

Main Panel



HexaziMAX 240 SL

Reg. No./Nr L7653, Act No./Wet Nr. 36 of/van 1947

READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

A water soluble liquid herbicide for the control of various annual grasses and broad-leaf weeds in ratoon sugarcane.

'n Wateroplosbare onkruidodder vir die beheer van 'n verskeidenheid eenjarige grasse en breëblaaronkruid in oorstaanriet.

GROUP/GROEP

5

HERBICIDE/ONKRUIDDODER

Active ingredient:

Hexazinone (triazinone)240 g/l..... Heksasinoon (triasinoon)

Net Volume



DANGER



Netto Volume

GHS Hazard Statements

Flammable liquid and vapour.

Causes serious eye damage.

Very toxic to aquatic life with long lasting effects.

GHS Precautionary Statements

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

Do not breathe mist, vapours or spray.



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. 1993 FLAMMABLE LIQUIDS N.O.S

Pamphlet

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WARNINGS:

GHS Hazard Statements

Flammable liquid and vapour.

Causes serious eye damage.

Very toxic to aquatic life with long lasting effects.

Do not use on plant cane.

Poisonous when swallowed.

Store in a cool place.

Store away from food, feed, fertilizer and other agricultural products.

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

Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.

In case of poisoning - **CALL A DOCTOR IMMEDIATELY AND MAKE THIS LABEL AVAILABLE TO HIM/HER.**

AERIAL APPLICATION: Notify all inhabitants in the immediate vicinity of the area to be treated of your intention and issue the necessary warnings. Do not spray over adjacent areas of water nor allow spray to drift there.

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 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 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 INSTRUCTION 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

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.

Do not apply more than 2.0 kg active ingredient of **Hexazimax 240 SL** to soils with over 60% sand, less than 0.5 % organic matter or with a water table less than 2 m below surface in one year.

Do not apply if other crops at risk are to be grown in the area in the near future.

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

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

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

Do not mix, apply or clean equipment within 20 m of any water source or where drift or run off could contaminate a water source.

Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.

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
Hexazinone	20-30%	Flammable liquid (Category 3) H226. Acute toxicity oral (Category 4) H302. Eye irritation (Category 2) H319. Aquatic acute 1 H400. Aquatic chronic 1 H410.
Ethanol	30-40%	Flammable liquid (Category 2) H225.
Alcohols C9-11 ethoxylated	1-5%	Acute toxicity oral (Category 4) H302. Serious eye damage (Category 1) H318.

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **HexaziMAX 240 SL** 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, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation persists.

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 if irritation persists.

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 if you feel unwell.

NOTE TO PHYSICIAN:

Treat symptomatically.

USE RESTRICTIONS:

Hexazimax 240 SL is a leaf and root absorbed herbicide with long residual action. It should be applied prior to or during the period of active growth of weeds. Effects of **Hexazimax 240 SL** on existing weeds may be slow to appear and several weeks may be required for the full effect to become visible. The degree of control and duration of effect will depend on the application rate, amount and intensity of rainfall and soil type.

Heavy rain on very sandy soils low in organic matter as well as flood irrigation can reduce weed control performance.

Do not apply **Hexazimax 240 SL** more than once per season to the same land or exceed the recommended rate.

Do not plant crops other than pineapples or sugarcane within 12 months of **Hexazimax 240 SL** application.

Do not add additional additives, wetters or surfactants to the spray mixture.

Soil must be deeply and thoroughly ploughed before planting subsequent crops. A test planting is recommended in all cases.

Do not use **Hexazimax 240 SL** on poorly drained soils or soils with a compaction layer, as under these conditions waterlogging can occur and the herbicide may cause crop injury.

Do not apply **Hexazimax 240 SL** to any crop or situation not mentioned on this label.

Only apply **Hexazimax 240 SL** using an accurate and safe application technique.

If **Hexazimax 240 SL** is used in a tank mix with other recommended herbicides, consideration should be given to the restrictions of those respective products' label.

