

Before using this product please read the label carefully

2,4-D AMINE 480 SL

Reg. No. L5233, Act No. 36 of 1947

Reg. Nr. L5233, Wet Nr. 36 van 1947

Botswana: Reg. No./Nr. W130302, Act No./Wet Nr. 18 of/van 1999

Namibian /Namibiese: Reg. No./Nr. N-AR 1318

A selective hormone-type weedkiller for the control of weeds in maize, grain sorghum, wheat and other cereals, sugarcane, lawns, golf courses and pastures.

'n Selektiewe hormoon tipe onkruiddoder vir die beheer van onkruid in mielies, graansorghum, koring en ander graangewasse, suikerriet, grasperke, golfbane en grasweidings.

Herbicide Group Code 4 Onkruiddodergroepkode

ACTIVE INGREDIENT :

AKTIEWE BESTANDDEEL:

(2,4-dichlorophenoxy) acetic acid480 g/l.....(2,4-dichloorfenoksie) asynsuur
(as the 2,4-D-dimethylammonium salt580 g/l.....(as die 2,4D-dimetielammoniumsout)

Netto Volume



Net Volume

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

Batch No:
Lotnommer:

Date of manufacture:
Datum van Vervaardiging

UN No. /VN Nr. 3082 –Environmentally hazardous substance, liquid, n.o.s.



**HARMFUL
SKADELIK**



Pamphlet

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HARMFUL

WARNINGS:

DO NOT GRAZE TREATED AREAS WITHIN 7 DAYS AFTER APPLICATION.

Handle with care.

Harmful when swallowed, inhaled or absorbed through the skin.

May cause severe eye irritation.

Toxic to fish and bees.

Keep out of reach of children, uninformed persons and animals.

Store away from food, feed, seed or other agricultural remedies.

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.

Aerial application - notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

2,4-D Amine 480 SL is a highly active herbicide that in small quantities, when used incorrectly, can cause serious damage to crop seedlings, deciduous fruit trees and grapevines during the budding and early season growth stages. Under the following conditions it can cause serious damage as far as 3 to 5 km from the nearest spray path of the aircraft. Cloudy weather with relative humidity above 80% and low air movement of less than 5 km per hour. When such conditions prevail, aerial application should NOT be carried out where crop seedlings, deciduous fruit trees and grapevines, in budding or early season growth stages, are present within 5 km of the nearest spray path of the aircraft.

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 AGAINST THE REMEDY CONCERNED AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR LACK OF PERFORMANCE OF THE REMEDY CONCERNED DUE TO 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:

Do not inhale the fumes or spray mist.

Avoid contact with eyes and skin.

Wear protective clothing (face shield, rubber gloves and boots) when handling the product.

Wash contaminated clothing after use.

Wash with soap and water after use or skin contact. In case of eye contact, rinse immediately with running water.

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, dams and other areas not under treatment.

Clean applicator thoroughly before using it with other material and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.

Let solution stand for several hours, preferably overnight. Rinse at least twice. This applicator should not be used for applying chemicals other than herbicides.

When empty, rinse empty container three times with a volume of water equal to a minimum of 30 % of that of the container and add rinsings to the contents of the spray tank before disposing of the container.

Destroy the empty container and dispose of it in a safe manner. Do not use for any other purpose.

The triple-rinsed container may be sent to an approved recycling facility for processing.

SYMPTOMS OF POISONING:

Symptoms may include the following; nausea, vomiting, sweating, headaches, muscle soreness, abdominal pain and loss of co-ordination. It may also include burns to the mouth, throat and oesophagus.

FIRST AID TREATMENT

INHALATION: If inhaled, remove patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

INGESTION: DO NOT INDUCE vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material have been swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

SKIN CONTACT: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before re-use. Get medical attention.

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.

NOTE TO PHYSICIAN

No specific treatment – treat symptomatically

USE RESTRICTIONS:

To prevent damage, do not permit drift, vapour or spray mist to come into contact with sensitive broadleaf crops, fruit or ornamentals. Apply the product strictly in accordance with the application directions.

