KERB™ FLO 400 SC

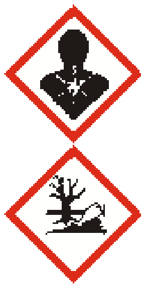
HERBICIDE

Registration Number/Registrasie nommer L4065 Act/Wet 36 of / van 1947

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

GROUP	K1	HERBICIDE

A suspension concentrate herbicide for use against annual winter grasses in canola, grapes, lettuce, leguminous pastures, and orchards (as indicated) in the winter rainfall region and in lawns and sports turf.	'n suspensie konsentraat onkruiddoder vir gebruik teen eenjarige wintergrasse in boorde (soos aangedui), kanola, druiwe, blaarslaai en peulgewasweidings in die winterreënvalgebied asook in grasperke en sportterreine.



WARNING

HAZARD STATEMENTS:
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure if swallowed.
Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Collect spillage.
Store locked up.
Dispose of contents/container in accordance with applicable regulations.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Propyzamide (benzamide) ……………………….. 400 g/l ………………… Propisamied (bensamied)

REGISTRATION HOLDER / REGISTRASIEHOUER
CORTEVA AGRISCIENCE RSA (PTY) LTD / (EDMS) BPK
REG NO 1991/003030/07
Lakefield Office Park, Block A, 2nd Floor, 272 West Avenue, CENTURION, 0157 South Africa
™Trademark of Corteva AgriscienceTM and its affiliated companies

Batch Number . . . . …………………….. Lotnommer
Date of Manufacture . . . . ………… Vervaardigingsdatum
Expiry Date ……………………….. ……………… Vervaldatum

UN NO: 3082

Poisons Helpline: +27(0)861-555-777
Local Emergency No: +27(0)82-895-0621 (SA only)
24 Hour Emergency Tel No: +32-3-575-5555
Information Hotline Tel No: +27(0)12 683-5700

KERB™ FLO 400 SC/2023-05-08

WARNINGS:

HAZARD STATEMENTS: Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if swallowed. Very toxic to aquatic life with long lasting effects.

After pasture treatment, a waiting period of 15 days should be allowed between treatment and re-use of the pasture for grazing purposes.

Harmful by swallowing.
Irritating to eyes, skin, and respiratory tract.
Avoid eye contact.
Store away from food and feeds.
Keep out of reach of children, uninformed persons, and animals.

RE-ENTRY INTERVAL: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

DISCLAIMER

ALTHOUGH THIS REMEDY HAS BEEN EXTENSIVELY TESTED UNDER A LARGE VARIETY OF CONDITIONS, THE REGISTRATION HOLDER DOES NOT WARRANT THAT IT WILL BE EFFICACIOUS UNDER ALL CONDITIONS BECAUSE THE ACTION AND EFFECT THEREOF MAY BE AFFECTED BY FACTORS SUCH AS ABNORMAL SOIL, CLIMATIC AND STORAGE CONDITIONS, QUALITY OF DILUTION WATER, COMPATIBILITY WITH OTHER SUBSTANCES NOT INDICATED ON THE LABEL AND THE OCCURRENCE OF RESISTANCE OF THE WEEDS TO THE REMEDY CONCERNED, AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR THE 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:

PRECAUTIONARY STATEMENTS: Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. Collect spillage. Store locked up. Dispose of contents/container in accordance with applicable regulations.

Avoid inhalation of spray mist.
Wear rubber gloves and face shield when handling the concentrate.
Wash after accidental skin contact. In case of eye contact, wash with copious quantities of water.
Do not eat, drink, or smoke whilst applying/mixing or before washing hands and face or change of clothing.
Avoid drift of spray mist onto other sensitive and/or edible crops, or to areas not under treatment.
All spray equipment should be washed thoroughly with water before using it for the application of any other pesticide.

Dispose of wash water where it will not contaminate other crops, grazing, rivers, or dams.
Destroy empty container by perforation and flattening and NEVER use for any other purpose.
Prevent contamination of food, feed, eating utensils and drinking water.
Containers and packages must be completely emptied before being disposed of. Drain out thoroughly into the mixing or spray tank. Rinse the empty container three times with a volume of water equal to a minimum of at least 10 % of that of the container. Add the rinsings to the spray tank before destroying the container.

RELEVANT SUBSTANCES:

COMPONENT	CAS No.	Concentration (% w/w)
Propyzamide (ISO)	23950-58-5	34,08
2-Naphthalenesulfonic acid, 6-hy-droxy-, polymer with formaldehyde and methylphenol, sodium salt	68540-70-5	>= 3 - < 10
Ethanediol	107-21-1	>= 3 - < 10

FIRST AID MEASURES:

Protection of first aiders
First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

Inhalation
No emergency medical treatment is necessary.

Skin contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Suitable emergency safety shower facility should be available in work area.

Eye contact
Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
Suitable emergency eye wash facility should be available in work area.

Ingestion
No emergency medical treatment necessary.

USE RESTRICTIONS

- Do not use in nurseries or on nursery stock.
- The following crops should not be planted on **KERB^{TM} FLO 400 SC** treated soil within 6 months from the date of application:
  Brassica's (Broccoli, Brussels sprouts, Cabbage, Canola, Cauliflower), Beans, Onions, and Potatoes.
- For cereals (wheat, barley, oats, rye), consult the table below.

