

MAKHTESHIM-AGAN SA (PTY) LTD

LINUHLOR 367 EC

Reg no L 6541 Act / Wet 36 / 1947

A selective emulsifiable concentrate herbicide for the control of annual broadleaf weeds and grasses as listed in potatoes.

'n Selektiewe emulsifiseerbare konsentraat onkruidodder vir die beheer van eenjarige breëblaar onkruide en grasse soos hieronder aangedui in aartappels.

ACTIVE INGREDIENTS / AKTIEWE BESTANDELE

Alachlor (262 g / l) (chloroacetanilide).....262 g / l.....Alachlor (chloorasetanilied)

Linuron (urea compound).....105 g / l.....Linuron (ureumverbinding)

NET VOLUME / NETTO VOLUME

..... 1

REGISTRATION HOLDER / REGISTRASIEHOUER

MAKHTESHIM-AGAN SA (PTY) LTD

Reg no 92/01741/07

21 Viben Street

Brackenfell

7560

Batch number

Lotnommer

Date of Manufacture

Datum van Vervaardiging

UN No:

1993



**CAUTION
VERSIGTIG**



WARNINGS

Poisonous if swallowed.

May irritate eyes, nose, throat and skin.

Toxic to fish and other aquatic organisms.

Store in a cool dry place away from food, feeds, seed, fertilizers and other agricultural chemicals.

FLAMMABLE: keep away from flames

Keep out of reach of uninformed persons and animals.

Aerial application:

Aerial application of **LINUHLOR 367 EC** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 0118 (Aerial Application of Agricultural Pesticides). 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 be met:

- **Volume:** A spray mixture volume of 30 litres 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.
- **Droplet coverage:** 20 to 30 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 350 to 400 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure 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 and that relevant data will be compiled in a logbook and kept for future reference.

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 soils, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of 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 the failure of the user to follow label instructions or the occurrence of conditions which could not have been foreseen in terms of the registration. Consult your supplier in the event of any uncertainty.

PRECAUTIONS

Do not inhale fumes of spray mist.

Avoid contact with the skin.

In case of accidental contact with the eyes wash immediately with plenty of soap and water.

Do not eat, drink or smoke whilst mixing or applying or before hands and face have been washed and contaminated clothing has been changed.

Prevent contamination of food, feed, drinking water and eating utensils.

Prevent spray drift onto other crops, grazing, rivers, dams or any area not under treatment.

Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers, dams boreholes or any other area not under treatment.

IMPORTANT: TRIPLE RINSING

Invert the empty container over the spray – or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank before destroying the empty container in the prescribed manner.

USE RESTRICTIONS

- To avoid damage to follow on crops a waiting period of 4 months on all crops should be adhered to except for lettuce where the waiting period is 12 months.
- Do not use LINUCHLOR 367 EC more than once per season on the same area.
- LINUCHLOR 367 EC must be applied within 5 days after potatoes were planted.
- Prolonged adverse climatic conditions such as excessive rainfall after application, cold and wet conditions etc. can result in discoloration of leaves of the potato plants or partly stunted plants. However, these plants will fully recover without causing and yield loss.
- Rain or irrigation is needed to leach the LINUCHLOR 367 EC into the weed germination zone before the weeds appear above the soil surface.

DIRECTIONS FOR USE

Half fill the spray tank with water.

Add the required volume of LINUCHLOR 367 EC while agitating.

Fill the spray tank to capacity while agitating.

APPLICATION

GROUND APPLICATION

LINUCHLOR 367 EC can be applied by any medium-or high volume applicator provided it is fitted with an efficient agitator and that the spray mixture is applied evenly over the target area. It is recommended that the spray boom should be fitted with flat fan nozzles and that it should be able to deliver 200 l – 400 l water / ha.

LINUCHLOR 367 EC must be applied preferably within 5 days afterplanting and before germinating potatoes cause the soil to crack. Potato seed should be planted at least 50 mm deep.

AERIAL APPLICATION

LINUCHLOR 367 EC can be applied aerially provided the spray is distributed evenly over the target area and the loss of spray material during application is restricted to a minimum. To achieve this it is essential that the following requirements are met:

- Use a conventional boom fitted with flat fan nozzles eg. SS6515 or similar.
- Use a minimum spray volume of 30 l / ha.
- A minimum of 25-35 droplets per cm² must be recovered on the target area.
- Employ a droplet spectrum with a VMD of 450 micron.
- Maintain a flying height of 3 m above the target area at wind speeds of 0 –8 km/h and a flying height of 2 m at wind speeds of 8 – 15 km/ h.
- The difference between the wet and dry bulb reading as determined by a whirling hygrometer must not exceed 8°C.
- Do not spray during the heat of the day.
- Ensure that the fields are accurately marked.

