



# KALIF<sup>®</sup> 480 EC

Reg. no. / Reg. nr L8458 Act / Wet 36 of / van 1947

A selective residual pre-emergence, emulsifiable concentrate herbicide for the control of annual grasses and some broadleaf weeds in soyabeans and tobacco grown in the summer rainfall region.

'n Selektiewe residuele vooropkom emulgeerbare konsentraat onkruidodder vir die beheer van eenjarige grasse en sommige breëblaaronkruid in sojabone en tabak wat in die somerreënvalstreek verbou word.

HRAC HERBICIDE GROUP CODE

F 3

HRAC ONKRUIDDODER GROEPKODE

## ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Clomazone (isoxazolidinone)

480 g / ℓ

Klomasoon (isoksasolidinon)

## NET VOLUME / NETTO VOLUME

.....

## REGISTRATION HOLDER / REGISTRASIEHOUER

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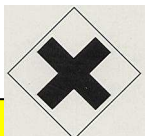
Batch number .....

Lotnommer

Date of manufacture .....

Datum van vervaardiging

UN No: 1993



**HARMFUL  
SKADELIK**



## WARNINGS:

- Handle with care.
- Harmful to fish and other aquatic organisms.
- Store in a cool, dry place away from food, feed, seed and other agricultural chemicals.
- Keep under lock and key away from children, uninformed persons and animals.
- **Flammable:** Keep away from heat, sparks or open flames.

**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:

- Avoid contact with skin, or inhalation of spray mist.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Wear suitable protective clothing, gloves and eye/face protection when the concentrate is handled.
- Do not eat, drink or smoke during mixing and application or before hands and face have been washed.
- Avoid drifting of the spray mixture to other crops, grazing areas, rivers or dams or any other area that is not under treatment
- **RINSING OF CONTAINER - TRIPLE RINSE:** Invert the empty container over the mixing tank or spray tank and drain for at least 30 seconds after the flow has been reduced to a drip. Thereafter rinse the empty container at least three times with a volume of water equal to at least 10 % of that of the container. Add the rinsate into the spray tank.
- Perforate and flatten the empty container. Do not re-use for any other purpose
- Clean applicator thoroughly after use and throw wash water where it will not contaminate food, grazing areas, rivers or dams.
- **Re-entry interval:** Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- In case of poisoning, call a doctor and make this label available to him/her.

## SYMPTOMS OF HUMAN POISONING:

Symptoms of overexposure to the active ingredient include loss of motor co-ordination, lacrimation, bloody tears, oral and nasal discharge, bloody nose, irregular breathing, hair loss, salivation and bulging eyes.

## FIRST AID TREATMENT:

- Inhalation: Remove victim to fresh air. If breathing is difficult, artificial respiration. Get medical attention.
- Ingestion: Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.
- Skin contact: Remove contaminated clothing. Wash away remainder with soap and water.
- Eye contact: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.

**NOTE TO PHYSICIAN:**

There is no specific antidote. Treat symptomatically and give supportive therapy.

**RESISTANCE WARNING:**

**KALIF® 480 EC** is a group code F 3 herbicide. Any population of a specific weed may contain individuals which have a natural resistance against **KALIF® 480 EC** or other group code F 3 herbicides. If these herbicides are used repeatedly the resistant individuals can eventually dominate the weed population. These resistant weeds will probably not be controlled by **KALIF® 480 EC** or any other group code F 3 herbicide. To delay the occurrence of resistance the following can be done:

- 1) Avoid the repeated exclusive use of herbicides in the same group code. Alternate with or tank mix with herbicides from other group codes
- 2) Integrate with other methods of control (chemical, biological and cultural) in weed control programmes

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

**USE RESTRICTIONS:**

**General:**

- Phytotoxic symptoms may occur because seedlings do not always undergo a period of wilting after transplantation.
- A temporary yellowing of the sand leaves of the tobacco plants may occur.
- Phytotoxic symptoms may occur on adjacent crops, trees and shrubs as a result of spray drift or volatility of the product. To prevent spray drift, use the appropriate nozzle size to deliver the desired spray volume at the lowest spray pressure, do not spray when the wind speed > 15 km / h, do not mount spray booms too high and, most importantly, do not apply **KALIF® 480 EC** within 300 m of non-target crops or neighbouring shrubbery. To prevent volatilization, monitor temperature, humidity and soil moisture.
- If **SULTAN 500 SC** is used in a tankmix with **KALIF® 480 EC**, familiarise yourself with the directions for use on the label and ensure that you adhere to all instructions and warnings.

**Waiting Periods for Follow-on Crops:** (from last application to planting of follow-on crop)

Cabbage, Cucurbits, Oats, Onion and Peas .....	6 months
Maize, Sweetcorn, Wheat and grass lays .....	9 months

- A deep soil cultivation prior to planting will reduce the potential risk of carry-over to the follow-on crop.