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	AERIAL APPLICATION	GROUND APPLICATION
1,5 - 5	800 m downwind 800 m crosswind 15 m upwind	200 m downwind 200 m crosswind 6 m upwind
5 - 10	1 600 m downwind 800 m crosswind 15 m upwind	400 m downwind 200 m crosswind 1.5 m upwind
10 - 15	3,2 km downwind 800 m crosswind 15 m upwind	800 m downwind 400 m crosswind 1,5 m upwind
Above 15	Prohibited	Prohibited

RESISTANCE WARNING:

For resistance management, **2,4-D Amine 480 SL** is a group code 4 herbicide. Any weed population may contain individuals naturally resistant to **2,4-D Amine 480 SL** and other group code 4 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. The resistant weeds may not be controlled by **2,4-D Amine 480 SL** or any other group code 4 herbicides.

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.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

Do not apply to land adjacent to susceptible crops.

May be applied by air, tractor or by hand sprayers on land in the vicinity of susceptible crops, provided adequate precautionary measures are taken to avoid spray drift.

MIXING INSTRUCTIONS:

2,4-D Amine 480 SL selective weedkiller must be diluted with water and applied as an evenly distributed fine spray. The exact amount of water to be used will be obtained when not less than 200 l of the mixture per ha is used. Always calibrate the spraying equipment before use in order to ascertain the exact quantity of spray delivered per ha.

METHOD OF APPLICATION:

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 approved by the Registrar: Act No. 36 of 1947)

The difference between the wet and dry bulb readings on a whirling hygrometer must not exceed 8 °C.

Post-emergence Application:

Spraying should only be carried out when the crop is in a suitable stage of development as indicated below.

For the best results, weeds should be sprayed when in the young stages and growing vigorously.

As they mature the rate of application should be increased accordingly, but the prescribed rates must not be exceeded. When in flower, most weeds are resistant to normal application. Rainfall after 12 hours of application will not reduce the effectiveness of the weedkiller.

AERIAL APPLICATION: (Do not apply 2,4-D Amine 480 SL by air in KwaZulu-Natal)

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

Equipment:

Use a conventional boom and nozzles equipped with flat fan tips that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.

The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.

All nozzles / atomisers should be positioned within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

Application parameters:

A minimum volume of 30 ℓ spray mixture per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.

A droplet coverage of 30-40 droplets per cm² must be recovered at the target.

A droplet spectrum with a VMD (Volume Median Diameter) of 300-350 microns is recommended.

Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.

The use of a suitable drift retardant and/or low drift nozzles (e.g. straight stream nozzles) is recommended.

In case of fixed-wing aircraft flying at a speed faster than 130 mph, the maximum deflection angle of nozzles or spray stream, as measured from a horizontal straight backwards orientation, may not exceed 30 degrees. In the case of slower flying fixed wing aircraft, the maximum deflection angle as described above, may not exceed 55 degrees.

The height of the spray boom should be maintained at 3-4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.

Apply before the crop becomes too dense, thus preventing proper coverage of the weeds.

Meteorological conditions:

The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C

Do not spray under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.

Do not spray under temperature inversion conditions (spraying in or above the inversion layer).

Do not spray if the wind speed exceeds 15 km/h.

General:

Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met.

APPLICATION TABLE:

CROP	DOSAGE RATE (ℓ/ ha)	REMARKS
BARLEY AND RYE	1,5 - 2,6 ℓ	Apply when the crop is in the 5 to 7 leaf stage. Use the higher rate for severe weed pressure or less susceptible weed stage.
LAWNS AND GOLF COURSES	3,3 - 4,4 ℓ	Apply once the grass has become established. For lawns repeated applications may be necessary. An application of nitrogenous fertilizer 2 - 3 weeks before spraying is recommended.
GRAIN SORGHUM (post-emergence only)	2 ℓ	Apply when plants are 150 mm high or about 3 weeks after emergence of the crop. Spray may be applied later provided directional spraying using drop arms is practiced.

GRASS PASTURES	3,3 - 4,4 ℓ	Apply once grass is growing well. Repeat if necessary.
MAIZE (post-emergence) After 30 to 45 cm height	2 ℓ	Grasses which have already emerged will not be controlled. NB: Drop arms must be used for directional spraying, so that the spray does not land in the funnel of the maize plants. <i>Striga asiatica</i> should be sprayed when the first flowers are noticed. The addition of BIODEW (Reg. No. L8120), a spreader/sticker is recommended. Maize may become malformed and brittle after application but this is usually of a temporary nature.
SUGARCANE (post-emergence only)	5,25 - 7,25 ℓ	Apply in 300 – 400 ℓ water/ha. If the sugarcane exceeds a height of 400 mm or has unfurled more than 5 leaves per shoot, directed spraying must be carried out or else the growth may be retarded.
WHEAT (post-emergence only)	1,35 - 2,7 ℓ	Apply between growth stages 7 (centre double ridges enlarged) and 13 (awn of top spikelets elongated) according to the list of growth stages of the ARC Small Grain Institute at Bethlehem.