CULTIVATION METHOD	PLANTING METHOD	WAITING PERIOD
No Till	Planted with a planter	10 months
No Till	Broadcast sown	18 months
Till	Planted with a planter	18 months
Till	Broadcast sown	18 months

- A waiting period of 12 months from date of **KERB™ FLO 400 SC** application should be allowed for all other crops not mentioned above.

- High temperatures and low or no rainfall shortly after application can have a negative influence on the effectiveness of **KERB™ FLO 400 SC**.

- Do not use on Outeniqua variety or on fine turf that is mown frequently and may thus have a poorly developed root system, such as bowling and putting greens and cricket wickets. Damage may occur to these *Cynodon* surfaces.

- Do not use on lawns/turf consisting of grass types or varieties not listed as being suitable as serious injury to such unlisted grass types or varieties may result.

RESISTANCE WARNING:

For resistance management, **KERB™ FLO 400 SC** is a group code K1 herbicide. Any weed population may contain individuals naturally resistant to **KERB™ FLO 400 SC** and other group code K1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **KERB™ FLO 400 SC** or any other group code K1 herbicide.

To delay weed 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 the control methods (chemical, cultural, biological) into weed control programmes.

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

GENERAL INFORMATION:

Mode of Action:

KERB™ FLO 400 SC is a soil-acting herbicide with uptake occurring through the roots of germinating and newly emerged sensitive grasses. Sufficient rain or irrigation (≥15 mm) in one precipitation within 5 days of application is essential to leach the **KERB™ FLO 400 SC** into the root zone of sensitive weeds.

Best results are obtained when **KERB™ FLO 400 SC** is applied to a soil surface which is moist and has settled (due to rain or irrigation breaking up soil clods or smoothening loose soil caused by cultivation processes). The soil surface should be relatively fine, even and firm without large clods, it should be free of excessive organic and surface material (dead or rotting weeds, leaves, plant cuttings etc.)

Note that **KERB™ FLO 400 SC** should only be applied in winter as the chemical is more active in cool conditions. Warmer conditions promote degradation and shorter residual effects.

Mixing and Application:

Use only correctly calibrated spray equipment with effective strong agitation in the spray tank. First half-fill the spray tank with water. Mix the required quantity of the **KERB™ FLO 400 SC** with some water in a bucket or mixing tank. Keep the spray tank agitator running while the mixture of **KERB™ FLO 400 SC** and the balance of water are added to the spray tank. Maintain continuous thorough agitation during the entire mixing process and until the product has all been applied.

Choice and arrangement of flat fan nozzles must be such that an even distribution and optimum recovery of the herbicide on the soil is obtained. Apply **KERB™ FLO 400 SC** broadcast in sufficient spray volume of ≥150 liters per hectare to ensure that the product reaches the soil surface as an evenly distributed spray. Too low a volume will result in the spray mix being intercepted by the foliage of the crop and/or weeds, or being affected by wind or groundspeed, resulting in uneven and/or inadequate distribution of **KERB™ FLO 400 SC** on the soil surface. Even and adequate distribution of **KERB™ FLO 400 SC** on the soil surface is stressed above as without achieving this poor weed control is likely to result.

Use the prepared spray mix without delay and do not allow to stand for prolonged periods.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

ONLY FOR APPLICATIONS DURING WINTER MONTHS

CROP	DOSAGE/ HA	REMARKS
APPLES, APRICOTS, CHERRIES, PEACHES including NECTARINES, PEARS, PLUMS, PRUNES AND GRAPES In Winter Rainfall area **ONLY** Apply preferably in dormant stage of orchards and vineyards. When applied after bud burst, the spray should be directed to the soil – do not apply over any crop parts after bud burst. **DO NOT** apply to nursery stock. **DO NOT** apply to orchards or vines within ten (10) months after transplanting.	1,9 – 3,8 l/ha (See Remarks)	Apply in winter, pre-emergence to early post-emergence of annual winter grasses. Direct the spray to the soil surface. Do not spray over the trees or vines. Pre-emergence application is preferable. The lower rate of 1,9 l **KERB™ FLO 400 SC**/ha should only be considered in situations when annual grass weeds have not emerged yet and where the soil surface is clean and free of organic plant material. For post-emergence application use the higher rate of 3,8 l **KERB™ FLO 400 SC**/ha. For best results annual grasses should not be beyond the 3-leaf stage and the area to be treated should be relatively free (< 10% of soil surface) of organic material or surface litter coverage (dead or decaying weeds, leaves, mowing clippings, etc.). **KERB™ FLO 400 SC** is not absorbed through leaves and acts mainly through root absorption. For best results water (rain or overhead irrigation) is required within one to five days after application. At least 15 mm rain or overhead irrigation is necessary in one precipitation to leach **KERB™ 50 WP** in the soil to within the root zone of the germinating annual grasses, and to activate the product.