**DIRECTIONS FOR USE:**

Use only as directed.

**APPLICATION:**

**KALIF® 480 EC** can be applied by means of any suitable medium to high volume applicator, provided that it is fitted with an efficient agitation system, it is able to apply the spray mixture evenly over the target area and it is calibrated correctly. Ensure thorough coverage of the target area by using not less than 200 l spray mixture per ha.

CROP	CLAY %	DOSAGE RATE / HA	REMARKS
SOYABEANS	11 – 20	<b>KALIF® 480 EC</b> 1.0 – 1.5 l or <b>KALIF® 480 EC</b> + SULTAN 500 SC 0.75 l + 0.4 l	Apply at planting or within 3 days of planting onto a well-prepared seedbed that is fine, even and firm and without excessive plant rests. Refer to the weed spectrum below to establish the appropriate application rate.
	>20	<b>KALIF® 480 EC</b> 1.0 – 2.0 l or <b>KALIF® 480 EC</b> + SULTAN 500 SC 1.0 l + 0.5 l	For increased control of grasses and some broadleaf weeds, a tank mix of <b>KALIF® 480 EC</b> and SULTAN 500 SC is recommended.
TOBACCO	-	<b>KALIF® 480 EC</b> 1.5 – 2.5 l or	Apply immediately after transplanting tobacco seedlings while the plants are still in a wilted condition. Ensure that the seedbed is fine, even and firm and without excessive plant rests. Refer to the weed spectrum below to establish the appropriate application rate. Do not apply straight over the tobacco plants. Carry out a directed spray instead.
	-	<b>KALIF® 480 EC</b> followed by SULTAN 500 SC 1.0 – 1.5 l followed by 1.0 l	Apply <b>KALIF® 480 EC</b> as described above. For increased control of grasses and some broadleaf weeds, apply SULTAN 500 SC as a follow-on treatment 28 – 30 days after the transplantation of the tobacco as a directed spray on a weed-free seedbed. If weeds have already germinated before application of SULTAN 500 SC, carry out a shallow cultivation in order to control these weeds.

#### WEED SPECTRUM:

The following weeds are normally controlled by **KALIF® 480 EC**.

**KALIF® 480 EC:** 1.0 l / ha

<i>Amaranthus hybridus</i>	Common pigweed
<i>Eleusine coracana</i>	Goose grass
<i>Schkurhia pinnata</i>	Dwarf marigold
<i>Tagetes minuta</i>	Khaki weed

**KALIF® 480 EC:** 1.5 l / ha (incl. the above)

<i>Chenopodium album</i>	White goosefoot
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Echinochloa colona</i>	Marsh grass
<i>Galinsoga parviflora</i>	Quick weed
<i>Hibiscus trionum</i>	Bladderweed
<i>Physalis angulata</i>	Wild gooseberry

**KALIF® 480 EC:** 2.0 l / ha (incl. the above)

<i>Commelina benghalensis</i>	Wandering Jew
<i>Portulaca oleracea</i>	Common purslane
<i>Tribulus terrestris</i>	Devil thorn
<i>Urochloa panicoides</i>	Garden urochloa

	<i>Xanthium strumarium</i>	Cocklebur
<b>KALIF® 480 EC + SULTAN 500 SC:</b>	<i>Cleome monophylla</i>	Spindlepod
1.0 l + 0.5 l / ha (incl. the above)	<i>Datura ferox</i>	Large thorn apple
	<i>Datura stramonium</i>	Common thorn apple
	<i>Ipomoea purpurea</i>	Morning glory
	<i>Panicum schinzii</i>	Sweet buffalo grass

**SULTAN 500 SC** (Reg. no. L6892) is the registered trade mark of Makhteshim Agan Industries, Israel.

## WAARSKUWINGS:

- Hanteer versigtig.
- Skadelik vir visse en ander waterorganismes.
- Berg in 'n koel, droë plek weg van voedsel, voer, saad en ander landbouchemiese stowwe.
- Hou onder slot en grendel buite bereik van kinders, oningeligte persone en diere.
- **Vlambaar:** Hou weg van hitte of oop vlamme.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond, klimaats- en bergingstoestande, kwaliteit van die verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van 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:

- Vermoedlik velkontak, asook inaseming van dampe en spuitnewel.
- In geval van oogkontak, was uit met groot hoeveelhede skoon lopende water en kry mediese hulp.
- Dra beskermende oorklere, handskoene en gesigskerm wanneer die konsentraat hanteer word.
- Moet nie eet, drink of rook tydens vermenging en toediening, of voordat hande en gesig gewas is nie.
- Vermoedlik die oorwaaier van die spuitnewel na ander gewasse, weiding, riviere of damme en ander gebiede wat nie onder behandeling is nie.
- **SPOEL VAN HOERS – DRIEKEER UITGESPOEL:** Keer die leë houer om oor die spuit- of mengtenk en dreineer vir ten minste 30 sekondes nadat die vloei tot 'n gedrup verminder het. Spoel daarna die leë houer driekeer met 'n volume water uit wat minstens gelykstaande is aan 10 % van die volume van die houer. Gooi die spoelwater in die mengtenk.
- Vernietig die leë houer deur dit te perforeer en plat te druk en moet dit nooit weer vir enige ander doel hergebruik nie.
- Maak die spuittoestel deeglik skoon met water na gebruik en gooi waswater uit waar dit nie voedsel, weiding, riviere of damme sal besoedel nie.
- **Herbetreding:** Moet nie behandelde gebied betree vir 'n dag na bespuiting nie, tensy beskermende oorklere gedra word.
- In geval van vergiftiging, ontbied 'n geneesheer en toon hierdie etiket aan hom/haar.

## SIMPTOME VAN VERGIFTINGING:

Simptome van uitermatige blootstelling aan die tegniese materiaal kan simptome soos motoriese koördinasieverlies, lakrimasie, bloederige tranes, mond- en neusuitskeiding, bloederige neus, ongereelde asemhaling, opbou van speeksel en swellende oë veroorsaak.

## NOODHULPBEHANDELING:

Inaseming: Verwyder pasiënt na vars lug. Indien probleme met asemhaling, pas kunsmatige asemhaling toe. Kry mediese hulp.

- Inname: Was mond uit met groot hoeveelhede water. Kry mediese hulp. Moenie braking veroorsaak of enige iets per mond aan 'n persoon wat sy bewussyn verloor het gee nie.
- Velkontak: Verwyder besoedelde klere en was besoedelde liggaamsdele met koue water en seep
- Oogkontak: Was uit met groot hoeveelhede skoon water terwyl ooglede oopgehou word vir minstens 15 minute. Kry mediese hulp.

#### **NOTA AAN GENEESHEER:**

Daar is geen spesifieke teenmiddel nie. Behandel simptome en gee ondersteunende terapie.

#### **WEERSTANDSWAARSKUWING:**

**KALIF<sup>®</sup> 480 EC** is 'n groepkode F 3 onkruidoder. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **KALIF<sup>®</sup> 480 EC** of enige ander groepkode F 3 onkruidoders het. Indien hierdie onkruidoders herhaaldelik gebruik word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruid sal waarskynlik nie deur **KALIF<sup>®</sup> 480 EC** of enige ander groepkode F 3 onkruidoders beheer word nie. Om weerstand teen onkruidoders te vertraag kan die volgende gedoen word:

- 1) Vermyn die eksklusiewe herhaaldelike gebruik van onkruidoders met dieselfde groepkode. Wissel af met / of gebruik tenkmengsels van produkte in verskillende onkruidodergroepkodes
- 2) Integreer met ander beheermaatreëls (chemiese, verbouing, biologies) in onkruidbeheerprogramme

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

#### **GEBRUIKSBEPERKINGS:**

##### **Algemeen:**

- Omdat saailaaiplante nie noodwendig sal verlep na uitplant nie mag fitotoksiese simptome (verbleiking) voorkom.
- 'n Effense vergeling van die sandblare van die tabakplante mag tydelik voorkom.
- Simptome van fitotoksiteit mag voorkom op aangrensende gewasse, struik en bome as gevolg van die wegdrywing van die spuitnewel of weens die vlugtigheid van die produk. Wegdrywing van die spuitnewel kan verminder word deur die vorming van klein druppels te verhoed deur die druk tydens bespuiting te reguleer en nie in winderige toestande te spuit nie. Die spuitbalk se hoogte bokant die teikenoppervlak moet korrek gestel word. Gebruik die regte spuitpunt om die verlangde spuitvolume teen die laagste moontlike druk aan te wend. Moet nie toedien as die windsnelheid 15 km per uur oorskry nie. Moet nie **KALIF<sup>®</sup> 480 EC** toedien binne 300 m van boomgewasse, struik, groente of enige ander gevoelige gewas toedien nie. Hoë temperatuur en humiditeit asook nat gronde bevorder vervlugtiging van die produk.
- Let op die gebruiksaanwysings van die SULTAN 500 SC etiket en kom dit na indien dit in 'n tenkmengsel met **KALIF<sup>®</sup> 480 EC** gebruik word.