It is essential to obtain an assurance from the aerial operator that the above requirements will be met.

APPLICATION RATES

% CLAY	LINUCHLOR 367 EC (l / ha)	REMARKS
10 – 15 % 16 – 30 %	5,5 – 6,5 6,5 – 7,5	The dosage rate as indicated is for overall application. The dosage for band applications should be reduced proportionately. Soil moisture is essential for activity. Apply to moist soil.

WEEDS CONTROLLED / ONKRUIDE BEHEER

1. BROADLEAVES / BREëBLARE

WEED / ONKRUID	COMMON NAME	ALGEMENE NAAM
<i>Amaranthus deflexus</i>	Perennial pigweed	Meerjarige misbredie
<i>Amaranthus hybridus</i>	Common pigweed	Gewone misbredie
<i>Amaranthus spinosus</i>	Thorney pigweed	Doringmisbredie
<i>Amaranthus thunbergii</i>	Red pigweed	Rooimisbredie
<i>Chenopodium album</i>	White goosefoot	Withondebossie
<i>Chenopodium carinatum</i>	Green goosefoot	Groenhondebossie
<i>Crotalaria sphaerocarpa</i>	Wild Lucerne	Mielie-crotalaria
<i>Datura ferox</i> *	Large thornapple	Grootstinkblaar
<i>Datura stramonium</i> *	Thorn apple	Stinkblaar
<i>Portulaca oleracea</i>	Purslane	Porslein
<i>Polygonum aviculare</i>	Prostrate bindweed	Voëlduisendknoop
<i>Schkuhria pinnata</i>	Dwarf marigold	Kleinkakiebos
<i>Tagetes minuta</i> *	Tall khaki weed	Langkakiebos
<i>Tribulus terrestris</i> *	Common dubbeltjie	Dubbeltjie

* For the control of *Datura*, *Tagetes* and *Tribulus* a minimum of 6,5 l / ha should be applied.

* Vir die beheer van *Datura*, *Tagetes* and *Tribulus* moet ten minste 6,5 l / ha toegedien word.

2. ANNUAL GRASSES / EENJARIGE GRASSE

WEED / ONKRUID	COMMON NAME	ALGEMENE NAAM
<i>Brachiaria eruciformis</i>	Sweet signal grass	Litjiesinjalgras
<i>Digitaria sanguinalis</i>	Crab fingergrass	Kruisvingergras
<i>Elusine indica</i>	Indian goosegrass	Jongosgras
<i>Panicum schinzii</i>	Sweet buffalo grass	Soetbuffelgras

WAARSKUWINGS

Giftig indien ingesluk.

Kan die oë, neus, keel en vel irriteer.

Giftig vir visse en ander waterorganismes.

Stoor in 'n koel, droë plek weg van voedsel, voer, saad, kunsmis en ander landbouchemiese middels.

VLAMBAAR – hou weg van vlamme.

Hou buite bereik van kinders, oningeligte persone en diere.

Lugtoediening:

LINUHLOR 367 EC kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SABS Kode 0118 (Aerial Application of Agricultural Pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- **Volume:** 'n Spuitmengsel volume van 30 liter per ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- **Druppel bedekking:** 20 tot 30 druppels per cm² moet op die teikenarea herwin word.
- **Druppelgrootte:** 'n Druppelspektrum met 'n VMD van 350 tot 400 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- **Vlieghoogte:** Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik nie, uitklim of draai nie.
- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binnste 60 tot 75 % van die vlerkspan om te verhoed dat druppels binne-in die vlerkpuntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihieter, moet nie 8°C oorskry nie.
- Stop bespuiting indien die windspoed 15 km/h oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80% en meer) mag tot volgende probleme aanleiding gee:
 - a) verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - b) skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

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 onkruid teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir die skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op die mens of diere 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 of registrasiehouer in die geval van enige onsekerheid.

VOORSORGMAATREËLS

Moet nie dampe of die spuitnewel inasem nie.

Vermy kontak met die vel.

Indien velkontak per ongeluk plaasgevind het, was onmiddelik met groot hoeveelheid water en seep af.

Moet nie eet, drink of rook terwyl vermenging of toediening plaasvind of voor hande en gesig gewas is en besoedelde klere uitgetrek is nie.

Verhoed die besoedeling van voedsel, voer, drinkwater en eetgerei.