CROP	DOSAGE/ HA	REMARKS
APPLES, APRICOTS, CHERRIES, PEACHES including NECTARINES, PEARS, PLUMS, PRUNES AND GRAPES (CONT.)		**KERB™ FLO 400 SC** is compatible with post-emergence herbicides such as glyphosate or paraquat/diquat.
LEGUMINOUS PASTURES (Established pastures in Winter Rainfall area)	1,3 – 1,9 l/ha	**ESTABLISHED LEGUMINOUS PASTURES IN WINTER RAINFALL AREA** Annual grasses should be pre-emergence (preferably) to early post-emergence (not past the 3-leaf stage) at the time of application. Apply just after the first meaningful winter rain, when soil is moist and soil temperatures are colder. Sufficient rainfall of 15 mm or more within 5 days after application is essential to leach the **KERB™ FLO 400 SC** to the root zone of the weeds or else poor annual grass control could result. The lower dosage should only be applied if all the following conditions apply: - where no tillage has taken place (undisturbed soils), under conditions of high rainfall early in the season, and before the grasses have reached the 2-leaf stage. The higher dosage should be applied if all the following apply: - where tillage has taken place (loose soils),under conditions of low rainfall and when the annual grasses are beyond the 2-leaf stage but not past the 4 – 5 leaf stage, as poor grass weed control may result. A high and thick stand of pastures must first be grazed down before application takes place to allow access of the **KERB™ FLO 400 SC** onto the soil surface. **NOTE: KERB™ FLO 400 SC** can be used with safety in the normal *Medicago spp* and *Trifolium spp* pasture mixtures used in the Winter Rainfall Region.

CROP	DOSAGE/ HA	REMARKS
LEGUMINOUS PASTURES **(Newly established pastures in the Winter rainfall area)** **OR** **CANOLA** **(In the Winter rainfall area)**	1,9 l/ha	**NEWLY ESTABLISHED LEGUMINOUS PASTURES OR CANOLA IN WINTER RAINFALL AREA** Apply only after the crop has emerged and it has formed 2 – 3 true leaves. (Crop plants younger than this stage can be damaged or killed). To expect effective control annual grasses must not be older than the 3-leaf development stage. After planting under either moist or dry soil conditions sufficient follow up rains are required to ensure breaking up of clods and settling the seedbed, with resultant even germination of the crop and grasses. After application at least 15 mm sprinkler irrigation or rain in one precipitation within 5 days is required to leach the **KERB™ FLO 400 SC** to the root zone of the germinating grasses. Planting under dry conditions with very low or no sub-soil moisture can cause a cloddy seedbed, combined with insufficient follow up rain/irrigation this could result in uneven germination of crop and/or grasses. In this case application should be postponed until 100 % of the crop has emerged and developed 2 – 3 true leaves. Under such conditions application should not be considered unless at least 20 mm rain is expected within 5 days of application. The user should be aware of the facts that grasses germinating afterwards from big soil clods not yet broken up, or grasses that have been developed past the 3-leaf stage at the time of application might not be controlled. Failure to follow the guidelines as above could result in poor annual grass control.

CROP	DOSAGE/ HA	REMARKS
LEGUMINOUS PASTURES (Newly established pastures in the Winter rainfall area) (cont) **<u>OR</u>** **CANOLA (In the Winter rainfall area) (cont)**	1,9 l/ha	Poor control can also result when: • Annual grasses germinate from deeper than the level to which the **KERB™ FLO 400 SC** has leached (especially after deep cultivation). • Annual grasses have already developed a strong root system. • Big soil clods present as a result of the cultivation or planting process have not yet broken up at the time of spraying.
LETTUCE In the Winter Rainfall area	2,5 l/ha	**Direct sown** Apply **KERB™ FLO 400 SC** pre-emergence immediately after sowing. To ensure the best results, the seedbed should be well prepared and free from clods. Sprinkler irrigation or rain of at least 15 mm in one precipitation within 5 days is necessary to leach the **KERB™ FLO 400 SC** into the root zone of germinating annual grasses and to ensure good results. **Transplanted** Apply immediately after transplanting to clean, freshly worked soils, well prepared and free of clods. Sprinkler irrigation or rain of at least 15 mm in one precipitation within 5 days is necessary to leach the **KERB™ FLO 400 SC** into the root zone of germinating annual grasses and to ensure good results.
LAWNS AND SPORTS TURF	2,5 l/ha (25 ml/100 m²) Pre-emergence **<u>OR</u>** 5,0 l/ha (50 ml/100 m²) Early Post-emergence	Apply **KERB™ FLO 400 SC** for the control of *Poa annua* (Annual bluegrass, also known as Winter grass) in lawns of the *Cynodon* type (e.g., Royal Cape, Florida, Frankenwald Fine) and Kikuyu. **Do not use on the Outeniqua varieties, which may be severely damaged.** Do not use **KERB™ FLO 400 SC** on any grass types or varieties not listed as suitable on this label, as serious injury to such grass types or varieties may result. Do not use on newly sown lawns/turf. Use only on well-established lawns/turf.

