rainfall Regions	Apply when weeds are growing actively and not under stress due to drought or low temperatures. Best results will be achieved if application is made 1 - 3 days after rain has fallen and there is adequate soil moisture for active plant growth.
Sugarcane (Directed post-emergence application in plant and ratoon sugarcane)	Apply as directed post emergence spray between the sugarcane rows when weeds are growing actively and are not wilted nor under stress due to drought, excessive heat, low temperatures or any other stress inducing factor. Ensure that the sugarcane foliage is not exposed to any spray drift as the cane will be damaged

WEEDS CONTROLLED IN THE WINTER RAINFALL REGION

Annual Grasses

COMMON NAME	BOTANICAL NAME	RATE /HA		REMARKS
Common wild oats	*Avena fatua*	5 - 7,5ℓ	A	
Oats (cover crop)	*Avena sativa*	5 - 7,5ℓ	A	
Ripgut brome	*Bromus diandrus*	5 - 7,5ℓ	A	
Rescue grass	*Bromus unioloides*	5 - 7,5ℓ	A	
Crab finger-grass	*Digitaria sanguinalis*	5 - 7,5ℓ	A	
Barnyard grass	*Echinochloa crus-galli*	5 - 7,5ℓ	A	Large established grass not adequately controlled.
Oat-seed grass	*Ehrharta longifolia*	5 - 7,5ℓ	A	Suppression.
Goose grass	*Eleusine indica*	5 - 7,5ℓ	A	
Italian Ryegrass	*Lolium multiflorum*	7,5ℓ	A	
Winter grass	*Poa annua*	3 - 5ℓ	A	
Rye (cover crop)	*Secale cereale*	5 - 7,5ℓ	A	
A = Spray older plants before seed sets				

Perinnial Grasses

COMMON NAME	BOTANICAL NAME	RATE /HA		REMARKS
Common couch	*Cynodon dactylon*	7,5ℓ	B	Multiple sprays. Spray when adequate leaf area is present for uptake but before the grass forms a recumbent mat.
Common Paspalum	*Paspalum dilatatum*	5 - 7,5ℓ	B	Big clumps suppressed. Small plants controlled.
Couch Paspalum	*Paspalum distichum*	5 - 7,5ℓ	B	
Tall Paspalum	*Paspalum urvillei*	5 - 7,5ℓ	B	Big clumps suppressed. Small plants controlled.
Kikuyu	*Pennisetum clandestinum*	5 - 7,5ℓ		Repeat 5 - 8 weeks later if re growth occurs, 5ℓ/ha will be sufficient for follow-up sprays.
For the above mentioned perennial grasses, sprays should be repeated when 50 - 60 % re growth occurs. DO NOT USE LESS THAN 300ℓ SPRAY MIXTURE / HA. ENSURE GOOD WETTING OF FOLIAGE.				
B = Spray at any stage while actively growing. Repeat if re growth occurs.				

Sedges

COMMON NAME	BOTANICAL NAME	RATE /HA	REMARKS
Yellow nutsedge	*Cyperus esculentus*	7,5ℓ	Multiple sprays. If yellow nutsedge is shaded 7,5ℓ/ha can in the majority of cases be expected to give good suppression if sprayed at 5 % flowering under normal growing conditions. Control may be erratic under other situations due do climate and many other factors influencing growth and herbicide uptake. Re growth normally occurs. Re-spray when sufficient leaf area (50%) is present for uptake of herbicide.