Do not apply near desirable plants or trees or on areas where their roots may extend or in locations where the chemical may be washed or moved in contact with their roots.

RESISTANCE WARNING:

For resistance management, **Hexazimax 240 SL** is a group code 5 herbicide. Any weed population may contain individuals naturally resistant to **Hexazimax 240 SL** and other group code 5 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **Hexazimax 240 SL** or any other group code 5 herbicide.

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.

The presence of resistant weeds is difficult to detect prior to use and therefore neither the Registration Holder nor the Distributor can accept responsibility for any losses as a result of **Hexazimax 240 SL** not controlling resistant weeds. Do not apply **Hexazimax 240 SL** alone in situations where weed resistance has been confirmed. Sub-standard application of **Hexazimax 240 SL** or other group code C1 herbicides will lead to inferior weed control and may assist in development of herbicide resistance.

MODE OF ACTION:

Hexazinone act by inhibition of photosynthesis at photosystem II

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

MIXING INSTRUCTIONS:

Half-fill the spray tank with suitable water, then add the required amount of **Hexazimax 240 SL** to the water in the tank while agitating. When tank mixing **Hexazimax 240 SL** with diuron or ametryn, first add the **Hexazimax 240 SL** to the tank. Fill the spray tank to the desired volume while agitating. Should tank mixtures with other herbicides be made, follow the respective manufacturers' label recommendations. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation. **Hexazimax 240 SL** should be applied in 200 – 400 l of water per ha, depending on the density of weeds, and applied to the weeds and soil as an overall or directed spray.

COMPATIBILITY:

The compatibility of **Hexazimax 240 SL** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **Hexazimax 240 SL** is compatible with Ametryn SC and Diuron 800 SC.

APPLICATION METHODS:

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.

Ground application:

Knapsack sprayers or tractor mounted boom sprayers may be used. A spray volume of 200 – 400 l/ha should be used for ground application and can be applied via solid- or hollow cone nozzles. **Constant agitation throughout the spray operation is essential.** Only clean water should be used. Prevent overdosing by avoiding overlapping of swaths and closing the nozzles while starting, slow movement, turning and stopping. Apply before broadleaf weeds reach 100 mm in height.

AERIAL APPLICATION

Aerial application of **HEXAZIMAX 240 SL** 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). 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:

Application Parameters

- A minimum volume – pre-emergence 30 l; post-emergence 30 - 35 l spray mixture per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage: The following number of droplets per cm² must be recovered at the target area: Pre-emergence 20 - 30; post-emergence 35 - 45 droplets.
- Droplet size: The following droplet spectra are recommended: Pre-emergence - VMD of 350 – 400 micron; Post-emergence - VMD of 300 – 350 micron. Ensure that the production of fine droplets, with a VMD less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Apply before the crop becomes too dense, thus preventing proper coverage of the weeds.

Equipment

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 60 to 75% of the wingspan to prevent droplets from entering the wingtip vortices.

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 nor 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 when the wind speed exceeds 15 km per hour.
- 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:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage)
 - damage to other sensitive crops and / or non-target areas through the movement of the suspended spray cloud away from the target field

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 and that relevant data will be recorded in a logbook and kept for future reference.

SUGARCANE RECOMMENDATIONS:

Do not use on plant cane crops.

Where possible, direct the spray mixture so as to avoid spraying directly over the crop foliage, especially under hot and humid conditions.

For best results, apply **Hexazimax 240 SL** mixtures to moist soil when the climate is warm and favourable for active weed and crop development.

Apply as a uniform overall spray at a pre-emergence or early post-emergence growth stage of weeds. Following harvesting, **Hexazimax 240 SL** may be applied before the weeds have emerged, or in combination with Ametryn SC or Diuron 800 SC very soon after the weeds have emerged.

Hexazimax 240 SL alone or in mixtures should control weeds for 8 – 12 weeks.