BROADLEAF WEEDS CONTROLLED:

The following weeds are normally controlled by **2,4-D Amine 480 SL** at the dosage rates indicated above.

<i>Amaranthus deflexus</i>	perennial pigweed
<i>Arctotis leiocarpa</i>	Karoo daisy
<i>Bidens formosa</i> => <i>Cosmos bipinnatus</i>	cosmos
<i>Bidens pilosa</i>	blackjack
<i>Chenopodium album</i>	white goosefoot
<i>Commelina benghalensis</i>	Bengal wandering Jew
<i>Datura stramonium</i>	thorn apple
<i>Galinsoga parviflora</i>	gallant soldier
<i>Polygonum aviculare</i>	prostrate knotweed = hogweed
<i>Raphanus raphanistrum</i>	wild radish
<i>Striga asiatica</i>	witch weed
<i>Tagetes minuta</i>	khaki weed
<i>Tribulus terrestris</i>	Devils thorn = Dubbeltjie
<i>Vicia sativa</i>	broad-leaved purple vetch
<i>Xanthium strumarium</i>	cocklebur

GRASS WEEDS CONTROLLED:

<i>Eleusine indica</i> => <i>Eleusine corocana</i> (pre-emergence)	goose grass
<i>Panicum laevifolium</i> => <i>Panicum schinzii</i> (pre-emergence)	sweet buffalo grass

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PAMFLET

2,4-D AMINE 480 SL

Reg. Nr. L 5233 Wet. Nr. 36 van 1947
Botswana: Reg Nr. W130302, Wet Nr. 18 van 1999
Namibiese: Reg. Nr. N-AR 1318

'n Selektiewe hormoontipe onkruidodder vir die beheer van onkruid in mielies, graansorghum, koring en ander graangewasse, suikerriet, grasperke, golfbane en grasweidings.

ONKRUIDDODERGROEPKODE O

AKTIEWE BESTANDDEEL:

(2,4-dichloorfenoksie) asynsuur480 g/l
(as die 2,4D-dimetielammoniumsout)580 g/l

REGISTRASIEHOUER :

Nulandis® ('n Afdeling van AECI Beperk)

Reg. Nr. 1924/002590/06

Posbus 14418

Witfield, 1467

Tel : (011) 823 8000



SKADELIK

WAARSKUWINGS:

MOENIE BINNE 7 DAE NA TOEDIENING LAAT BEWEI NIE

Hanteer versigtig. Giftig indien ingesluk, ingesam of deur die vel opgeneem word.

Mag ernstige oogirritasie veroorsaak.

Giftig vir vis en bye.

Hou buite die bereik van kinders, oningeligte persone en diere.

Berg weg van voedsel, voer, saad of ander landboumiddels.

Herbetreding: Moenie behandelde gebied betree vir 1 dag na die bespuiting nie, tensy beskermende oorklere gedra word.

In geval van vergiftiging – ONTBIED 'N GENEESHEER EN STEL HIERDIE ETIKET AAN HOM BESKIKBAAR.

Lugtoediening - stel alle persone in die onmiddellike omgewing van die gebied wat behandel gaan word in kennis en reik die nodige waarskuwings uit. Moenie aangrensende gebiede of waterbronne bespuit of toelaat dat die sporeinewel daarheen oorwaai nie. **2,4-D AMINE 480 SL** is 'n uiters aktiewe onkruidodder wat in klein hoeveelhede, indien verkeerd toegedien, ernstige skade kan aanrig aan gewassaailinge, sagtevrugtebome en wingerde, tydens bot en vroeë seisoensgroei. Onder die volgende klimaatstoestande kan dit ernstige skade aanrig vir sover as 3 tot 5 km vanaf die naaste spuitbaan van die vliegtuig. Bewolkte weerstoestande met relatiewe humiditeit hoër as 80% en stadige luginbeweging van minder as 5 km per uur. Waar sodanige toestande heers, moet lugtoediening NIE uitgevoer word nie, indien gewassaailinge, sagtevrugtebome of wingerde in bot of vroeë seisoengroei voorkom, binne 5 km vanaf die naaste spuitbaan van die vliegtuig.