CROP	DOSAGE/ HA	REMARKS
LAWNS AND SPORTS TURF (cont.)	2,5 l/ha (25 ml/100 m²) Pre-emergence **<u>OR</u>** 5.0 l/ha (50 ml/100 m²) Early Post-emergence	**TIMING OF APPLICATION:** Apply **KERB™ FLO 400 SC** during winter as the chemical is more active in cool conditions, warmer conditions promote degradation and shorter residual effect. Application of **KERB™ FLO 400 SC** can be pre- or early post-emergence. **PRE-EMERGENCE:** Pre-emergence application is preferable, it is normally more effective than post-emergence. **EARLY POST-EMERGENCE:** For post-emergence **KERB™ FLO 400 SC** application ***<u>Poa annua</u>*** grass should not be beyond the 3-5 leaf stage. **KERB™ FLO 400 SC** acts slowly on emerged ***<u>Poa annua</u>*** plants which may first become dark green and then gradually turn yellow and senesce over a 3-5 week period. **MOISTURE REQUIREMENT: KERB™ FLO 400 SC** uptake is mainly by root absorption, foliar uptake is limited. It is desirable to irrigate with 15-20 mm immediately following **KERB™ FLO 400 SC** application to move the chemical into the weed root zone. Avoid initial irrigation of >25 mm to reduce the possibility of excess washing or leaching of the chemical from the area of application. **MANAGEMENT PRACTICES:** Management Practices which influence ***<u>Poa annua</u>*** itself could be manipulated to contribute to the success of ***<u>Poa</u>*** control, including attention to watering timing/amounts, cutting height, compaction, fertilizing, etc. Growing conditions should allow adequate growth of the desirable lawn/turf but not be too favourable for the ***<u>Poa annua</u>***. ***<u>Poa annua</u>*** is more prolific and competitive under a regime of frequent light irrigations, close mowing, compaction, and prolonged moist soils.

CROP	DOSAGE/ HA	REMARKS
LUCERNE (Under irrigation in the Karoo)	1,9 l/ha	**KERB™ FLO 400 SC** can be applied to established or newly planted Lucerne. For established Lucerne apply in winter. Apply pre-emergence (preferably) up to early post-emergence (up to 3 leaf stage) of annual winter grasses. On newly planted Lucerne, application of **KERB™ FLO 400 SC** should not be made until after the third trifoliate leaf is fully developed. Irrigate with sprinklers (15 – 20 mm) immediately after application and if no rain has fallen within a month, repeat irrigation. **Note**: Poor control of deep germinating annual grasses may occur, especially in heavy soil or where big clods were formed during cultivation or planting process in newly planted Lucerne.

LIST OF ANNUAL GRASSES CONTROLLED BY KERB™ FLO 400 SC

BOTANICAL NAME	COMMON NAME
Avena fatua**	Common wild oats
Bromus diandrus**	Ripgut brome
Bromus catharticus**	Rescue grass
Hordeum murinum	Mouse barley
Lolium spp	Ryegrass
Phalaris canariensis	Canary seedgrass
Poa annua	Annual bluegrass
Triticum aestivum	Volunteer wheat
Vulpia myuros	Ratstail fescue

****Note:** Annual grasses eg. *Avena* and *Bromus* spp which germinate from soil depths deeper than the **KERB™ FLO 400 SC** layer will be poorly controlled.

Local Emergency No: +27(0)82-895-0621 (SA only)
24 Hour Emergency Tel No: +32-3-575-5555
Information Hotline Tel No: +27(0)12 683-5700

WAARSKUWINGS

RISIKO VERKLARINGS:
Kan vermoedelik kanker veroorsaak. Indien ingesluk, mag dit skade aan organe veroorsaak deur langdurige of herhaalde blootstelling Baie giftig vir waterlewe met langdurige effekte.

Na behandeling van weidingsgewasse moet 'n wagtydperk van 15 dae toegelaat word vanaf die dag van behandeling totdat beweiding weer 'n aanvang neem.
Skadelik indien ingesluk word.
Irriterend vir die vel, oë en asemhalingstelsel.
Vermy oogkontak.
Bêre weg van voedsel en voer.
Hou buite bereik van kinders, oningeligte persone en diere.
HERBETREDING: Moet nie behandelde gebied betree alvorens die spuitneerslag droog is nie tensy beskermende oorklere gedra word.

VRYWARING:
ALHOEWEL HIERDIE MIDDEL OMVATTEND ONDER 'N GROOT VERSKEIDENHEID TOESTANDE GETOETS IS, WAARBORG DIE REGISTRASIEHOUER NIE DAT DIT ONDER ALLE TOESTANDE DOELTREFFEND SAL WEES NIE AANGESIEN DIE WERKING EN EFFEK DAARVAN BEïNVLOED KAN WORD DEUR FAKTORE SOOS ABNORMALE GROND-, KLIMAATS- EN BERGINGSTOESTANDE, KWALITEIT VAN VERDUNNINGSWATER, VERENIGBAARHEID MET ANDER STOWWE WAT NIE OP DIE ETIKET AANGEDUI IS NIE EN DIE VOORKOMS VAN WEERSTAND VAN DIE ONKRUIDE TEEN DIE BETROKKE MIDDEL, SOWEL AS DIE METODE, TYD EN AKKURAATHEID VAN TOEDIENING. VERDER AANVAAR DIE REGISTRASIEHOUER NIE VERANTWOORDELIKHEID VIR SKADE AAN GEWASSE, PLANTEGROEI, DIE OMGEWING OF VIR NADELIGE EFFEK OP MENS OF DIER OF VIR 'N GEBREK AAN PRESTASIE VAN DIE BETROKKE MIDDEL AS GEVOLG VAN DIE VERSUIM VAN DIE GEBRUIKER OM ETIKETAANWYSINGS NA TE KOM OF AS GEVOLG VAN DIE ONTSTAAN VAN TOESTANDE WAT NIE KRAGTENS DIE REGISTRASIE VOORSIEN KON WORD NIE. RAADPLEEG DIE VERSKAFFER IN DIE GEVAL VAN ENIGE ONSEKERHEID.

