Main Panel

KNERSUS® 200 SL

Reg. No. L10631, Act No./Wet Nr. 36 of / van 1947
Namibian Reg. No./Namibiese Reg. Nr. N-AR 2063
Botswana Reg. No./Nr W1301164, Act No./Wet Nr. 18 of/van 1999

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

A non-selective, non-residual, 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.

'n Nie-selektiewe, nie-residuele, gedeeltelik-sistemiese kontak onkruiddoder geformuleer as 'n wateroplosbare konsentraat, vir die beheer van sekere breëblaar-, gras- en watergrasonkruide in gewasse soos aangedui sowel as industriële en onbeplante gebiede.

GROUP/GROEP	**10**	HERBICIDE/ONKRUIDDODER

Active ingredient: **Aktiewe bestanddeel:**

Glufosinate-ammonium (phosphinic acid) ..... 200 g/ ℓ..... Glufosinaat-ammonium (fosfiensuur)

NET VOLUME ℓ **NETTO VOLUME**

DANGER

GHS Hazard Statements
Causes serious eye damage. May damage fertility. May damage the unborn child. May cause damage to organs (nervous system) through prolonged or repeated exposure.
GHS Precautionary Statements
Do not breathe mist or spray. Wash thoroughly after handling.

AECI® AGRI HEALTH

REGISTRATION HOLDER / REGISTRASIEHOUER:
AECI® Limited)/AECI® Beperk
Reg. No. / Nr. 1924/002590/06
P.O. Box / Posbus 14418
Witfield, 1467
Tel : (011) 823 8000
www.aeciph.com/ www.aeciworld.com
IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL;
0861 555777 / 082 446 8946

KNERSUS® 200 SL is a registered trademark of AECI® Limited /'n geregistreerde handelsmerk van AECI® Beperk

Batch No: **Lotnommer:**

DATE OF MANUFACTURE: **VERVAARDIGINGSDATUM:**

UN No. / VN Nr. Not regulated / nie gereguleer nie

Pamphlet

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P.O. Box 14418
Witfield, 1467
Tel : (011) 823 8000

WARNINGS:

GHS Hazard Statements
Causes serious eye damage.
May damage fertility.
May damage the unborn child.
May cause damage to organs (nervous system) through prolonged or repeated exposure.

Handle concentrate with care.
May cause skin irritation.
Harmful when inhaled
The use of **KNERSUS 200 SL** in any other way or time as indicated in the “Time of Application” may lead to plant injury or other negative effects.
Keep out of reach of children, uninformed persons and animals.
Store under lock and key and keep away from food, seed and fertilizers.
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.

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 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 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 THE EVENT OF ANY UNCERTAINTY.

PRECAUTIONS:

GHS Precautionary Statements
Do not breathe mist or spray.
Wash thoroughly after handling.
Wear protective gloves, protective clothing, eye protection & face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

Wash with soap and cold water after use.
Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes.
Prevent contamination of food, feed, drinking water and eating utensils.
Prevent spray drift onto other crops, grazing, rivers, dams and other areas not under treatment.
Clean applicator thoroughly before re-using and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
Triple rinse the empty container: 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 (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RELEVANT SUBSTANCES:

Substance name (IUPAC/EC) % by weight	Concentration	
Glufosinate ammonium	10-20%	EC1272/2008 Acute toxicity oral, dermal, inhalation (Category 4) H302+H312 +H332. Reproductive toxicity (Category 1B) H360. STOT RE 2 H373.
Sodium laureth sulfate	1-5%	Skin irritation (Category 2) H315. Eye irritation (Category 2) H319.
Glucamide in aqueous / glycolic solution	1-5%	Acute toxicity inhalation (Category 4) H332. Serious eye damage (Category 1) H318.

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **KNERSUS 200 SL** and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

FIRST AID:
In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs.
In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

NOTE TO PHYSICIAN:

Based on the active glufosinate ammonium; 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 diuresis 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, **KNERSUS 200 SL** is a Group Code 10 herbicide. Any weed population may contain individuals naturally resistant to **KNERSUS 200 SL** and other Group Code 10 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. The resistant weeds may not be controlled by **KNERSUS 200 SL** or any other Group Code 10 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. The Registration Holder 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 registered 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.