Verhoed dat die spuitnewel oorwaai na ander gewasse, weiding, riviere, damme of enige ander gebied wat nie onder behandeling is nie.

Maak die toedieningsapparaat deeglik skoon na toediening en gooi die waswater weg waar dit nie gewasse, weiding, riviere, damme, boorgate of enige ander gebied wat nie onder behandeling is nie, kan besoedel.

BELANGRIK: DRIEDUBBELE UITSPOELING

Keer die leë houer om oor die spuit-of mengtenk en dreineer vir ten minste 30 sekondes nadat die vloeï tot 'n gedrup verminder het. Spoel die houer daarna drie keer 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 die houer op die voorgeskrewe manier vernietig word. Moet nooit die leë houer vir enige ander doel gebruik nie.

GEBRUIKSBEPERKINGS

- Om skade aan opvolggewasse te vermy moet 'n wagperiode van 4 maande gehandhaaf word, behalwe in die geval van blaarslaai waar die wagperiode 12 maande is.
- **LINUHLOR 367 EC** moet nie meer as een keer op dieselfde land in dieselfde seisoen gebruik word nie.
- **LINUHLOR 367 EC** moet binne 5 dae nadat die aartappels geplant is, toegedien word.
- Langdurige ongunstige klimaatstoestande soos byvoorbeeld oormatige reënval, nat en koue weerstoestande, ens. kan veroorsaak dat aartappelblare verkleur of dat selfs gedeeltelike verdwergde plante mag voorkom. Normaalweg sal hierdie plante heeltemal herstel sonder dat 'n oesverlaging voorkom.
- Reën of besproeiing is noodsaaklik om die **LINUHLOR 367 EC** in die ontkiemingsone van die onkruid te loog voordat hulle bokant die grondoppervlak verskyn.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

MENGINSTRUKSIES

Vul die spuittenk halfvol met water.

Voeg die benodigde hoeveelheid **LINUCHLOR 367 EC** in die tenk terwyl geroer word.

Vul die spuittenk met water terwyl gedurigdeur geroer word.

TOEDIENING

1. GRONDTOEDIENING

LINUCHLOR 367 EC kan met enige medium of hoë volume toedieningsapparaat toegedien word, mits dit toegerus is met 'n doeltreffende roermeganisme en dit in staat is om 'n eweredige benatting oor die teikengebied te lewer. Dit word aanbeveel dat die spuitbalk toegerus word met platwaaierspuitpunte en dat 'n watervolume van 200 – 400 l gehandhaaf word.

LINUCHLOR 367 EC moet verkieslik binne 5 dae na plant toegedien word, maar beslis voor die die ontkiemende aartappels die grond begin kraak.

Die aartappelmoere moet ten minste 50 mm diep geplant word.

2. LUGBESPUITING

LINUCHLOR 367 EC kan deur middel van lugbespuiting toegedien word mits die benatting van die teikengebied eweredig is en die verlies van spuitmateriaal tydens toediening tot 'n minimum beperk word. Om aan bogenoemde te voldoen, moet die volgende vereistes nagekom word:

- 'n Konvensionele spuitbalk toegerus met platwaaierspuitpunte, soos bv. SS 6515 of soortgelyk, moet gebruik word.
- 'n Minimum spuitvolume van 30 l water per ha moet gebruik word.
- 'n Minimum van 25-35 druppels per cm² moet op die teikengebied herwin word.
- 'n Druppelspektrum van 450 mikron moet gebruik word.
- 'n Vlieghoogte van 3 m bokant die teikengebied moet gehandhaaf word by windsnelhede van 0 – 8 km / h en 2 m bokant die teikengebied by windsnelhede van 8 – 15 km / h. Bespuiting moet gestaak word as die windsnelheid 15 km/ h oorskry.
- Die verskil tussen die nat- en droëbollesing soos bepaal deur 'n swaaihygrometer moet nie 8°C oorskry nie.
- Moet nie gedurende die hitte van die dag spuit nie.
- Verseker dat die lande akkuraat gemerk is.

Dit is noodsaaklik om versekering by die lugbespuitingsoperateur te verkry dat aan al bogenoemde vereistes voldoen sal word.

TOEDIENINGSHOEVEELHEDE

% KLEI	LINUCHLOR 367 EC (l / ha)	OPMERKINGS
10-15 % 15-30 %	5,5 – 6,5 l 6,5 – 7,5 l	Die toedieningshoeveelheid soos aangedui is vir algehele toediening. Vir baantoediening moet toedieningshoeveelheid dienooreenkomstig verminder word. Grondvog is essensieel vir aktiwiteit. Dien toe op klam grond.