VOORSORGMAATREËLS

VOORSORG VERKLARINGS:
Vermy vrylating van sproeinewel na die omgewing Dra beskermende handskoene/beskermende klere/oogbeskerming/gesigskerm. INDIEN blootgestel of daar rede tot kommer is: Kry mediese advies/aandag. Versamel verspilde produk. Stoor agter slot en grendel. Raak ontslae van inhoud/houer in ooreenstemming met toepaslike regulasies.

Vermy inaseming van sproeinewel.
Dra rubberhandskoene en gesigskerm wanneer die konsentraat hanteer word.
Was na toevallige velkontak. In geval van oogkontak, spoel die oë met voldoende skoon water om die middel uit die oë te was.
Moenie eet, drink of rook gedurende toediening/vermenging of voordat die hande en gesig gewas is of voordat skoon klere aangetrek is nie.
Voorkom wegdrywing van die sproeinewel na ander sensitiewe en/of eetbare gewasse, of gebiede wat nie onder behandeling is nie.

Was spuittoerusting deeglik met water na toediening of voordat dit vir toediening met ander middels gebruik word.
Vernietig die leë houer deur gate in te maak en dit plat te druk en moet NOOIT vir enige ander doel hergebruik nie.
Verhoed besoedeling van voedsel, voer, eetgerei en drinkwater.
Houers en verpakkings moet heeltemal leeggemaak word voordat hulle vernietig word. Dreineer die houer deeglik uit in die meng- of spuittenk. Spoel die leë houer daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat houer vernietig word.

RELEVANTE STOWWE:

KOMPONENT	CAS No.	Konsentraat (% w/w)
Propisamied (ISO)	23950-58-5	34,08
2-naftaleensulfonsuur, 6-hidroksi-, polimeer met formaldehied en metielfenol, natriumsout	68540-70-5	>= 3 - < 10
Etaandiol	107-21-1	>= 3 - < 10

NOODHULPMAATREËLS

Beskerming van noodhelpers
Noodhulppersoneel moet aandag gee aan selfbeskerming en die aanbevole beskermende klere (chemikaliebestande handskoene, spatbeskerming) dra.

Inaseming
Geen mediese noodbehandeling nodig nie.

Velkontak
Trek besmette klere uit. Spoel besmette vel dadelik af met baie water vir 15-20 minute. Bel 'n gifbeheersentrum of dokter vir behandelingsadvies.
Geskikte noodveiligheidsstortfasiliteit moet in die werksplek beskikbaar wees.

Oogkontak
Hou oë oop en spoel stadig en versigtig uit met water vir 15-20 minute. Verwyder kontaklense, indien teenwoordig, na die eerste 5 minute, gaan dan voort om oë uit te spoel. Bel 'n gifbeheersentrum of dokter vir behandelingsadvies.
Geskikte nood-oogspoelfasiliteit moet in die werkarea beskikbaar wees.

Inname
Geen mediese noodbehandeling nodig nie.

GEBRUIKSBEPERKINGS

- Moenie in kwekerye of op kwekery-plante gebruik nie.

- Die volgende oesgewasse moet nie op **KERB™ FLO 400 SC** behandelde grond geplant word binne 6 maande na die datum van **KERB™ FLO 400 SC** toediening nie:

  Brassicae (Blomkool, Brokkoli, Brusselspruite, Kanola, Kool), Aartappels, Boontjies en Uie

- Vir kleingraan (koring, hawer, rog, gars), raadpleeg die tabel hieronder:

BEWERKINGSMETODE	PLANTMETODE	WAGPERIOD
Geen Bewerking	Geplant met ‘n planter	10 maande
Geen Bewerking	Breedwerpig gesaai	18 maande
Bewerking	Geplant met ‘n planter	18 maande
Bewerking	Breedwerpig gesaai	18 maande

- ‘n Wagtydperk van 12 maande vanaf die datum van 'n **KERB™ FLO 400 SC** toediening moet toegelaat word voordat alle ander gewasse wat nie hierbo genoem is nie, geplant word.

- Hoë temperature en lae of geen reënval kort na toediening kan die werking van **KERB™ FLO 400 SC** nadelig beïnvloed.

- Moenie op Outeniqua variëteit of fyn grasperke bv. Rolbalbane, setperke en kolfblaaie wat dikwels gesny word en wat gevolglik ‘n swak wortelstelsel ontwikkel het, toedien nie. Beskadiging van sodanige *Cynodon* grasperke mag voorkom.

- Moenie op grasperke/sportterreine wat met ongelyste grastipes of variëteite gevestig is gebruik nie. Sulke ongelyste grastipes of variëteite mag erg beskadig word.

WEERSTANDSWAARSKUWING

KERB™ FLO 400 SC is 'n groepkode K1 onkruiddoder. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **KERB™ FLO 400 SC** of enige ander groepkode K1, onkruiddoders het. Indien hierdie onkruiddoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruide sal waarskynlik nie deur **KERB™ FLO 400 SC** of enige ander groepkode K1 onkruiddoder beheer word nie.

