COTOGARD® 500 SC

Reg no. L 1446 Act / Wet 36 / 1947

A suspension concentrate herbicide for selective pre-emergence control of broadleaf weeds in irrigated cotton when used in combination with a registered grass-killer. It may also be used as a post-emergence directed application.	‘n Suspensiekonsentraat onkruiddoder vir selektiewe voorопkom beheer van breëblaaronkruide in katoen onder besproeiïng wanneer dit in kombinasie met ‘n geregistreerde grasdoder gebruik word. Dit kan ook as ‘n gerigte na-opkombespuiting toegedien word.

ACTIVE INGREDIENTS / AKTIEWE BESTANDDELE

Prometryn (triazine)………………………..250 g / ℓ……………………Prometrien (triasien)

Fluometuron (urea-derivative)……………..250 g / ℓ…………….Fluometuron (urea-derivaat)

NET VOLUME / NETTO VOLUME

5 ℓ

REGISTRATION HOLDER / REGISTRASIEHOUER
Adama SA (PTY) LTD
Reg no 92/01741/07
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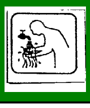
Batch number ………………. Lotnommer

Date of Manufacture ………………. Datum van vervaardiging



WARNINGS

- Poisonous if swallowed.
- Toxic to fish.
- Store in a cool place.
- Store away from food and feed.
- 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 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 inhale the spray mist.
- Avoid skin contact.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face.
- Do not mix and load within at least 15 m from boreholes, streams, rivers and dams.
- Do not apply within at least 15 m from boreholes, streams and rivers.
- Do not apply within 60 m from dams.
- Ensure that no back-siphoning to boreholes or dams takes place when product is applied through the irrigation system.
- Avoid drift of spray onto other crops, grazing, rivers, boreholes, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water, boreholes and eating utensils.
- Rinse the empty container three times with a volume of clean water equal to a minimum of 10 % of the container. Add the rinsate to the content of the spray tank before destroying the container.
- Do not use the empty container for any other purpose.

USE RESTRICTIONS

- Do not apply **COTOGARD 500 SC** pre-emergence to soils where an attack of damping-off disease is expected, unless effective measures have been taken to combat the disease.
- Do not apply **COTOGARD 500 SC** pre-emergence to soils with less than 20 % clay content.
- Do not apply **COTOGARD 500 SC** pre-emergence to gravely soils.
- Do not plant any crop other than cotton on lands treated with **COTOGARD 500 SC** in the same season.

- Do not use **COTOGARD 500 SC** pre-emergence on newly deposited alluvial soils as found in the Upington and Burgersfort areas and on the banks of the Limpopo river.
- Do not use **COTOGARD 500 SC** as a post-emergence directed treatment after it has been applied pre-emergence.
- Do not apply **COTOGARD 500 SC** to brackish or alkaline soils.

WEEDS CONTROLLED

The following broadleaf weeds are normally controlled by **COTOGARD 500 SC** when used in combination with a registered grass-killer:

Acanthospermum hispidum	Upright starbur
Amaranthus hybridus	Cape pigweed
Amaranthus spinosus	Thorney pigweed
Amaranthus thunbergii	Red pigweed
Bidens bipinnata	Spanish blackjack
Bidens pilosa	Blackjack
Flaveria bidentis	Smelter's bush
Galinsoga parviflora	Gallant soldier
Nicandra physaloides	Apple of Peru
Physalis angulata	Wild gooseberry
Portulaca oleracea	Purslane
Richardia brasillensis	Tropical Richardia
Schkuhria pinnata	Dwarf marigold
Sesbania punicea	Red Sesbania
Solanum nigrum (complex)	Deadly nightshade
Tagetes minuta	Khaki weed
Zeleya pentandra	Zeleya
Control of the following weeds is variable:	
Cassia italica	Eland's senna
Datura ferox	Large thorn apple
Datura stramonium	Thorn apple
Euphorbia geniculata	Painted milkweed
Sida cordifolia	Heartleaf Sida

DIRECTIONS FOR USE
USE ONLY AS INDICATED

5.1 COMPATIBILITY

The compatibility of **COTOGARD 500 SC** with other products may be influenced by the formulation of the products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of **Makhteshim-Agan** and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

5.2 MIXING INSTRUCTIONS

Shake well before use. Replace cap after use.