Broadleaf weeds

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Pigweed	*Amaranthus spp.*	5 - 7,5ℓ	A + C	
Cape marigold	*Arctotheca calendula*	5 - 7,5ℓ	A	
Blackjacks	*Bidens spp.*	5 - 7,5ℓ	A	Before plants reach a height of 50cm.
Russian knapweed	*Centaurea repens*	3 - 5ℓ	A	
White goosefoot	*Chenopodium album*	7,5ℓ	A+C	
Field bindweed	*Convolvulus arvensis*	5 - 7,5ℓ	A	Add 3ℓ MCPA/ha. Spray re growth.
Fleabane	*Conyza spp.*	7,5ℓ	A+C	
Thorn apple	*Datura spp.*	5 - 7,5ℓ	A +C	
Patterson's curse	*Echium lycopsis*	3 - 5ℓ	C	Spray before flowers form.
Spiny emex	*Emex australis*	5 - 7,5ℓ	B	
Musk heron's bill	*Erodium moschatum*	7,5ℓ	A	Add 3ℓ MCPA if plants have reached 25cm in height.
Fumitory	*Fumaria officinalis*	3 - 5ℓ	B	
Cranesbill	*Geranium molle*	7,5ℓ	A	
Jersey cudweed	*Gnaphalium luteo-album*	7,5ℓ	A	
Wild lettuce	*Lactuca serriola*	5 - 7,5ℓ	A	
Henbit	*Lamium amplexicaule*	3 - 5ℓ	A	
Pepper cress	*Lepidium africanum*	5 - 7,5ℓ	A	
Small mallow	*Malva parviflora*	7,5ℓ		Will suppress young actively growing plants before they reach 25cm in height.
Bur clover	*Medicago polymorpha*	5 - 7,5ℓ	A	
Annual yellow sweet clover	*Melilotus indica*	3 - 5ℓ	A	
Evening primrose	*Oenothera stricta*	5 - 7,5ℓ	A	
Yellow sorrel	*Oxalis pes-caprae*	5 - 7,5ℓ	B	
Narrow-leaved ribwort	*Plantago lanceolata*	7,5ℓ		Repeat sprays when necessary. Suppression only. Multiple sprays. Just before or just after flowering. Repeat when there is sufficient leaf area for uptake of herbicide. Suppression only. For improved control, add 4ℓ MCPA to 7,5ℓ **BLATIVE 200 SL**/ha. Prior to or just after flowering stage for complete control.

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Prostrate knotweed	*Polygonum aviculatre*	5 - 7,5ℓ	A	
Wild radish	*Raphanus raphanistrum*	7,5ℓ	C	Up to early flowering. After flowering add 4ℓ MCPA to 5ℓ **BLATIVE 200 SL**/ha.
Sheep sorrel	*Rumex angiocarpus*	5 - 7,5ℓ	A	
Senecio	*Senecio spp.*	3 - 5ℓ	A	
Common wild mustard	*Sisymbrium thellungii*	3 - 5ℓ	A	
Nightshade	*Solanum nigrum*	5 - 7,5ℓ		Spray older plants before fruits ripen.
Sowthistle	*Sonchus spp.*	3 - 5ℓ	A	
Corn spurry	*Spergula arvensis*	3 - 5ℓ	A	
Chickweed	*Stellaria media*	3 - 5ℓ	B	
Khaki weed	*Tagetes minuta*	5 - 7,5ℓ	A + C	
Stinging nettle	*Urtica dioica*	3 - 5ℓ	C	
Field speedwell	*Veronica persica*	3 - 5ℓ	A	
Broad-leaved	*Vicia sativa*	3 - 5ℓ	A	

A = Spray plants before seeds sets
B = Spray at any stage while actively growing
C = Before plants reach a height of 25 cm

WEEDS CONTROLLED IN SUMMER RAINFALL REGION :

Annual Grasses

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Rescue Grass	*Bromus unioloides*	5 - 7,5ℓ	B	Repeat when 50 - 60% re growth occurs.
Crab finger-grass	*Digitaria sanguinalis*	5 - 7,5ℓ	A	
Marsh grass	*Echinochloa colona*	5 - 7,5ℓ	A	
Goose grass	*Eleusine indica*	5 - 7,5ℓ	A	
Rough love grass	*Eragrostis aspera*	5 - 7,5ℓ	B	Repeat when 50 - 60% re growth occurs.
Natal red-top	*Rhynchelytrum repens*	5 - 7,5ℓ	A	
Sticky bristle grass	*Setaria verticillata*	5 - 7,5ℓ	A	
Cats tail drop seed	*Sporobolus pyramidalis*	5 - 7,5ℓ	A	
Small carrot seed grass	*Tragus berteronianus*	5 - 7,5ℓ	A	
Large carrot seed grass	*Tragus racemosus*	5 - 7,5ℓ	A	
Herringbone grass	*Urochloa panicoides*	5 - 7,5ℓ	A	

A = Spray plants before seed sets.