Om weerstand teen onkruiddoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van onkruiddoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende onkruiddodergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruiddoderprogramme.

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

ALGEMENE INLIGTING

Metode van Werking:

KERB™ FLO 400 SC is ’n onkruiddoder met grondwerking deurdat opname deur die wortels van sensitiewe grasse wat ontkiem of pas opgekom het, geskied. Voldoende reën of besproeiing (≥15 mm) binne 5 dae na toediening in ’n enkel neerslag is noodsaaklik om die **KERB™ FLO 400 SC** tot in die wortelsone van sensitiewe onkruide in te loog.

Beste resultate kan verwag word wanneer op `n klam saadbed, nadat die kluite of los bogrond deur reën of besproeiing geblus en geset is, toegedien word. Die oppervlak moet relatief fyn, egalig, ferm en sonder groot kluite wees. Dit moet ook vry van oortollige organiese- of oppervlak materiaal (dooie of verrottende onkruide, blare, plantsnysels ens.) wees.

Let daarop dat **KERB™ FLO 400 SC** slegs in die winter toegedien behoort te word. Die middel is meer aktief onder koel toestande. Warmer toestande is bevorderlik vir afbraak en korter residuele werking.

VERMENGING EN TOEDIENING:

Gebruik slegs spuitapparaat wat korrek gekalibreer is en met sterk roering onder in die tenk. Vul eers die spuittenk halfvol met water. Meng die verlangde hoeveelheid **KERB™ FLO 400 SC** met water in ’n emmer of ’n mengtenk. Hou die roerder in die spuittenk aan die gang terwyl die mengsel van **KERB™ FLO 400 SC** en die balans van die water tot die spuittenk bygevoeg word. Behou voortdurende en deeglike roering totdat die produk klaar toegedien is.

Die keuse en spasiëring van plat waaier spuitkoppe moet verseker dat `n egalige verspreiding en optimale herwinning van die onkruiddoder op die grond verkry word. Om te verseker dat die onkruiddoder die grondoppervlak as eweredige bedekking bereik, moet **KERB™ FLO 400 SC** breedwerpig in voldoende spuitvolume van 150 liter per ha of meer, toegedien word. Te lae volume sal veroorsaak dat die spuitmengsel deur loofgedeeltes van die gewas en onkruide onderskep word, of deur wind of grondspoed beïnvloed word om dan oneweredige of onvoldoende verspreiding van **KERB™ FLO 400 SC** op die grondoppervlak tot gevolg te hê. Eweredige en voldoende verspreiding van **KERB™ FLO 400 SC** op die grondoppervlak soos hierbo genoem word benadruk, want indien dit nie nagekom word nie kan onvoldoende onkruidbeheer verwag word.

Gebruik die aangemaakte spuitmengsel sonder versuim en moet nie toelaat dat dit vir verlengde periodes oorstaan nie.

GEBRUIKSAANWYSINGS: **GEBRUIK SLEGS SOOS AANGEDUI**

SLEGS VIR TOEDIENING GEDURENDE DIE WINTERMAANDE

GEWAS	DOSIS / HA	OPMERKINGS
APPELS, APPELKOSE, KERSIES, PERSKES insluitend NEKTARIENS, PERE, PRUIME, PRUIMEDANTE EN DRUIWE **SLEGS** vir gebruik in die Winterreënvalstreek. Dien verkieslik in dormante stadium van boorde en wingerde toe. Sodra toediening na bot geskied, moet die spuitmengsel na die grond gerig word om kontak met enige plantdele in die na-bot periode te vermy. **MOENIE** in kwekerye gebruik nie. **MOENIE** in boorde of wingerde, binne 10 maande na uitplant gebruik nie.	1,9 – 3,8 l/ha (Sien Opmerkings)	Dien in winter voor-opkoms tot vroeg na-opkoms van eenjarige wintergrasse toe. Rig die bespuiting na die grondoppervlak. Moenie bo-oor boompies of stokkies spuit nie. Voor-opkoms toediening is verkieslik. Die laer dosis van 1,9 l **KERB™ FLO 400 SC**/ha moet alleenlik in situasies voor-opkoms van eenjarige grasse en waar die grondoppervlak skoon en vry van organiese plantmateriaal is, oorweeg word. Vir na-opkoms toedienings gebruik die hoër dosis van 3,8 l **KERB™ FLO 400 SC**/ha. Vir beste resultate moet eenjarige grasse nie verder as die 3 blaar stadium ontwikkel wees nie en die oppervlak wat behandel moet word, moet relatief vry (<10 % van grondoppervlakte) van organiese- of oppervlak materiaal (dooie of verrottende onkruide, blare, plantsnysels, ens.) wees. **KERB™ FLO 400 SC** word nie deur blare opgeneem nie en werk hoofsaaklik deur wortel-opname. Vir beste resultate word water (reën of oorhoofse besproeiing) binne een tot vyf dae na toediening benodig. Minstens 15 mm reën of oorhoofse besproeiing in 'n enkel neerslag, is na toediening noodsaaklik om die **KERB™ FLO 400 SC** na die wortelsone van die ontkiemende eenjarige grasse te loog, en in die grond te aktiveer. **KERB™ FLO 400 SC** is mengbaar met na-opkoms onkruiddoders soos glifosaat of parakwat/dikwat.