Half-fill the spray tank with water and pour the required quantity of **COTOGARD 500 SC** through a 50 mesh sieve into the tank whilst stirring. Top up the tank with water to the final volume required.

Ensure thorough agitation of the mixture in the tank during mixing and spraying operations.

Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank.

5.3 APPLICATION TECHNIQUES

COTOGARD 500 SC may be applied with any medium or high volume sprayer equipped with an efficient agitation mechanism, which is capable of adequate coverage and even distribution.

For pre-emergence application, best results are obtained by using fan-type spray nozzles and applying a spray volume of 200 ℓ water / ha.

When **COTOGARD 500 SC** is applied as a directed post-emergence treatment, a floodjet spray nozzle should be used. The use of shields is recommended to prevent the spray mixture reaching the cotton.

5.3.1 Pre-emergence application

COTOGARD 500 SC should be applied at or immediately after planting onto a freshly cultivated, fine, even, firm and weed free seedbed. To obtain effective weed control it is essential that the application be followed by a light overhead irrigation (10 – 15 mm) to leach the herbicide into the soil before the weeds emerge (within 3 – 4 days after application).

5.3.2 Post-emergence directed application

COTOGARD 500 SC may be applied post-emergence as soon as the cotton is tall enough to permit a properly directed spray. Special care must be taken to keep the spray away from the cotton plants as injury may occur. Injury to the bottom leaves does not however, affect yield. Application may take place immediately after an inter-row cultivation or on weeds not more advanced than the 2 – leaf stage. If application takes place immediately after an inter-row cultivation, overhead irrigation should follow to activate the herbicide.

5.4 APPLICATION RATES

COTTON

5.4.1 Pre-emergence application

COTOGARD 500 SC is only recommended when used in combination with a suitable grass killer such as **TRIFLUREX 480 EC** (Reg no L5350).

When **COTOGARD 500 SC** is used in combination with **TRIFLUREX**, the **TRIFLUREX** must be applied and incorporated according to the manufacturer's recommendations prior to planting the cotton. **COTOGARD 500 SC** is then applied as a pre-emergence treatment after the cotton has been planted or during the planting process.

TABLE 1 : **Application rates of COTOGARD 500 SC applied pre-emergence or immediately after planting in cotton:**

Soil Type	% Clay	Following pre-plant incorporated grass-killer treatment
		COTOGARD 500 SC (ℓ / ha)
Sand/sandy loam	0 - 20	**NOT RECOMMENDED**
Sandy clay loam	21 – 30	3,0
Sandy clay loam / sandy clay	31 – 50	4,0
Clay	> 50	**NOT RECOMMENDED**

Important

- For band treatment calculate the amount of herbicide required in accordance with band width and row spacing. Ensure proper fertilisation to promote vigorous seedling growth.

5.2.4 Post-emergence directed application

Apply **COTOGARD 500 SC** post-emergence directed as follows, using a suitable surfactant at 0,2 % by volume if weeds are present at time of application.

TABLE 2: **Application rates of COTOGARD 500 SC applied post-emergence in cotton:**

Soil Type	% Clay	COTOGARD 500 SC (l / ha)
Sand / sandy clay loam	0 – 30	3,0
Sandy clay loam/ sandy clay	31 – 50	4,0
Clay	> 50	4,0*
Turf	-	4,0*

* On clay and turf soils apply only as a directed post-emergence treatment with the weeds in the cotyledon to 2 leaf stage. Pre-emergence applications are **NOT** to be made on such soil types.

COTOGARD® 500 SC and TRIFLUREX = registered trade marks of MAKHTESHIM-AGAN, Ashdod, ISRAEL.

WAARSKUWINGS

- Giftig indien ingesluk.
- Giftig vir visse.
- Berg in ‘n koel plek.
- Berg weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.