APPLICATION TABLE:

SITUATION	% CLAY	Pre-mergence of weeds	Post-emergence of weeds			
		Hexazimax 240 SL ℓ/ha	P L U S	Diuron 800 SC ℓ/ha	O R	Ametryn 500 SC ℓ/ha
Early season ratoon cane	5 – 15	1,75 – 2,25		1,0		3,0
	16 – 35	2,25 – 2,75		1,0 – 1,5		3,0 – 4,0
	> 35	2,5 – 3,0		1,5 – 2,0		4,0
Mid-season ratoon cane	5 – 15	1,75 – 2,0	P L U S	1,0	O R	3,0
	16 – 35	2,0 – 2,25		1,0 – 1,5		3,0 – 4,0
	> 35	2,0 – 2,5		1,5 – 2,0		4,0
Late season ratoon cane	5 – 15	1,0 – 1,15	P L U S	1,0	O R	3,0
	16 – 35	2,0		1,0 – 1,5		3,0 – 4,0

	> 35	2,25	2,0	4,0
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Remarks:

If *Panicum maximum* has emerged by the time of application, the addition of Diuron 800 SC or Ametryn 500 SC is recommended. Apply prior to tillering of grass weeds or before they have developed a strong root system.

Ametryn 500 SC is the preferred tank-mix partner under cooler and drier conditions of spring.

Diuron 800 SC is the preferred tank-mix partner under warm, wet favourable conditions.

Always use lower rates for light, less absorptive soils having a low cation exchange capacity.

For extremely heavy soils (usually a high cation exchange capacity) confirm the actual rate with the Registration Holder or AECI Plant Health Crop Adviser.

SUGARCANE VERGES AND BREAKS

% CLAY	DOSAGE/ha	SPOT TREATMENT (10 m ²)	REMARKS
< 20	7,5	7,5 ml	Apply as a directed spray to avoid contact with cane foliage.
21 – 35	11,3	11,3 ml	
> 35	15,0	15,0 ml	

Remarks:

- Above dosage rates will extend residual weed control but may not completely kill existing weed growth.

BROADLEAF WEEDS NORMALLY CONTROLLED BY HEXAZIMAX 240 SL:

<i>Ageratum conyzoides</i>	Invading Ageratum = Billy goat weed
<i>Argemone mexicana</i>	Yellow-flowered Mexican poppy
<i>Bidens pilosa</i>	Blackjack
<i>Bidens formosa</i> => <i>Cosmos bipinnatus</i>	Cosmos
<i>Chenopodium murale</i>	Nettle-leaved goosefoot
<i>Datura stramonium</i>	Thorn apple
<i>Emex australis</i>	Spiny Emex
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Hibiscus trionum</i>	Bladderweed
<i>Nicandra physaloides</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane
<i>Siegesbeckia orientalis</i>	St. Paul's Wort
<i>Solanum nigrum</i> => <i>Solanum retroflexum</i>	Nightshade

GRASS WEEDS NORMALLY CONTROLLED BY HEXAZIMAX 240 SL

<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Digitaria sanguinalis</i>	Crab finger-grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Ubabe = Guineagrass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Setaria pallide-fusca</i>	Red bristle grass

WEEDS NOT normally controlled:

Cyperus rotundus Purple nutsedge
Cynodon dactylon Common couch
Sorghum verticilliflorum => *Sorghum bicolor* and established (tillering) as well as post-tillered *Panicum maximum* are not controlled.

NOTES:

The control of weeds mentioned above is dependent upon environmental conditions.

Situations with high soil organic matter or excessive dead plant material on the soil surface may reduce the length of residual control obtained.

Reduced residual control of shallower germinating weeds may occur where application of **Hexazimax 240 SL** is made on soils with low organic matter and/or clay content is followed by heavy rain or irrigation shortly after application.

Degree of pre-emergence weed control and duration of effect may vary, depending on weed species, environmental conditions and soil conditions.

The registration holder does not accept any liability in respect of the control of unlisted weeds.