##### **Wagperiodes vir Opvolggewasse:**

Erte, Hawer, Kool, Rankgewasse en Uie ..... 6 maande  
Koring, Mielies, Suikermielies en grasweidings ..... 9 maande

- 'n diep ploegbewerking van grond voordat 'n opvolggewas gevestig word, sal die risiko van oordraging verminder.

**GEBRUIKSAANWYSINGS:**

Gebruik slegs soos aangedui.

**TOEDIENING:**

**KALIF<sup>®</sup> 480 EC** kan deur middel van enige geskikte medium- of hoëvolume spuitapparaat toegedien word, mits dit toegerus is met 'n geskikte roermeganisme, dit in staat is om die spuitmengsel eweredig oor die teikenoppervlak te versprei en dit korrek gekalibreer is. 'n Spuitvolume van 200 l water / ha word aanbeveel om 'n eweredige verspreiding te verseker.

**AANBEVELINGS:**

<b>GEWAS</b>	<b>KLEI %</b>	<b>TOEDIENINGS- HOEVEELHEID / HA</b>	<b>OPMERKINGS</b>
<b>SOJABONE</b>	11 – 20	<b>KALIF<sup>®</sup> 480 EC</b> 1.0 – 1.5 l of <b>KALIF<sup>®</sup> 480 EC</b> + SULTAN 500 SC 0.75 l + 0.4 l	Dien met plant of binne 3 dae na plant toe op 'n goed voorbereide fyn, ferm, gelyk saadbed sonder onkruid of oormatige plantreste. Verwys na die onkruidspektrum hieronder om die toedieningshoeveelheid vas te stel.
	>20	<b>KALIF<sup>®</sup> 480 EC</b> 1.0 – 2.0 l of <b>KALIF<sup>®</sup> 480 EC</b> + SULTAN 500 SC 1.0 l + 0.5 l	Vir verbeterde beheer van veral grasse en sommige breëblare word 'n tenkmengsel van <b>KALIF<sup>®</sup> 480 EC</b> en SULTAN 500 SC aanbeveel.
<b>TABAK</b>	-	<b>KALIF<sup>®</sup> 480 EC</b> 1.5 – 2.5 l of	Dien direk na uitplant van tabaksaailinge terwyl die plantjies nog verlep is toe. Verseker dat die saadbed fyn, ferm en gelyk is sonder enige onkruid of oormatige plantreste. Verwys na die onkruidspektrum hieronder om die toedieningshoeveelheid vas te stel. Moet nie direk oor die tabakplantjies toedien nie, maar voer 'n gerigte bespuiting uit.
	-	<b>KALIF<sup>®</sup> 480 EC</b> gevolg deur SULTAN 500 SC 1.0 – 1.5 l gevolg deur 1.0 l	Dien <b>KALIF<sup>®</sup> 480 EC</b> toe soos hierbo aangedui. Vir verbeterde beheer van grasse en sommige breëblare kan SULTAN 500 SC as 'n opvolgbespuiting 28 – 30 dae na die uitplant van die tabak as 'n gerigte bespuiting op 'n onkruidvrye saadbed toegedien word. Indien onkruid alreeds ontkiem het voor toediening van SULTAN 500 SC moet 'n ligte skoffelbewerking uitgevoer word om hierdie onkruid te vernietig.



## ONKRUIDSPEKTRUM:

Die volgende onkruid word normalweg deur **KALIF® 480 EC** beheer.

<b>KALIF® 480 EC:</b> 1.0 l / ha	<i>Amaranthus hybridus</i> <i>Eleusine coracana</i> <i>Schkurhia pinnata</i> <i>Tagetes minuta</i>	Gewone misbredie Jongosgras Kleinkakiebos Langkakiebos
<b>KALIF® 480 EC:</b> 1.5 l / ha bogenoemde plus	<i>Chenopodium album</i> <i>Digitaria sanguinalis</i> <i>Echinochloa colona</i> <i>Galinsoga parviflora</i> <i>Hibiscus trionum</i> <i>Physalis angulata</i>	Withondebos Kruisvingergras Moerasgras Knopkruid Terblansbossie Wilde appeliefie
<b>KALIF® 480 EC:</b> 2.0 l / ha bogenoemde plus	<i>Commenlina benghalensis</i> <i>Portulaca oleracea</i> <i>Tribulus terrestris</i> <i>Urochloa panicoides</i> <i>Xanthium strumarium</i>	Wandelende Jood Gewone porslein Dubbeltjie Tuin urochloa Kankerroos
<b>KALIF® 480 EC + SULTAN 500 SC:</b> 1.0 l + 0.5 l / ha bogenoemde plus	<i>Cleome monophylla</i> <i>Datura ferox</i> <i>Datura stramonium</i> <i>Ipomoea purpurea</i> <i>Panicum schinzii</i>	Enkelblaar cleome Groot stinkblaar Olieboom Purperwinde Soetgras

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