Perinnial Grasses

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Common couch	*Cynodon dactylon*	7,5ℓ	B	Multiple sprays. Spray when adequate leaf area is present for uptake but before the grass forms a recumbent mat.
Common buffalo grass	*Panicum maximum*	5 - 7,5ℓ	B	Repeat at the lower rate if re growth appears.
Common Paspalum	*Paspalum dilatatum*	5 - 7,5ℓ	B	Repeat at the lower rate if re growth appears.
Couch Paspalum	*Paspalum paspaloides*	7,5ℓ	B	Repeat if re growth occurs
Kikuyu	*Pennisetum clandestinum*	5 - 7,5ℓ	B	Repeat 5 - 8 weeks later if re growth occurs. 5ℓ/ha will be sufficient for follow-up crops.
For the above mentioned perennial grasses, sprays should be repeated when 50 - 60 % re growth occurs. DO NOT USE LESS THAN 300ℓ SPRAY MIXTURE/HA. ENSURE THOROUGH WETTING OF FOLIAGE.				
B = Spray at any stage while actively growing.				

Sedges

COMMON NAME	BOTANICAL NAME	RATE /HA	REMARKS
Yellow nut sedges	*Cyperus esculentus*	7,5ℓ	Multiple sprays
Purple nut sedges	*Cyperus rotundus*	7,5ℓ	If nut sedge is shaded, 7,5ℓ/ha can be expected to give good suppression in the majority of cases if sprayed at 5% flowering under normal growing conditions. Control may be erratic under other situations due to climatic and many other factors influencing growth and herbicide uptake. Regrowth normally occurs. Re-spray when sufficient leaf area is present (50%) or uptake of herbicide.
White sedge	*Kyllinga erecta*	7,5ℓ	

Broadleaf weeds

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Upright starbur	*Acanthospermum hispidum*	5 - 7,5ℓ	A + C	
Khaki bur weed	*Alternanthera pungens*	3 - 5ℓ	A	
Thorny pigweed	*Amaranthus spinosus*	3,75 - 5ℓ	A + C	
Pigweed	*Amaranthus spp.*	5 - 7,5ℓ	A + C	
Blackjack	*Bidens pilosa*	5 - 7,5ℓ	A + C	
White goosefoot	*Chenopodium album*	5 - 7,5ℓ	A + C	
Green goosefoot	*Chenopodium carinatum*	5 - 7,5ℓ	A + C	
Bengal wandering Jew	*Commelina benghalensis*	5 - 7,5ℓ	B	
Flax-leaf fleabane	*Conyza bonariensis*	5 - 7,5ℓ	A + C	
Horseweed fleabane	*Conyza canadensis*	7,5ℓ	A + C	
Thorn apple	*Datura stramonium*	5 - 7,5ℓ	A + C	
Red milkweed	*Euphorbia hirta*	5 - 7,5ℓ	B	
Climbing knotweed	*Fallopia convolvulus*	3 - 5ℓ	A	

COMMON NAME	BOTANICAL NAME	RATE /HA		OPMERKINGS
Gallant soldier	*Galinsoga parviflora*	3 - 5ℓ	B	
Pepper cress	*Lepidium africanum*	5 - 7,5ℓ	A	
Sorrel	*Oxalis spp.*	3 - 5ℓ	B	
Wild gooseberry	*Physalis angulata*	3 - 5ℓ	B	
Purslane	*Portulaca oleracea*	5 - 7,5ℓ	B	
Tropical Richardia	*Richardia brasiliensis*	5 - 7,5ℓ	B	
Smooth dock	*Rumex lanceolatus*	5 - 7,5ℓ	A + C	
Dwarf marigold	*Schkuhria pinnata*	5 - 7,5ℓ	A	
Arrowleaf Sida	*Sida rhombifolia*	5 - 7,5ℓ	A	Spray seedlings. Older plants not well controlled.
Khaki weed	*Tagetes minuta*	7,5ℓ	A + C	

