

Main Panel

CYPERIN 200 EC

Reg. No./Nr. L5321, Act No./Wet Nr. 36 of/van 1947
Botswana Reg. No./Nr W130737, Act No./Wet Nr. 18 of/van 1999
Malawi Reg. No./Nr. MW/PCB/2011/0363
Namibian Reg. No./Namibiese Reg. Nr. N-AR 1201

READ THE LABEL BEFORE USE

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

An emulsifiable concentrate, contact and stomach insecticide for the control of various insect pests on crops as indicated.

'n Emulgeerbare konsentraat kontak-en maaginsekdoder vir die beheer van verskeie insekplae op gewasse soos aangedui

GROUP/GROEP	3A	INSECTICIDE/INSEKDODER
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ACTIVE INGREDIENT:

Cypermethrin (Pyrethroid) 200 g/l

AKTIEWE BESTANDDEEL:

Sipermetrien(Piretroïed)

Net Volume

ℓ

Netto Volume



DANGER

GHS Hazard Statements

Flammable liquid and vapour.

Harmful if swallowed.

May be fatal if swallowed and enters airways.

Causes serious eye damage.

May cause damage to organs through prolonged or repeated exposure.

May cause respiratory irritation.

May cause genetic defects.

May cause cancer. Very toxic to aquatic life with long lasting effects.

GHS Precautionary Statements

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, open flames and other ignition sources.



REGISTRATION HOLDER / REGISTRASIEHOUER:

Nulandis® (A division of AECI Limited)/ Nulandis® ('n Afdeling van AECI Beperk)

Reg. No. / Nr. 1924/002590/06

P.O. Box / Posbus 14418

Witfield, 1467

Tel : (011) 823 8000

www.aeciph.com

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL ;

0861 555777 / 082 446 8946

Batch No:

Lotnommer:

DATE OF MANUFACTURE:

VERVAARDIGINGSDATUM:

UN No. / VN Nr. 1268 FLAMMABLE LIQUID, PETROLEUM PRODUCTS N.O.S

Pamphlet

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**ALLOW THE FOLLOWING WITHHOLDING PERIODS (MINIMUM NUMBER OF DAYS)
FROM LAST APPLICATION AND HARVESTING OR GRAZING;**

CROP	DAYS
PEACHES (CANNING)	3
BEANS ; GROUNDNUTS (HAY); PEAS	7
COTTON (GRAZING); SORGHUM; GRAPES (TABLE AND WINE)	28
CRUCIFERAE; TOMATOES	4
LUCERNE; MAIZE; PEACHES; SWEETCORN; APPLES; PEARS;	14
PLUMS; PASTURES	
MACADAMIAS	30

Handle with care.

Flammable – Do not store or spray near open flame. Keep out of reach of children and uninformed persons and animals.

Store in a cool dry place, away from food and feed.

If soil is dry, do not apply for cutworm control.

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.

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 PESTS TO 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:

GHS Precautionary Statements

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, open flames and other ignition sources. No smoking.

Do not breathe mist, vapours or spray.

Wash thoroughly after handling.

Wear protective gloves, protective clothing, eye protection & face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell.

If exposed or concerned: Get medical attention.

Store in a well-ventilated place. Keep container tightly closed.

Do not eat, drink or smoke whilst mixing or applying, or before washing hands and face and changing clothes.

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

Prevent spray drift onto other crops, grazing, rivers, dams and areas not under treatment.

Clean applicator thoroughly with **FLUSHSOL** before re-using and dispose of wash water where it will not contaminate crops, grazing, rivers dams or boreholes. Refer to the **FLUSHSOL** label for directions of use.

Triple rinse the empty container: Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RELEVANT SUBSTANCES:

Substance name (IUPAC/EC)	Concentration % by weight	Classification
		EC1272/2008
Light aromatic petroleum solvent	70-75%	Flammable liquid (Category 3) H226. Aspiration hazard (Category 1) H304. Germ cell mutagenicity (Category 1B) H340. Carcinogenicity (Category 1B) H350.
Cypermethrin tech 92%	20-30%	Acute toxicity oral (Category 3) H301. STOT SE 3 H335. STOT RE 2 H373. Aquatic acute 1 H400. Aquatic chronic 1 H410. M=1000
Calcium dodecylbenzene sulphonate	1-5%	Skin irritation (Category 2) H315. Serious eye damage (Category 1) H318. Aquatic chronic 3 H412.
Isotridecanoethoxylate	1-5%	Acute toxicity oral (Category 4) H302. Serious eye damage (Category 1) H318. 1 H410.

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **CYPERIN 200 EC** and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

FIRST AID:

In case of inhalation: If inhaled, immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that the start of treatment is not delayed. Get medical attention immediately.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

In case of 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 immediately.