MODE OF ACTION:

Glufosinate-ammonium act by inhibition of glutamine synthase.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY:

Do not mix **KNERSUS 200 SL** in the spray tank with any agricultural remedy/ies, unless prior use of such a mixture has proven the combination to be physically compatible and non-injurious. The compatibility of **KNERSUS 200 SL** has not yet been proven with other agricultural remedies. Its compatibility with other products may be influenced by several factors. As certain factors may vary from farm to farm, a physical compatibility test must always be performed before such a tank mixture is sprayed.
For further information on compatibility or in the event of uncertainty, contact your local AECI Agri Health Crop Adviser.

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. Fill the spray tank two thirds with clean water and start agitation. Pour the required quantity of **KNERSUS 200 SL** into the tank. Top up the tank with water to the final volume required. Ensure thorough agitation during filling and application.

METHOD OF APPLICATION:

Use 300 – 500 ℓ water /ha depending on size of the weeds in the Winter Rainfall Region and 200 – 300 ℓ water /ha in the Summer Rainfall Region. For weeds in the seedling stage (up to 10 cm high), use the lower listed dose. For weeds taller than 10 cm but less than 50 cm use the higher listed dose. For weeds 50 cm and taller increase the volume of water to 800 ℓ /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 the the same concentration of mixture used (15 – 25 mℓ/ℓ water). Weeds should be thoroughly wetted with the spray mixture.

TIMING OF APPLICATION:

CROP	APPLICATION TIMING
Citrus, pome fruit, stone fruit and vines in the Winter Rainfall Region	Start 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. Start 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, tree 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 a 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 spray application does not make contact with the sugarcane foliage as the cane crop will be damaged.

WEEDS CONTROLLED IN THE WINTER RAINFALL REGION

Annual grasses:

BOTANICAL NAME	COMMON NAME	RATE / HA
Avena fatua	common wild oats	5 - 7,5 ℓ
Avena sativa	oats (cover crop)	5 - 7,5 ℓ
Bromus diandrus	ripgut brome	5 - 7,5 ℓ
Bromus catharticus = *B.unioloides*	rescue grass	5 - 7,5 ℓ
Digitaria sanguinalis	crab finger-grass	5 - 7,5 ℓ
Echinochloa crus-galli	barnyard grass	5 - 7,5 ℓ
Ehrharta longifolia	oat-seed grass	5 - 7,5 ℓ
Eleusine indica=> Eleusine coracana	goose grass	5 - 7,5 ℓ
Lolium multiflorum	Italian ryegrass	5 - 7,5 ℓ
Poa annua	winter grass	5 - 7,5 ℓ
Secale cereale	rye (cover crop)	5 - 7,5 ℓ

Perennial grasses:

BOTANICAL NAME	COMMON NAME	RATE / HA
Cynodon dactylon	common couch = common Quick Grass	5 - 7,5 ℓ
Paspalum dilatatum	common Paspalum	5 - 7,5 ℓ
Paspalum distichum	couch Paspalum	5 - 7,5 ℓ
Paspalum urvillei	tall Paspalum	5 - 7,5 ℓ
Pennisetum clandestinum	kikuyu	5 - 7,5 ℓ

For the abovementioned perennial grasses, sprays should be repeated when 50 - 60 % regrowth occurs. ENSURE THAT NOT LESS THAN 300 ℓ SPRAY MIXTURE /HA IS USED TO ENSURE GOOD WETTING OF FOLIAGE.