Alhoewel hierdie middel omvattend onder ‘n groot verskeidenheid van 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. Raadpleeeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMAATREëLS

- Moet nie die spuitnewel inasem nie.
- Vermy velkontak.
- Was met seep en water na gebruik.
- Was besoedelde klere na gebruik.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Moet nie meng en laai nader as 15 m vanaf boorgate, strome, riviere en damme nie.
- Moet nie nader as 15 m van boorgate, strome en riviere toedien nie.
- Moet nie nader as 60 m toedien van damme nie.
- Verseker dat geen terugsyfering plaasvind na boorgate of damme wanneer die produk toegedien word deur ‘n besproeiingsisteem nie.
- Vermy oorwaai van spuitnewel nie ander gewasse, weiveld, riviere, damme, boorgate en plekke wat nie behandel moet word nie.
- Maak toedieningsapparaat skoon na gebruik. Uitspoelwater moet nie gewasse, weiveld, riviere, damme en boorgate besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Spoel die leë houer drie keer uit met ‘n volume skoon water gelykstaande aan ‘n minimum van 10 % van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word.
- Moet nie die leë houer vir enige ander doel gebruik nie.

GEBRUIKSBEPERKINGS

- Moet nie **COTOGARD 500 SC** vooropkom toedien op grond waar ‘n aanval van saailingverwelksiekte verwag word nie, tensy doeltreffende maatreëls getref is om die siekte te bestry.
- Moet nie **COTOGARD 500 SC** vooropkom toedien op gronde wat minder as 20 % klei bevat nie.
- Moet nie **COTOGARD 500 SC** vooropkom toedien op gruiserige gronde nie.

- Moet geen gewas anders as katoen plant op lande wat met **COTOGARD 500 SC** in dieselfde seisoen behandel is nie.
- Moet nie **COTOGARD 500 SC** vooropkom op nuutgevormde alluviale gronde soos wat in die Upington- en Burgersfortgebiede of op die walle van die Limpopo rivier voorkom, gebruik nie.
- Moet nie **COTOGARD 500 SC** as ‘n na-opkombespuiting gebruik indien dit alreeds vooropkom toegedien is nie.
- Moet nie **COTOGARD 500 SC** op brak- en alkaliese grond gebruik nie.

ONKRUIDE WAT BEHEER WORD

Die volgende breëblaaronkruide word normaalweg deur **COTOGARD 500 SC** beheer wanneer dit in kombinasie met ‘n geregistreerde grasdoder gebruik word:

Acanthospermum hispidum	Regopsterklits
Amaranthus hybridus	Kaapse misbredie
Amaranthus spinosus	Doringmisbredie
Amaranthus thunbergii	Rooimisbredie
Bidens bipinnata	Spaanse knapsekêrel
Bidens pilosa	Knapsekêrel
Flaveria bidentis	Smeltersbossie
Galinsoga parviflora	Knopkruid
Nicandra physaloides	Basterappelliefie
Physalis angulata	Wildeappelliefie
Portulaca oleracea	Porslein
Richardia brasiliensis	Tropiese Richardia
Schkuhria pinnata	Kleinkakiebos
Sesbania punicea	Rooi-Sesbania
Solanum nigrum (kompleks)	Nastergal
Tagetes minuta	Kakiebos
Zeleya pentandra	Zeleya
Onkruide wat wisselvallig beheer word	
Cassia italica	Elandsertjie
Datura ferox	Grootstinkblaar
Datura stramonium	Stinkblaar
Euphorbia geniculata	Gekleurde melkkruid
Sida cordifolia	Hartblaartaaiman

GEBRUIKSAANWYSINGS
GEBRUIK SLEGS SOOS AANGEDUI

5.1 **VERENIGBAARHEID**

Die verenigbaarheid van **COTOGARD 500 SC** met ander produkte kan beïnvloed word deur die formulasie van die betrokke produkte asook die kwaliteit van die water. Aangesien die formulasie van produkte kan verander sonder die medewete van **Makhteshim-Agan** en die kwaliteit van die water van plaas tot plaas kan verskil, moet ‘n fisiese verenigbaarheidstoets altyd uitgevoer word voordat gespuit word.

5.2 **MENGINSTRUKSIES**

Skud goed voor gebruik. Plaas skroefdeksel terug na gebruik.

Maak die spuittenk halfvol met water en voeg die benodigde hoeveelheid **COTOGARD 500 SC** deur ‘n 50 maas sif by terwyl geroer word. Vul die tenk verder met water totdat die finale volume verkry word.

Die spuitmengsel moet tydens vermenging en toediening voortdurend in roering gehou word.

Tenkmengsels moet onmiddelik uitgespuit word en nie toegelaat word om in die spuittenk te staan nie.