In case of ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

NOTE TO PHYSICIAN:

No specific antidote – Treat symptomatically

RESISTANCE WARNING:

For resistance management, **Cyperin 200 EC** is a group code 3A insecticide. Any insect population may contain individuals naturally resistant to **Cyperin 200 EC** and other group code 3A insecticides. The resistant individuals dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **Cyperin 200 EC** or other group code 3A insecticides, although local experts should be consulted for local resistance recommendations. The following classification scheme is based on mode of action. It is recognized that resistance of insects and mites to insecticides and acaricides can also result from enhanced metabolism, reduced penetration or behavioural changes that are not linked to any site of action classification but are specific for individual chemicals or chemical groupings. Despite of this, alternation of compounds from different chemical classes remains a viable management technique. To delay insecticide resistance:

*Avoid exclusive repeated use of insecticides from the same chemical group code.

*Integrate other control methods (chemical, cultural, biological) into insect control programmes

For further information, contact the registration holder of this product.

African bollworm resistance management:

Resistance of African bollworm (*Helicoverpa armigera*) to synthetic pyrethroids has been confirmed.

COTTON: Synthetic pyrethroids must only be applied to cotton during the period 1 January to 28 February. DO NOT apply more than two applications per growing season.

ALL OTHER CROPS: If a pyrethroid gives poor performance DO NOT re-spray with any synthetic pyrethroid, even at a corrective dosage rate. Use a product from a different chemical group code.

MODE OF ACTION:

The mode of action of cypermethrin is by acting on the nervous system of the insect, and disturb the function of neuron by interaction with the sodium channel.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY:

Do not mix with seaweed extract or amitraz, chinomethionat, vamidothion, prothiophos. When spraying apples, pears and grapes a wetting agent should not be added to **Cyperin 200 EC**.

Cyperin 200 EC is compatible with most cotton miticides in common use. The compatibility of **Cyperin 200 EC** 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 and water quality may vary from farm to farm a physical compatibility test should always be carried out prior to application.

MIXING INSTRUCTIONS:

The addition of **Bladbuff 7** (Reg. No. L8121, Act No. 36 of 1947) to the spray water prior to adding **Cyperin 200 EC**, is recommended to prevent alkaline hydrolysis. Add **Bladbuff 7** first to the spray water. For optimum stability, **Cyperin 200 EC** should be applied at a pH of 3-4. Half fill the spray tank with clean water. Add the measured amount of **Cyperin 200 EC** to the tank while agitating. Fill the tank and maintain agitation until spraying is completed. Ensure thorough agitation during the filling of the spray tank and spraying. Prepared spray mixture must not be left in the spray tank for any length of time e.g., overnight.

GROUND APPLICATION:

When using a conventional high volume sprayer or a mist blower, fit equipment with hollow cone nozzles that provides medium to fine droplets. Ensure that sprayers are calibrated before spraying and that thorough coverage is obtained. An uniform distribution must be ensured throughout the target area. The use of drop arms on conventional booms are recommended when spraying crops such as cotton and tomatoes. Do not spray plants that are wet with dew or rain.

AERIAL APPLICATION:

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 Pesticides). 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 suitable atomising equipment (hydraulic nozzles or rotary atomisers) 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 250-280 microns is recommended. Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.
- 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 plants.

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 / PEST	DOSAGE	REMARKS
ALL CROPS Cutworms	Ground Application: 100 ml/ha 0.33 ml/100 m plant row Aerial Application: 100 ml/ha	Apply treatment either pre or post emergence when pests are noticed. Ensure that the top 3 cm of the soil is moist. Repeat treatment in case of re-infestation. 1. Overall spray Apply in 300 ℓ water/ha. 2. Band spray (300 mm wide) Apply in at least 3 ℓ water/100m row. Apply in 30 ℓ water/ha.
APPLES & PEARS Codling moth, Leaf roller, African bollworm	5 ml/100 ℓ water High volume (125 – 175 ml/ha) Low volume (100 – 140 ml/ha)	NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning”. Apply first spray at 75 % petal drop and repeat at 14 day intervals. Apply as a corrective treatment not earlier than 75 % petal drop. Use 2 500 – 3 500 ℓ spray mixture per ha. Caution: Toxic to bees.
Banded fruit weevil (Snout beetle)	10 ml/100 ℓ water High volume (250 – 350 ml/ha) Low volume (200 – 280 ml/ha)	High Volume Application Using 2 500 – 3 500 ℓ spray mixture per ha. Apply two sprays, the first at 75 % petal drop. Repeat 4 weeks later. Further, either a low or high volume spray can be applied during mid-January to prevent late season damage. Low Volume Application Using ¼ or 1/8 of spray volume indicated for high volume application.
BEANS African bollworm	150 ml/ha	NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning”. <u>Ground Application:</u> Apply in 300 ℓ water. Inspect lands regularly and if necessary repeat application. Apply as soon as eggs or larvae are noticed <u>Aerial Application:</u> Apply in 30 ℓ water/ha.