GEWAS	DOSIS / HA	OPMERKINGS
PEULGEWASWEIDINGS (Gevestigde weidings in die Winterreënval gebied)	1,3 – 1,9 l/ha	**GEVESTIGDE PEULGEWASWEIDINGS IN WINTERREëNVALGEBIED.** Tydens toediening moet eenjarige grasse verkieslik voor-opkoms tot vroeg na-opkoms wees (nie groter as 3-blaar stadium nie). Dien net na die eerste betekenisvolle winterreën toe wanneer die grond klam en grondtemperature kouer is. Voldoende reën binne 5 dae na toediening van 15 mm of meer is noodsaaklik om die **KERB™ FLO 400 SC** na die wortelsone van die onkruid te loog, anders kan onvoldoende beheer van eenjarige grasse verkry word. Die laer dosis moet slegs oorweeg word waar geen bewerking toegepas is nie (onversteurde grond) en hoë reënval vroeg in die seisoen voorkom en voordat die grasse die 2-blaarstadium bereik het. Die hoër dosis moet onder toestande van lae reënval of waar bewerking gedoen is (los gronde) en wanneer die eenjarige grasse verder as die 2-blaarstadium ontwikkel het, oorweeg word. Let egter daarop dat die grasse nie verby die 4 – 5 blaarstadium ontwikkel moet wees nie, want onvoldoende beheer van grasonkruide kan dan verwag word. ‘n Hoë en digte stand weiding moet voor toediening eers bewei word sodat die **KERB™ FLO 400 SC** tot op die grond toegedien kan word. **NOTA: KERB™ FLO 400 SC** is veilig vir gebruik in die normale ***Medicago* spp** en ***Trifolium* spp** wat in weidingsmengsels in die Winterreënvalgebied gebruik word.

GEWAS	DOSIS / HA	OPMERKINGS
PEULGEWASWEIDINGS (Nuut gevestigde weidings in die Winterreënval gebied) **<u>OF</u>** **KANOLA** (In die Winterreënvalgebied)	1,9 l/ha	**NUUT GEVESTIGDE PEULGEWASWEIDINGS OF KANOLA IN DIE WINTERREëNVALGEBIED.** Dien slegs toe nadat die gewas opgekom het en 2 – 3 egte blare gevorm het. (Gewasplante jonger as hierdie stadium kan beskadig of gedood word). Om effektiewe beheer te verwag moet eenjarige grasse nie verby die 3-blaarstadium ontwikkel het nie. Nadat onder nat óf droë grondtoestande geplant is, word voldoende opvolgreëns benodig om te verseker dat kluite opgebreek word en die saadbed egalig set, met daaropvolgende egalige ontkieming van die gewas en grasse. Minstens 15 mm reën of oorhoofse besproeiing in `n enkel neerslag is binne 5 dae na toediening nodig om die **KERB™ FLO 400 SC** tot by die wortelsone van die ontkiemende grasse in te loog. Indien onder droë toestande met lae of geen onderliggende grondvog geplant word, kan dit tot 'n kluiterige saadbed lei. Met onvoldoende opvolg reën/besproeiing kan dit onegalige ontkieming van gewas en/of grasse tot gevolg hê. In so ,'n geval moet toediening uitgestel word totdat 100 % van die gewas opgekom het en 2 – 3 egte blare ontwikkel het. <u>Onder sulke toestande moet toediening nie oorweeg word tensy minstens 20 mm reën binne 5 dae na toediening in 'n enkel neerslag verwag word nie.</u> Die gebruiker moet bewus wees van die feite dat grasse wat agterna vanuit groot grondkluite, wat nog nie opgebreek is nie, ontkiem, of grasse wat ten tye van toediening verby die 3-blaarstadium ontwikkel het, dalk nie beheer sal word nie. Versuim om die riglyne soos hierbo te volg, mag tot swak beheer van eenjarige grasse lei.

GEWAS	DOSIS / HA	OPMERKINGS
PEULGEWASWEIDINGS (Nuutgevestigde weidings in die Winterreënval gebied) (verv.) **<u>OF</u>** **KANOLA (In die Winterreënvalgebied) (verv.)**	1,9 l/ha	Swak beheer kan ook geskied sodra: • Eenjarige grasse van 'n vlak ontkiem wat dieper is as die vlak waartoe die **KERBTM FLO 400 SC** geloog het (veral na diep bewerking). • Eenjarige grasse reeds 'n sterk wortelstelsel ontwikkel het. • Groot grondkluite as gevolg van die bewerkings- of plantproses nog aanwesig is en nog nie ten tye van bespuiting opgebreek het nie.
BLAARSLAAI In die Winterreënvalgebied	2,5 l/ha	**Direk Gesaai** Dien voor-opkoms kort na saai van blaarslaai toe. Om beste resultate te verseker, moet die saadbed goed voorberei en vry van kluite wees. Sprinkelbesproeiing of reën van ten minste 15 mm as enkel neerslag binne 5 dae na toediening is noodsaaklik om die **KERBTM FLO 400 SC** na die wortelsone van ontkiemende eenjarige grasse te loog en goeie resultate te verseker. **Uitgeplant** Dien **KERBTM FLO 400 SC** onmiddellik na uitplant aan skoon, varsbewerkte gronde, wat goed voorberei en vry van kluite is toe. Oorhoofse besproeiing of reën van ten minste 15 mm as enkel neerslag binne 5 dae na toediening is noodsaaklik om die **KERBTM FLO 400 SC** na die wortelsone van ontkiemende eenjarige grasse te loog en goeie resultate te verseker.