Sedges:

BOTANICAL NAME	COMMON NAME	RATE / HA REMARKS
Cyperus esculentus	yellow nutsedge	7,5 ℓ

Broadleaf weeds:

BOTANICAL NAME	COMMON NAME	RATE / HA	REMARKS
Amaranthus spp.	pigweed	5 - 7,5 ℓ	
Arctotheca calendula	Cape marigold	5 - 7,5 ℓ	
Bidens pilosa	blackjack	5 - 7,5 ℓ	
Centaurea repens	Russian knapweed	3 - 5 ℓ	
Chenopodium album	white goosefoot	5 - 7,5 ℓ	
Convolvulus arvensis	field bindweed	5 - 7,5 ℓ	
Conyza spp.	fleabane	5 - 7,5 ℓ	
Datura spp.	thorn apple	5 - 7,5 ℓ	
Echium lycopsis=> Echium plantagineum	Patterson's curse	5 - 7,5 ℓ	
Emex australis	spiny Emex	5 - 7,5 ℓ	
Erodium moschatum	musk heron's bill	5 - 7,5 ℓ	
Fumaria officinalis	fumitory	5 - 7.5 ℓ	
Geranium molle	crane's bill	7,5 ℓ	
Gnaphalium luteo-album	jersey cudweed	7,5 ℓ	
Hypochoeris radicata	hairy wild lettuce	5 - 7.5 ℓ	
Lactuca serriola	wild lettuce	5 - 7,5 ℓ	
Lamium amplexicaule	Henbit	5 - 7.5 ℓ	
Lepidium africanum	pepper cress	5 - 7,5 ℓ	
Malva parviflora	small mallow	7,5 ℓ	
Medicago polymorpha	bur clover	5 - 7,5 ℓ	
Melilotus indica	annual yellow sweet clover	3 - 5 ℓ	
Oenothera stricta	evening primrose	5 - 7,5 ℓ	
Oxalis pes-caprae	yellow sorrel	5 - 7,5 ℓ	
Picris echioides	Bristly Oxtongue	5 - 7,5 ℓ	
Plantago lanceolata	narrow-leaved ribwort	5 - 7,5 ℓ	
Polygonum aviculare	prostrate knotweed = hogweed	5 - 7,5 ℓ	
Raphanus raphanistrum	*wild radish*	*5* - 7,*5* ℓ	
Rumex acetosella subsp. *angiocarpus*	sheep sorrel	5 - 7,5 ℓ	
Senecio polyanthemoides.	Senecio	3 - 5 ℓ	
Sisymbrium thellungii	common wild mustard	3 - 5 ℓ	
Solanum nigrum	nightshade	5 - 7,5 ℓ	
Sonchus oleraceus.	sowthistle	5 - 7,5 ℓ	
Spergula arvensis	corn spurry	3 - 5 ℓ	
Stellaria media	chickweed	5 - 7,5 ℓ	
Tagetes minuta	khaki weed	5 - 7,5 ℓ	
Urtica dioica	common nettle	3 - 5 ℓ	
Veronica persica	field speedwell	3 - 5 ℓ	
Vicia sativa	broad-leaved purple vetch	3 - 5 ℓ	

WEEDS CONTROLLED IN SUMMER RAINFALL REGION

Annual grasses:

BOTANICAL NAME	COMMON NAME	RATE / HA	REMARKS
Bromus catharticus = unioloides	rescue grass	5 - 7,5 ℓ	
Digitaria sanguinalis	crab finger-grass	5,0 ℓ	
Echinochloa colona	marsh grass	5 – 7,5 ℓ	
Eleusine indica=> Eleusine coracana	goose grass	5,0 ℓ	
Eragrostis aspera	rough lovegrass	5 - 7,5 ℓ	
Rhynchelytrum repens => Melinis repens	Natal red-top	5 - 7,5 ℓ	
Setaria verticillata	sticky bristle grass	5 - 7,5 ℓ	
Sporobolus pyramidalis	cats tail drop seed	5 - 7,5 ℓ	
Tragus berteronianus	small carrotseed grass	5,0 ℓ	
Tragus racemosus	large carrotseed grass	5 - 7,5 ℓ	
Urochloa panicoides	herringbone grass	5 - 7,5 ℓ	

Perennial grasses:

BOTANICAL NAME	COMMON NAME	RATE / HA
Cynodon dactylon	common couch	5,0 ℓ
Panicum maximum	common buffalo grass	5,0 ℓ
Paspalum dilatatum	common Paspalum	5,0 ℓ
Paspalum paspaloides	couch Paspalum	7,5 ℓ
Pennisetum clandestinum	kikuyu	5,0 ℓ

For the abovementioned perennial grasses, sprays should be repeated when 50 - 60 % regrowth occurs. DO NOT USE LESS THAN 300 ℓ SPRAY MIXTURE/HA. ENSURE THOROUGH WETTING OF FOLIAGE.

