



MAKHRO 2,4-DB

Reg no L 5311 Wet / Act 36 / 1947

An aqueous concentrate post-emergence herbicide for the selective control of certain broadleaf weeds in Lucerne, in pastures of annual medics, clover or grasses and in underdown Lucerne in grain crops	'n Waterbasis konsentraat na-opkoms onkruidodder vir die selektiewe beheer van sekere breëblaaronkruid in lusern, eenjarige medicago, gras- en klawerweidings asook ondergesaaide lusern in graangewasse.
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ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

2,4-DB (phenoxy compound) (Sodium salt)	400 g / ℓ	2,4-DB (Fenoksie-verbinding) (Natriumsout)
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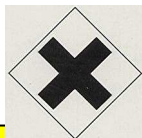
NET VOLUME / NETTO VOLUME

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REGISTRATION HOLDER / REGISTRASIEHOUER

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Batch number Lotnommer
 Date of manufacture Datum van vervaardiging



**HARMFUL
SKADELIK**



WARNINGS:

**ALLOW 30 DAYS BETWEEN LAST APPLICATION AND GRAZING OR LUCERNE
DO NOT USE MAKHRO 2,4-DB ON GROUNDNUTS**

- Handle with care
- Poisonous by swallowing
- Toxic to fish
- Store in a cool, dry place away from food, feeds and other agricultural chemicals
- Keep out of reach of children, uninformed persons and animals

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not guarantee that it will be effective under all conditions. The activity 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 as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure by 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:

- Do not breathe spray mist
- Wash contaminated clothing daily
- Wash with soap and water after use or skin contact
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes
- Prevent contamination of food, feeds, drinking water and eating utensils. Prevent spray drift onto other crops, grazing, rivers and dams and other areas not under treatment
- Clean applicator with a household ammonia solution (1 %) before using with other material. Let solution stand for several hours.
- Preferably overnight. Rinse at least twice.
- This applicator should not be used for applying chemicals other than herbicides.
- Dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- When empty, invert the container over the spray tank or mixing tank and allow it to drain for at least 30 seconds after the flow has slowed down to a drip. Rinse the container three times.
- Add the rinsings to the contents of the spray tank before destroying the container by puncturing and burying or burning it.
- Do not use the container for any other purpose

USE RESTRICTIONS:

- To prevent damage, do not permit drift, vapour or spray mist to come into contact with sensitive broadleaf crops, fruit or ornamentals as well as grain varieties in a susceptible stage.
- Apply the product strictly in accordance with the application directions.

- May be applied by tractor mounted and knapsack sprayers on lands in the vicinity of susceptible crops, provided that strict precautions are taken to avoid spray drift. Consult the supplier in case of any uncertainty in this regard.

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 crops	
WIND SPEED km/h	GROUND APPLICATION
1,5 – 5	200 m downwind 200 m crosswind 6 m upwind
5 – 10	400 m downwind 200 m crosswind 1,5 upwind
10 – 15	800 m downwind 400 m crosswind 1,5 upwind
Above 15	Prohibited

DIRECTIONS FOR USE:

Use only as directed

COMPATIBILITY:

Do not mix MAKHRO 2,4-DB with wetting agents or other herbicides

GROUND APPLICATION:

Avoid fine droplet size – use low pressure flat fan nozzles of 80 ° or equivalent anti-drift type, and do not exceed spray pressure of 200 kPa. Spray volume must exceed 150 ℓ / ha. Do not exceed spray height of 50 cm above target and ground speed of 10 km / h. Do not apply if wind velocity exceeds 15 km / hour (as measured by handheld wind recorder) The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C. Spray when the crop and weeds are growing vigorously and at the stage recommended.

Adjust the height of the boom above the crop so that the growth tips of all weeds are sprayed.

Application when the soil is dry is NOT recommended.

APPLICATION RATES:

CROP	DOSAGE RATE / HA	REMARKS
Clover and Grass	4 ℓ	Apply from the first tri-foliolate stage of the clovers and onwards.
Lucerne	4 ℓ	Apply from the first tri-foliolate leaf stage of the Lucerne. DO NOT apply later than the 4 th trifoliolate development stage of the Lucerne. Established Lucerne may be treated after being cut.
Undersown Lucerne in Grain Crops	4 ℓ	See remarks under Lucerne above. Apply when wheat is between 5-leaf stage and fully tillered stage.
Annual Medics and Clover Pastures (“spray-graze”)	1,5 ℓ	<p>Apply from the 5 – 8 trifoliolate leaf stage of the clovers and onwards. GRAZING: Heavily stock the camp with sheep for fast grazing of the weeds 7 – 14 days after this application. This grazing process should be completed within 10 days to prevent excessive trampling damage to the clovers.</p> <p>The process of “spray-graze” should be completed by the end of July to allow time for the establishment of a good clover stand for seed harvesting. IT IS IMPORTANT TO NOTE THAT THE PURPOSE OF THIS TREATMENT IS NOT TO KILL THE WEEDS BUT TO MAKE THEM MORE PALATIBLE FOR SHEEP AFTER SPRAYING.</p> <p>Broadleaf weeds reacting favourably to this treatment include: <i>Arctotheca calendula</i> (Cape marigold), <i>Raphanus raphanistrum</i> (Wild radish), <i>emex australis</i> (Spiny emex), <i>Chenopodium spp</i> (goosefoot) & <i>Malva parviflora</i> (small mallow)</p>