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 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 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:

Moenie dampe of sproeinewel inasem nie.

Vermyn oog- en velkontak.

Dra beskermende klere (gesigskerm, stewels en rubberhandskoene) wanneer produk hanteer word.

Was besoedelde klere na gebruik.

Was met seep en water na gebruik of velkontak. In geval van oogkontak spoel onmiddellik met lopende water.

Moenie eet, rook of drink tydens vermenging of toediening of voordat hande en gesig gewas en skoon klere aangetrek is nie.

Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

Verhoed wegdrywing van die sproeinewel na ander gewasse, weidings, riviere, damme en ander gebiede wat nie behandel word nie.

Maak toedieningsapparaat skoon voor her-gebruik en doen weg met waswater waar dit nie gewasse, weiding, riviere en damme sal besoedel nie.

Laat staan die oplossing vir 'n paar uur, verkieslik oornag. Spoel ten minste tweekeer uit.

Hierdie spuittoerusting behoort nie gebruik te word vir die toediening van enige ander landboumiddels, behalwe onkruidodders nie.

Spoel die leë houer driekeer uit met 'n volume water gelykstaande aan 'n minimum van 30% van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word.

Vernietig leë houer en raak daarvan ontslae op 'n veilige manier. Moet dit nie vir enige ander doel gebruik nie. Leë houe wat driekeer uitgespoel is kan aan 'n goedgekeurde verwerkingsaanleg gestuur word.

SIMPTOME VAN VERGIFTIGING:

Simptome mag die volgende insluit; naarheid, braking, sweetafskeiding, hoofpyn, spierpyn, maagpyn en verlies aan ko-ördinasie. Dit mag egter die mond, keel en asemhalingssisteem brand.

NOODHULPBEHANDELING:

INASEMING: Indien ingeasem, verwyder pasiënt na vars lug. Indien pasiënt ophou asemhaal, pas kunsmatige asemhaling toe. Indien asemhaling bemoeilik word, gee suurstof. Verkry mediese hulp.

INGESLUK: MOENIE braking veroorsaak tensy so aanbeveel deur mediese personeel. Moet nooit iets per mond aan 'n bewustelose persoon gee nie. Indien groot hoeveelhede van die middel gedrink is skakel onmiddellik 'n geneesheer. Maak styfpassende klere, soos bv. 'n kraag, das, belt of lyfband los.

VELKONTAK: Ingeval van velkontak, spoel onmiddellik af met genoegsame water. Verwyder besoedelde klere en skoene. Koue water mag gebruik word. Was klere na gebruik. Verkry mediese hulp.

OOGKONTAK: Verseker dat enige kontaklense verwyder word. In geval van oogkontak, spoel onmiddellik met genoegsame water vir minstens 15 minute. Koue water mag gebruik word. Verkry mediese hulp.

INLIGTING AAN GENEESHEER:

Geen spesifieke behandeling – behandel simptome.

GEBRUIKSBEPERKINGS:

Om skade te voorkom moet verhoed word dat dampe of sproeinewel in aanraking kom met of wegdryf na sensitiewe breëblaargewasse, vrugtebome of sierplante. Dien die produk streng volgens die gebruiksaanwysings toe.

DIE WINDSPOED EN WINDRICHTING TYDENS TOEDIENING SAL DIE AFSTAND TUSSEN DIE NAASTE RAND VAN DIE GEBIED WAT BESPUIT MOET WORD EN DIE GEVOELIGE GEWASSE BEPAAL.

WINDSPOED km/h	LUGTOEDIENING	GRONDTOEDIENING
1,5 - 5	800 m windaf 800 m dwarswind 15 m windop	200 m windaf 200 m dwarswind 6 m windop
5 - 10	1 600 m windaf 800 m dwarswind 15 m windop	400 m windaf 200 m dwarswind 1.5 m windop
10 - 15	3,2 km windaf 800 m dwarswind 15 m windop	800 m windaf 400 m dwarswind 1,5 m windop
Meer as 15	Verbode	Verbode

WEERSTANDSWAARSKUWING:

2,4-D Amine 480 SL is 'n groepkode O onkruidodder. Enige populasie van 'n spesifieke onkruidspesie mag individue insluit wat 'n natuurlike weerstand teen **2,4-D Amine 480 SL** of enige ander groepkode O onkruidodders het. Indien hierdie onkruidodders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruid sal waarskynlik nie deur **2,4-D Amine 480 SL** of enige ander groepkode O onkruidodders beheer word nie.