GEWAS	DOSIS / HA	OPMERKINGS
GRASPERKE EN SPORTVELDE	2,5 l/ha (25 ml/100 m²) Voor-opkoms **OF** 5,0 l/ha (50 ml/100 m²) Vroeg na-opkoms	Dien **KERB™ FLO 400 SC** vir die beheer van **Poa annua** (Eenjarige blougras, ook bekend as Wintergras) in grasperke van die ***Cynodon*** tipe (bv. Royal Cape, Florida, Frankenwald Fine) en Kikoejoe toe. **Moenie op die Outeniqua variëteit gebruik word nie aangesien dit ernstig beskadig mag word.** Moenie **KERB™ FLO 400 SC** op enige grastipes of variëteite, wat nie as geskik op hierdie etiket gelys is nie, gebruik nie want ernstige skade aan sulke grastipes of variëteite mag voorkom. Moet nie op nuut gesaaide grasperke/turf gebruik nie. Gebruik alleenlik op goed gevestigde grasperke/turf. **TYD VAN TOEDIENING:** Dien **KERB™ FLO 400 SC** gedurende die winter toe. Die produk is meer aktief onder koel toestande. Warm toestande bevorder afbraak van die produk met gevolglike korter residuele werking. Toediening van **KERB™ FLO 400 SC** kan voor- of vroeg na-opkoms van onkruid geskied. **VOOR-OPKOMS:** Voor-opkoms toediening is verkieslik, dit is normaalweg meer effektief as na-opkoms. **VROEG NA-OPKOMS:** Die toediening van **KERB* FLO 400 SC** vroeg na-opkoms op ***Poa annua*** gras moet nie na die 3 – 5 blaarstadium gedoen word nie. **KERB™ FLO 400 SC** reageer stadig op ontkiemde ***Poa annua*** plante wat eers donkergroen verkleur en dan geleidelik geel vertoon waarna dit oor ‘n tydperk van 3 – 5 weke kwyn.

GEWAS	DOSIS / HA	OPMERKINGS
GRASPERKE EN SPORTVELDE (verv.)	2,5 l/ha (25 ml/100 m²) Voor-opkoms **OF** 5,0 l/ha (50 ml/100 m²) Vroeg na-opkoms	**VOG BEHOEFTE:** Om **KERB™ FLO 400 SC** in die wortelsone van ontkiemende onkruide te laat beweeg, is dit noodsaaklik om `n besproeiing van 15 – 20 mm direk na toediening aan te wend. Om oormatige uitwas en loging van die chemikalië uit die wortelsone te verhoed, moet die aanvanklike besproeiing nie meer as 25 mm wees nie. **BESTUURSPRAKTYKE**: Manipulasie van bestuurspraktyke wat die ontkieming en vestiging van ***Poa annua*** kan onderdruk, sluit die volgende in: Aandag aan die tydsberekening hoeveelheid van besproeiing, snyhoogte, kompaksie en bemesting. Groeitoestande moet gunstig wees om voldoende groei vir die betrokke grasperk/sportveld aan te moedig, maar ongunstig wees vir die ontkieming en groei van ***Poa annua***. ***Poa annua*** is meer talryk en mededingend onder toestande van gereelde ligte besproeiings en kort gesnyde gras, kompaksie en/of langdurige nat gronde.
LUSERN (Onder besproeiing in die Karoo)	1,9 l/ha	**KERB™ FLO 400 SC** kan op gevestigde of nuut-geplante Lusern toegedien word. Vir gevestigde Lusern dien in winter toe. Dien voor-opkoms (verkieslik) tot vroeg na-opkoms (tot by 3-blaarstadium) van eenjarige wintergrasse toe. Op nuut-geplante Lusern moet **KERB™ FLO 400 SC** nie toegedien word voordat die derde drieledige blaar volledig ontwikkel het nie. Dien `n oorhoofse besproeiing van 15 – 20 mm, direk na toediening van die **KERB™ FLO 400 SC** toe. Indien dit nie binne `n maand daarna gereën het nie, moet die besproeiing weer herhaal word.
		Let wel: In nuut gevestigde Lusern, veral op swaar gronde of waar groot kluite tydens bewerking of plant gevorm het, mag swak beheer van diep ontkiemende eenjarige grasse verkry word.

LYS VAN EENJARIGE GRASSE WAT DEUR KERB™ FLO 400 SC BEHEER WORD

BOTANIESE NAAM	**GEWONE NAAM**
Avena fatua **	Gewone wildehawer
Bromus diandrus **	Predikantsluis
Bromus catharticus **	Reddingsgras
Hordeum murinum	Wildegars
Lolium spp	Raaigras
Phalaris canariensis	Kanariesaadgras
Poa annua	Wintergras
Triticum aestivum	Opslagkoring
Vulpia myuros	Langbaardswenkgras

****NOTA:** Eenjarige grasse bv. *Avena* en *Bromus* spp. wat vanuit 'n gronddiepte dieper as die **KERB™ FLO 400 SC** sone ontkiem, sal swak beheer word.

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