WEED SUSEPTIBILITY:

Spray when weeds are in the 2 – 5 leaf stage and actively growing. The following weeds are controlled at 4 ℓ / ha.

Acanthospermum hispidum
Amaranthus hybridus
A. Spinosus
A.Thunbergi
Argemone subfusiformis
Bidens bipinnata
B.Pilosa
Capsella bursa-pastoris
Chenopodium album
C.Carinatum
Citrullus lanatus
Cleome gynandra
C.Monophylla
Commelina benghalensis
Cucumis myriocarpus
Datura stramonium
Emex australis
Flaveria bidentis
Galingsoga parviflora
Hibiscus trionum
Ipomoea purpurea
Oenothera rosea
Oxalis pes-caprae
Plantago lanceolata
Schukuhria pinnata
Senecio consanguineus
Tagetes minuta
Zanthium strumarium
Zinnia peruviana

Erratic control of the following weeds may occur and supplementary measures such as handweeding, mechanical cultivation or additional chemical treatments may be required:

Datura ferox
Portulaca oleracea
Tribulus terrestris

NOTE:

MAKHRO 2,4-DB controls the abovementioned annual broadleaf and grass weed species alone, or in tank mixes with other products as indicated. Other annual broadleaf and grass 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 responsibilities for unlisted weeds. Weeds which have not germinated at the time of application will not be controlled. A second application of MAKHRO 2,4-DB may be required to control such weeds.

WAARSKUWINGS:

LAAT 30 DAE TOE NA LAASTE TOEDIENING EN BEWEIDING VAN BEHANDELDE GEBIEDE. MOENIE MAKHRO 2,4-DB IN GRONDBONE GEBRUIK NIE.

- Hanteer versigtig
- Giftig indien ingesluk word
- Giftig vir visse
- Stoor in 'n koel plek, weg van voedsel, voer en saad en ander landbou chemikalië
- Hou buite bereik van kinders, oningeligte persone en diere

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 en die voorkoms van weerstand van die plaag 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.

- Moet nie spuitnewel inasem nie
- Was besoedelde klere daaglik
- Was met seep en water na gebruik of velkontak
- Moet nie eet, drink of rook terwyl produk gemeng en toegedien word en voordat hande en gesig gewas en klere verwissel is nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei. Verhoed wegdrywing van spuitnewel na ander gewasse, weidings, riviere, damme en ander gebiede wat nie behandel word nie. Maak spuittoerusting met 'n huishoudelike ammoniakoplossing (1%) skoon voordat ander plaagdoders daarmee gebruik word. Laat staan die oplossing vir 'n paar uur, verkieslik oornag.
- Hierdie spuittoerusting behoort nie gebruik te word vir die toediening van enige ander chemikalieë nie behalwe onkruidodders. Gooi waswater weg waar dit nie voedsel, weiding, riviere of damme sal besoedel nie.

GEBRUIKSBEPERKINGS:

Om skade te voorkom moet verhoed word dat dampe of spuitnewel in aanraking kom met of wegdrywing na sensitiewe breëblaargewasse, vrugtebome of sierplante asook graansoorte in 'n gevoelige groeistadium. Dien die produk streng volgens die gebruiksaanwysings toe. Kan deur middel van trekker gemonteerde- of rugsakspuite op lande in die nabyheid van gevoelige gewasse toegedien word mits streng voorsorg teen spuitstofwegdrywing getref word. Raadpleeg die verskaffer in geval van enige onsekerheid in hierdie verband.

DIE WINDSPOED EN WINDRIGTING TYDENS TOEDIENING SAL DIE AFSTAND TUSSEN DIE NAASTE RAND VAN DIE GEBIED WAT BESPUIT MOET WORD EN DIE GEVOELIGE GEWASSE BEPAAL	
WINDSPOED km/uur	GROND TOEDIENING
1,5 – 5	200 m windaf 200 m dwarswind 6 m windop
5 – 10	400 m windaf 200 m dwarswind 1,5 windop
10 – 15	800 m windaf 400 m dwarswind 1,5 m windop
Meer as 15	Verbode

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

VERENIGBAARHEID:

MAKHRO 2,4-DB moet nie met benattingsmiddels of ander onkruidodders gemeng word nie.