Om weerstand teen onkruidodders te vertraag:

- Vermyn die eksklusiewe herhaaldelike gebruik van onkruidodders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende onkruidoddergroepcodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbeheerprogramme.

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

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

Moenie op lande aangrensend aan gevoelige gewasse toedien nie. Kan met 'n vliegtuig, trekker of handspuite op lande in die nabyheid van gevoelige gewasse toegedien word, mits genoegsame voorsorgmaatreëls getref word om spuitstofwegdrywing te voorkom.

MENGINSTRUKSIES:

2,4-D Amine 480 SL selektiewe onkruidoder moet met water verdun word en as 'n eweredige fyn sproei toegedien word. Presiese hoeveelhede water sal afhang van die spuitapparaat maar die beste resultate sal verkry word as nie minder as 200 ℓ van die spuitmengsel per ha gebruik word. Die spuittoestel moet altyd gekalibreer word vóór gebruik om te verseker dat die korrekte hoeveelheid spuitmengsel per ha toegedien word.

TOEDIENINGSMETODE:

Grondtoediening:

Vermyn fyn druppelgroottes - gebruik laedruk platwaaierspuitpunte van 80° of ekwivalente anti-wegdrywing tipe. Die spuitdruk moenie 200 kPa oorskry nie.

Spuitvolume moet 150 ℓ/ha oorskry.

'n Spuihoogte van 50 cm bokant die teiken en 'n grondspoed van 10 km/h moenie oorskry word nie.

Indien die windspoed hoër is as 15 km/h (soos bepaal deur 'n handwindmeter goedgekeur deur die Registrateur: Wet Nr. 36 van 1947) moet die produk nie toegedien word nie.

Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihygrometer bepaal, moenie meer as 8 °C wees nie.

Na-opkombespuiting:

Bespuiting moet alleen geskied wanneer die gewas 'n geskikte stadium van ontwikkeling bereik het, soos hieronder aangedui. Vir die beste resultate moet die onkruid bespuit word wanneer dit in jongstadiums verkeer en vinnig groei. Namate die onkruid ouer word moet die hoeveelhede wat toegedien word dienoreenkomstig verhoog word, maar die hoeveelhede wat vir die verskillende gewasse voorgeskryf word moenie oorskry word nie. Wanneer hulle in blom is, is die meeste onkruid bestand teen normale toedieningshoeveelhede. Reënval 12 uur na toediening sal nie die doeltreffendheid van die onkruidoder verminder nie.

LUGTOEDIENING: (Moenie 2,4-D Amine 480 SL uit die lug uit in KwaZulu-Natal toedien nie)

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (Aerial Application of Agricultural Remedies) gedoen word. Dit is belangrik om te verseker dat die spuitmengsel eweredig oor die teikenarea versprei word en dat die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is dus belangrik om aan die volgende kriteria te voldoen:

Toerusting:

- Gebruik 'n konvensionele spuitbalk waarvan die spuitstukke met platwaaierspuitpunte toegerus is wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n stelsel gebruik wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitneuse/atomiseerders moet in die binneste 60 tot 75 % van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks in te verhoed.

Toedieningsparameters:

- 'n Minimum volume van 30 ℓ spuitmengsel per hektaar word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effek indien hierdie produk teen 'n laer volume as hierbo aanbeveel, uit die lug toegedien word nie.
- 'n Druppelbedekking van 30-40 druppels per cm² moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 300 tot 350 mikron word aanbeveel. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron) tot 'n minimum beperk word. Die gebruik van 'n geregistreerde drywingsbeheermiddel en/of lae-drywing lugbespuiting spuitneuse (bv. "straight stream nozzles") word aanbeveel. In die geval van vastevlerkvliegtuie met 'n vliegspoed hoër as 130 mph, mag die defleksiehoek van die spuitneuse of spuitstroom, soos gemeet vanaf 'n horisontale reguit oriëntasie na agter, nie 30 grade oorskry nie. In die geval vastevlerkvliegtuie wat stadiger vlieg, mag die defleksiehoek, soos hierbo beskryf, nie 55 grade oorskry nie.
- Die hoogte van die spuitbalk moet op 3-4 meter bo die teiken gehandhaaf word. Moenie spuit wanneer die vliegtuig aan die bopunt is van, of tydens 'n duik, of terwyl dit uitklim of draai nie.
- Dien toe voordat die gewas te ruig word wat sal verhoed dat onkruid behoorlik bedek word.