[illegible]

CROP / PEST	DOSAGE	REMARKS
GROUNDNUTS African bollworm	150 ml/ha	NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning”. <u>Ground Application:</u> Apply in 250 ℓ water/ha. <u>Aerial Application:</u> Apply in 30 ℓ water/ha. Commence spraying as soon as eggs or larvae are noticed. Repeat if necessary.
LUCERNE Lucerne caterpillar	Ground Application: 75 ml/ha	Apply as full cover spray in 300 ℓ water/ha as soon as pest is noticed. Good coverage and wetting is essential.
MACADAMIAS Stinkbugs	20 ml/100 ℓ water	Commence spraying when nuts are marble size. Repeat after 4 weeks. If necessary another spray 4 weeks later can be applied, but not later than 30 days before harvest.
MAIZE AND SWEET CORN African bollworm Stalk borer	Aerial Application: 150 ml/ha Ground Application: 1,5 ml/100 m row ----- Ground Application: 3,5 ml/100 m row Aerial Application: 350 ml/ha	NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning”. Apply in 30 ℓ water/ha. Ensure timeous application, i.e. before larvae enter tassel and not later than 80% tassel emergence. Only larvae which come in contact with product will be controlled. Use in not less than 3 ℓ water/100 m row – ensure that nozzles are directed towards the cob. ----- Apply 7-10 days after 5 % or more plants are infested with eggs. Larvae in the stalk or bigger than 10 mm will not be controlled. Second spray could be necessary if infestation is over a long period. Do not apply in less than 3 ℓ water/100 m row. To ensure good coverage inside the funnel as well as on the sides of the plant, use at least two D4/35 or D5/35 nozzles per row. Apply in 30 ℓ water/ha.
PASTURES Army worm	150 ml/ha	<u>Ground Application:</u> Apply in 300 ℓ water/ha. <u>Aerial Application:</u> Apply in 30 ℓ water/ha.

CROP / PEST	DOSAGE	REMARKS
PEACHES & PLUMS		NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning” .
African bollworm	5 ml/100 ℓ water (HV 125 ml-175 ml/ha)	Apply as full cover spray at 75 % petal drop. Ensure full coverage.
Codling moth	5 ml/100 ℓ water (HV 125 ml-175 ml/ha)	Full cover spray at 75 % petal drop. Repeat at 14-21 day intervals.
False codling moth	5 ml/100 ℓ water (HV 125 ml-175 ml/ha)	Early cultivars A full cover spray should be applied 6 weeks before harvest and repeated at 14 day intervals. Late cultivars A full cover spray should be applied 8 weeks before harvest and repeated at 14 day intervals. In the summer rainfall regions first application must not be later than 3 rd week December. Canning Peaches As above, but last application can be made 3 days before harvest.
Fruit flies	10 ml/100 ℓ water (HV 250 ml-350 ml/ha)	All cultivars A full cover spray should be applied 8 weeks before harvest and repeated at 14 day intervals. Canning peaches can be sprayed 3 days before harvest. In the summer rainfall regions first application must not be later than 3 rd week December.
Banded Fruit Weevil (snout beetle)	10 ml/100 ℓ water (HV 150 ml-350 ml/ha)	Apply as soon as damage is noticed. Repeat after 4 weeks if necessary.

CROP / PEST	DOSAGE	REMARKS
PEAS African bollworm Lesser army worm	150 ml/ha	NB: Refer to “Warning against African bollworm resistance” under “Resistance Warning”. <u>Ground Application:</u> Apply in 300 - 500 ℓ water/ha. If necessary repeat at 14 day intervals. <u>Aerial Application:</u> Apply in 30 ℓ water/ha.
SORGHUM African bollworm	Ground Application: 1,5 ml/100 m row Aerial Application: 150 ml/ha	Refer to “ Warning against African bollworm resistance ” under “Resistance Warning”. Direct application onto ears. Do not apply in less than 3 litres water per 100 m row. Apply in 30 ℓ water/ha.
Stalk borer	Ground Application: 3,5 ml/100 m row Aerial Application: 350 ml/ha	Do not apply in less than 3 ℓ water/100 m row. To ensure good coverage inside the funnel as well as on the sides of the plant, use at least two D4/35 or D5/35 nozzles per row. Apply in 30 ℓ water/ha.
TOMATOES African bollworm	Ground Application: 15 ml/100 ℓ water 75 ml/ha 150 ml/ha	Refer to “ Warning against African bollworm resistance ” under “Resistance Warning”. At first signs of infestation, apply as full cover spray. Repeat at 7-10 day intervals or as necessitated by crop inspection. High Volume Apply up to 500 ℓ spray mixture to plants up to 600 mm high and 1 000 ℓ/ha or more to plants higher than 600 mm e.g. trellised tomatoes. Do not use more than 150 ml Cyperin 200 EC per hectare. Mist Blowers Apply in 150 ℓ water per ha for plants less than 600 mm tall. Apply in 500 ℓ water per ha for plants higher than 600 mm. Do not use more than 150 ml Cyperin 200 EC per hectare.
WINE & TABLE GRAPES Weevils	10 ml/100 ℓ water	Apply as soon as damage occurs. Repeat 3-4 weeks later if necessary. The occurrence of weevils can be expected from mid-October to mid-November. Ensure coverage of all parts of the plant.

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