GRONDTOEDIENING:

Vermyn fyn druppelgroottes – gebruik laedruk platwaaierspuitpunte van 80 grade of akwivalente antiwegdrywing tipe. Die spuitdruk moet nie 200 kPa oorskry nie. Spuitvolume moet 150 lt / ha oorskry. 'n Spuithoogte van 50 cm bokant die teiken en 'n grondspoed van 10 km / uur moet nie oorskry word nie. Indien die windspoed hoer as 15 km / uur (soos bepaal deur windhandmeter) moet die produk nie toegedien word nie. Die verskil tussen die nat-en droë bollesing, soos met 'n swaaihygrometer bepaal, moet nie meer as 8 grade celsius wees nie. Spuit wanneer die gewas en die onkruid aktief groei en in die groeistadium is soos aangedui.

Stel die hoogte van die spuitbalk bo die gewas, sodat die groeipunte van alle onkruid raakgespuit word.

Toediening wanneer die grond baie droog is word NIE aanbeveel nie.

GEWAS	TOEDIENINGS- HOEVEELHEID / ha	OPMERKINGS
Klawers en Gras weidings	4 lt	Dien toe vanaf die eerste driebladblaarstadium van die klawers
Lusern	4 lt	Dien toe vanaf die eerste driebladblaarstadium van die lusern. MOET NIE later as die 4de drie-blaarstadium toedien nie. Gevestigde lusern mag ook bespuit word nadat dit gesny is.
Ondergesaaide Lusern in Graangewasse	4 lt	Sien die opmerkings onder lusern hierbo. Dien toe tussen die 5-blaarstadium en stoelstadium van die koring
Eenjarige Medicago en klawers (spuitwei)	1.5 lt	Dien vanaf die 5 – 8 driebladblaarstadium van die klawers. WEIDING: die bespuite kampe moet swaar beweide word deur skape 7 -14 dae na bespuiting. Hierdie beweidingspraktyk moet binne 18 dae voltooi word om oormatige vertrapping van die klawers te voorkom. Die proses van (spuit-wei) moet voor die einde Julie voltooi word om die vestiging van 'n goeie klaverstand te verseker. DIT IS BELANGRIK OM DAAROP TE LET DAT DIE DOEL VAN HIERDIE PRAKTYK NIE IS OM DIE ONKRUID MET MAKHRO 2,4-DB TE DOOD NIE MAAR OM DIE ONKRUID SMAAKLIKER TE MAAK VIR SKAPE. Breëblaaronkruid wat gunstig reageer op hierdie behandeling sluit in <i>Arctoteca calendula</i> (soetgousblom), <i>Raphanus raphanistrum</i> (Ramenas), <i>Emex australis</i> (Spiny emex), <i>Chenopodium spp</i> (Hondebossie) en <i>Malva parviflora</i> (kiesieblaar)

ONKRUIDVATBAARHEID:

Vir beste resultate spuit wanneer die onkruid in die 2 – 5 blaarstadium is en aktief groei. Die volgende onkruid word teen 4 lt / ha beheer:

Acanthospermum hispidum
Amaranthus hybridus
A. Spinosus
A.Thunbergi
Argemone subfusiformis
Bidens bipinnata
B.Pilosa
Capsella bursa-pastoris
Chenopodium album
C.Carinatum
Citrullus lanatus
Cleome gynandra
C.Monophylla
Commelina benghalensis
Cucumis myriocarpus
Datura stramonium
Emex australis
Flaveria bidentis
Galingsoga parviflora
Hibiscus trionum
Ipomoea purpurea
Oenothera rosea
Oxalis pes-caprae
Plantago lanceolata
Schukuhria pinnata
Senecio consanguineus
Tagetes minuta
Zanthium strumarium
Zinnia peruviana

Wisselvallige beheer van die volgende onkruid mag ondervind word, en bykomende maatreels soos handskoffel, meganiese bewerking of addisionele chemiese behandelings mag nodig wees.

Datura ferox
Portulaca oleracea
Tribulus terrestris

NOTA:

MAKHRO 2,4-DB beheer die bogenoemde eenjarige breekbaar- asook grasonkruidspesies alleen, of in tenkingsels met ander produkte soos aangedui. Ander eenjarige breekbaar- asook grasonkruidspesies wat nie tydens die ontwikkelingsproewe met die middel voorgekom het nie, kan ook moontlik in 'n meerdere of mindere mate beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid ten opsigte van ongelyste onkruid nie. Onkruid wat nie ontkiem het tydens bespuiting sal nie beheer word nie. 'n Tweede MAKHRO 2,4-DB bespuiting mag nodig wees om sulke onkruid te beheer.