Meteorologiese toestande :

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihygrometer bepaal, moet nie 8°C oorskry nie.
- Moenie toedien tydens turbulente, onstabiele toestande gedurende die hitte van die dag wanneer styg en dalende konveksie windbeweging plaasvind nie.
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversielaag te spuit) nie.
- Moenie spuit indien die windspoed 15 km/uur oorskry nie.

Algemeen :

- Sorg dat die lande akkuraat gemerk is en die spuitoperateur presies weet watter lande gespuut moet word.

- Verkry 'n versekering van die spuitoperator dat aan die bogenoemde vereistes voldoen sal word.

TOEDIENINGSTABEL:

GEWAS	DOSIS (ℓ / ha)	OPMERKINGS
GARS EN ROG	1,5 - 2,6 ℓ	Dien toe wanneer die gewas in die 5 tot 7-blaarstadium is. Gebruik die hoër dosis vir ernstige onkruiddruk.
GRAANSORGHUM (slegs na-opkom)	2 ℓ	Dien toe sodra plante 150 mm hoog is of ongeveer 3 weke na opkom van gewas. Latere toedienings kan alleenlik geskied indien gerigte bespuiting met valarms toegepas word.
GRASWEIDINGS	3,3 - 4,4 ℓ	Dien toe sodra gras gevestig is. Herhaal indien nodig.
GRASPERKE EN GHOLFBANE	3,3 - 4,4 ℓ	Dien toe sodra gras gevestig is. Vir grasperke mag meer toedienings nodig wees. Die toediening van 'n stikstofhoudende kunsmis, 2 - 3 weke vóór bespuiting, word aanbeveel.
KORING (slegs na-opkom)	1,35 - 2,7 ℓ	Dien toe tussen groeistadia 7 (middelste dubbelriwwe vergroot) en 13 (baard van boonste syaartjies verleng) volgens die LNR-Kleingraan Instituut, Bethlehem se lys van groeistadia van koring.
MIELIES (na-opkom) Na hoogte van 460 mm	2 ℓ	Grasse wat reeds ontkiem het, sal nie beheer word nie. LW: Gebruik valarms vir gerigte bespuiting, sodat die spuitstof nie in die kelk beland nie. Spuit <i>Striga asiatica</i> (rooibloem) sodra die eerste blomme opgemerk word. Die byvoeging van BIODEW (Reg. Nr. L8120), 'n verspreider/kleefmiddel, word aanbeveel. Mielies mag misvormend en bros voorkom na toediening maar dit is gewoonlik slegs tydelike van aard.
SUIKERRIET (slegs na-opkom)	5,25 - 7,25 ℓ	Dien toe in 300 - 400 ℓ water per hektaar. Indien die suikerriet 'n hoogte van 400 mm bereik het óf as daar reeds meer as 5 blare per spruit ontvou het, moet gerigte bespuiting toegepas word, anders mag groei vertraag word.

BREËBLAARONKRUIDE WAT BEHEER WORD:

Die volgende onkruid word normaalweg deur **2,4-D Amine 480 SL** beheer teen die dosisse soos hierbo aangedui.

<i>Amaranthus deflexus</i>	meerjarige misbredie
<i>Arctotis leiocarpa</i>	gousblom
<i>Bidens formosa</i> => <i>Cosmos bipinnatus</i>	kosmos
<i>Bidens pilosa</i>	knapsekêrel
<i>Chenopodium album</i>	withondebossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Datura stramonium</i>	stinkblaar = Olieboom
<i>Galinsoga parviflora</i>	knopkruid
<i>Polygonum aviculare</i>	voëlduisendknoop = koperdraad
<i>Raphanus raphanistrum</i>	ramenas
<i>Striga asiatica</i>	gewone rooiblom
<i>Tagetes minuta</i>	kakiebos
<i>Tribulus terrestris</i>	dubbeltjie
<i>Vicia sativa</i>	breëblaarperswieke
<i>Xanthium strumarium</i>	kankerroos

GRASONKRUIDE BEHEER:

<i>Eleusine indica</i> => <i>Eleusine corocana</i> (voor-opkom)	jongosgras
<i>Panicum laevifolium</i> => <i>Panicum schinzii</i> (voor-opkom)	soet buffelsgras

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