Sedges:

BOTANICAL NAME	COMMON NAME	RATE / HA
Cyperus esculentus	yellow nutsedge	7,5 ℓ
Cyperus rotundus	purple nutsedge	7,5 ℓ
Kyllinga erecta	white sedge	7,5 ℓ

Broadleaf weeds:

BOTANICAL NAME	COMMON NAME	RATE / HA	REMARKS
Acanthospermum hispidum	upright starbur	5 - 7,5 ℓ	
Alternanthera pungens	khaki bur weed	3 - 5 ℓ	
Amaranthus spinosus	thorny pigweed	5,0 ℓ	
Amaranthus spp.	pigweed	5 - 7,5 ℓ	
Bidens pilosa	blackjack	5,0 ℓ	
Chenopodium album	white goosefoot	5,0 - 7,5 ℓ	
Chenopodium carinatum	green goosefoot	5,0 ℓ	
Commelina benghalensis	Bengal wandering Jew	5,0 ℓ	
Conyza bonariensis	Flax-leaf fleabane	5,0 ℓ	
Conyza canadensis	horseweed fleabane	5,0 ℓ	
Datura stramonium	thorn apple	5,0 ℓ	
Euphorbia hirta => *Chamaesyce hirta*	red milkweed	5 – 7,5 ℓ	
Fallopia convolvulus	climbing knotweed	3 - 5 ℓ	
Galinsoga parviflora	gallant soldier	3 - 5 ℓ	
Lepidium africanum	pepper cress	5,0 ℓ	
Oxalis spp.	sorrel	3 - 5 ℓ	
Physalis angulata	wild gooseberry	3 - 5 ℓ	
Portulaca oleracea	purslane	5,0 ℓ	
Richardia brasiliensis	tropical Richardia	5,0 ℓ	
Rumex lanceolatus	smooth dock	5 - 7,5 ℓ	
Schkuhria pinnata	dwarf marigold	5 - 7,5 ℓ	
Sida rhombifolia	arrowleaf Sida	5 - 7,5 ℓ	
Tagetes minuta	khaki weed	5,0 ℓ	

ALL REGIONS

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

KNERSUS 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 vlei). Where contact between **KNERSUS 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:

- 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.

- 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.
- 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.
- The use of **KNERSUS 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.
- Irrigation prior to application of **KNERSUS 200 SL** assists in weed control. DO NOT SPRAY WEEDS UNDER ENVIRONMENTAL STRESS such as drought, low temperatures, waterlogging 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.
- TWELVE HOURS should be left between spray application and the re-commencement of irrigation where perennials and waxy leafed weeds have been sprayed.
- 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.
- No impairment of plant growth takes place if crops are planted in soil recently treated with **KNERSUS 200 SL** as breakdown is rapid.
- Do not spray when weeds are wet from rain or irrigation
- 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.
- Green side shoots and suckers of mature trees and vines may be sprayed and scorched without damage extending to the rest of a tree or vine.
- Ensure that direct spray mist or drift is kept out of contact with green stems, leaves, active buds or fruit of crop plants or ornamentals.
- In the case of young trees with green stems, these should be protected or spray shields used to prevent damage to non-suberized bark. Do not apply around desirable trees or vines less than 2 years old unless they are effectively shielded from spray and spray drift.
- Do not allow spray to contact susceptible parts of desirable plants. Susceptible parts include leaves, active buds, fruit, stems with green bark, as well as cut, cracked or damaged tissue, where the affected surface has not adequately healed.
- 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.
- Bananas should be at least 2 years old before spray is allowed to come into contact with the plants.
- Only the bases of the pseudostems should be permitted to come in contact with the spray.