5.3 **TOEDIENINGSTEGNIEKE**

COTOGARD 500 SC kan met enige medium- of hoëvolume spuittoerusting met ‘n doeltreffende roermeganisme toegedien word, mits ‘n eweredige bedekking en verspreiding verkry word.

Vir vooropkomtoediening word die beste resultate verkry deur van waaiertipe-spuitpunte gebruik te maak en ‘n minimum spuitvolume van 200 ℓ water / ha toe te dien.

Wanneer **COTOGARD 500 SC** as ‘n gerigte na-opkombespuiting toegedien word, moet ‘n vloedstraal spuitpunt gebruik word. Die gebruik van skerms word aanbeveel ten einde te verhoed dat van die spuitmengsel op die katoen beland.

5.3.1 **Vooropkomtoediening**

COTOGARD 500 SC moet tydens of onmiddelik na plant toegedien word op ‘n varsbewerkte, fyn, egalige, ferm en onkruidvrye saadbed. Vir doeltreffende onkruidbeheer is dit noodsaaklik dat toediening gevolg word deur ‘n ligte oorhoofse besproeiing (10 – 15 mm) om die onkruiddoder in die grond in te loog voordat die onkruid opkom (binne 3 – 4 dae na toediening.)

5.3.2 **Na-opkom gerigte toediening**

COTOGARD 500 SC kan as ‘n gerigte na-opkombespuiting toegedien word sodra die katoen groot genoeg is om dit moontlik te maak. Noukeurige aandag word vereis om te verhoed dat die spuitmengsel nie op die katoenplante beland nie aangesien dit skade kan veroorsaak. Dit het egter geen effek op opbrengs as die onderste blare raakgespuit word nie. Hierdie toediening kan plaasvind onmiddelik na ‘n tussenrybewerking of op onkruide wat nie verder as die 2-blaarstadium gevorder is nie. Indien toediening onmiddelik na ‘n tussenrybewerking plaasvind, moet sprinkelbesproei word ten einde die onkruiddoder te aktiveer.

5.4 **TOEDIENINGSHOEVEELHEDE**

KATOEN

5.4.1 **Vooropkomtoediening**

COTOGARD 500 SC word slegs in kombinasie met ‘n geskikte grasdoder soos **TRIFLUREX 480 EC** (Reg no L5350) aanbeveel.

Wanneer **COTOGARD 500 SC** in kombinasie met **TRIFLUREX** gebruik word, moet **TRIFLUREX** voor plant in die grond ingewerk word volgens die vervaardiger se aanbevelings. **COTOGARD 500 SC** word dan as 'n vooropkombehandeling tydens of onmiddelik na plant toegedien.

TABEL 1: **Toedieningshoeveelhede van COTOGARD 500 SC as 'n vooropkombehandeling tydens of onmiddelik na die plantproses.**

Grondtipe	% Klei	Volgende op voorplant grasdoder behandeling
		COTOGARD 500 SC (ℓ / ha)
Sand/ sandleem	0 – 20	**NIE AANBEVEEL**
Sandklei leem	21 – 30	3,0
Sandklei leem/ sandklei	31 – 50	4,0
Klei	> 50	**NIE AANBEVEEL**

Belangrik

- Vir strookbehandeling moet die benodigde hoeveelheid onkruiddoder bereken word volgens die strookbreedte en rywydte.
- Verseker voldoende bemesting om aktiewe saailinggroei te verkry.

5.4.2 **Gerigte na-opkomtoediening**

Dien 'n gerigte na-opkombespuiting van **COTOGARD 500 SC** soos volg toe en gebruik 'n geskikte benattingsmiddel teen 0,2 % per volume indien onkruid teenwoordig is tydens toediening.

TABEL 2:

Grondtipe	% Klei	**COTOGARD 500 SC** (l / ha)
Sand / sandkleileem	0 – 30	3,0
Sandkleileem / sandklei	31 – 50	4,0
Klei	> 50	4,0*
Turf	-	4,0*

*   Op klei- en turfgronde dien slegs gerigte na-opkombespuitings toe wanneer die onkruid in die saailing tot 2-blaarstadium is. Vooropkomtoedienings moet **NIE** op sodanige gronde gemaak word nie.

COTOGARD® en TRIFLUREX = geregistreerde handelsmerke van MAKHTESHIM-AGAN LTD, Ashdod, ISRAEL.