A = Spray plants before seeds sets
B = Spray at any stage while actively growing
C = Before plants reach a height of 25 cm

ALL REGIONS

COMMON NAME	BOTANICAL NAME	RATE /HA	REMARKS
Common reed	*Phragmites australis*	15ℓ	Apply in 1 000ℓ water per ha when common reed regrowth has reached 1m height after slashing or burning.

BLATIVE 200 SL can only be sprayed on common reed where the areas of growth are drained, or where the water systems wherein they grow are closed or confined areas with standing water (dams, pans or valleys). Where contact between **BLATIVE 200 SL** and adjoining water has been made – **DO NOT USE THIS WATER FOR DOMESTIC PURPOSES FOR A MINIMUM PERIOD OF 24 HOURS AFTER APPLICATION.**

IMPORTANT NOTES:

1. Seedlings that have not emerged at the time of application will not be controlled or are not damaged. No action via the roots is present.
2. Damage symptoms in the form of yellowing and leaf scorch to the aerial portions of plants commence 7 - 10 days after treatment and maximum control is achieved 2 - 6 weeks after spraying depending on weed spectrum and environmental conditions.
3. Optimum herbicidal action following leaf uptake is obtained under environmental conditions favourable for active plant growth as well as for young growing plants having a large proportion of foliage with a high metabolic rate.
4. The use of **BLATIVE 200 SL** sprays at the prescribed doses will remove weed competition within orchards etc, for a period of usually not less than 6 weeks in the case of an established weed population, but often greatly in excess of this period, depending upon the weed species, type of weed, stage of development, whether the weeds are annual or perennial as well as upon environmental factors.
5. Irrigation prior to application of **BLATIVE 200 SL** assists in weed control. DO NOT SPRAY WEEDS UNDER ENVIRONMENTAL STRESS such as drought, low temperatures, water logging and salinity as herbicidal action may be affected. This also applies to weeds which are senescing or dormant or growing slowly due to other plant stress inducing factors.
6. TWELVE HOURS should be left between spray application and the re-commencement of irrigation where perennials and waxy leafed weeds have been sprayed.
7. In the case of weeds which do not have waxy leaves or in the case of small annual weeds EIGHT HOURS should be left between spray application and re-commencement of irrigation.
8. What has bearing upon irrigation also has bearing upon the effect of rainfall above 5mm.
9. No impairment of plant growth takes place if crops are planted in soil recently treated with **BLATIVE 200 SL** as breakdown is rapid.
10. Do not spray when weeds are wet from rain or irrigation.
11. Do not spray if weeds are covered with a heavy layer of mud, dust or debris as may occur when flood irrigation is in use.
12. Green side shoots and suckers may be sprayed and scorched without damage extending to the rest of a fruit tree or vine.

13. Ensure that direct spray or drift is kept out of contact with green leaves, active buds and fruit.
14. In the case of young trees with green stems, these should be protected or spray shields used to prevent damage to non-suberised bark.
15. It is recommended that low hanging branches should be trimmed to avoid leaf and fruit contact as well as to prevent interference with weed control.
16. Bananas should be at least 2 years old before spray is allowed to come into contact with the plants. Only the bases of the pseudo stems should be permitted to come in contact with the spray.

NOTE: **BLATIVE 200 SL** controls the above mentioned weed species alone, or in tank mixes with other products as indicated. Other weed species that were not present during the development trials with the product, may possibly also be controlled to a certain degree. The registration holder does not accept any responsibility for unlisted weeds.