Read the label before opening the container. For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

HEXAZINONE 240 SL

South Africa Reg. No: L7947 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: C

A water soluble liquid herbicide for the selective control of grasses and broadleaf weeds, as listed, in ratoon sugarcane, and for non-selective use insugarcane verges and breaks. For use only in Mpumalanga.

ACTIVE INGREDIENT:

Hexazinone (triazine).....240g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Highly flammable liquid and vapour
- Causes severe skin burns and eye damage
- Causes serious eye irritation
- Very toxic to aquatic life with long lasting effects



DANGER

PRECAUTIONARY STATEMENTS

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Wash hands and face thoroughly after handling.

enviro™ bio-chem

Registration holder: Enviro Crop protection (Pty) Ltd.
Co. Reg. No: CK2007/027855/07
44 Kerk Street, Lichtenburg NW, South-Africa
Tel: +27 12 006 0063 | Fax: +27 86 541 7948
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Expiry Date:
Batch No:
Date of Manufacture:

UN No. 2924

WARNINGS:

- Highly flammable liquid and vapour
- Causes severe skin burns and eye damage
- Causes serious eye irritation
- Very toxic to aquatic life with long lasting effects
- Keep out of reach of children, uninformed persons and animals.
- Store in a cool place under lock and key, away from food, feed, fertiliser and seed.
- Do not apply to plant sugarcane.
- Avoid excessive spray swath overlapping and double spraying.
- Flammable – keep away from heat, sparks and open flames.
- Aerial application: Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warning. Do not spray over or allow drift to contaminate water of adjacent areas.
- Re-entry: Do not enter the treated field until the spray deposit has dried unless wearing protective clothing.

Although this remedy has been extensively tested under a wide 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 pest 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 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:

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
- Wash hands, forearms, and face thoroughly after handling
- Avoid release to the environment.
- Wear impervious rubber gloves and boots, protective clothing, and chemical safety goggles.
- Collect spillage.
- Store in a well-ventilated place. Keep container tightly closed.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Do not apply near desirable plants or trees (such as windbreaks, ornamental trees or shrubs along roads) or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use in areas where susceptible crops are to be grown in the foreseeable future.
- Over-application or any use not in accordance with the directions on this label may cause stunting of the crop and other adverse effects.
- Triple rinse empty container in the following manner: 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 empty 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.
- Empty containers should be taken for local recycling or waste disposal.
- Do not re-use empty containers.

RELEVANT SUBSTANCES:

Hexazinone 32.7%
Ethanol < 35%
Acetic acid <10%

SYMPTOMS OF HUMAN POISONING:

May cause eye irritation. May cause skin irritation and allergic reaction. If large quantities are ingested, nausea, vomiting abdominal distress and diarrhoea may occur.

FIRST AID TREATMENT:

SKIN CONTACT: Remove contaminated clothing as well as shoes and leather goods. Wash body with non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical advice if necessary.

EYE CONTACT: Flush eyes immediately with large amounts of clean water for approximately 15 minutes. Occasionally lift the upper and lower lids. If eye irritation persists, get medical attention.

INHALATION: Remove patient to a well ventilated area and loosen clothing around the neck. Perform artificial respiration and administer oxygen if necessary. Keep patient warm and calm.

INGESTION: Do not induce vomiting. Get medical attention immediately. Administration of gastric lavage or oxygen should be performed by qualified medical personnel.

NOTE TO PHYSICIAN:

No specific antidote. Treat symptomatically and supportively. Keep patient under observation. Perform gastric lavage and catharsis if the victim is not unconscious.

RESISTANCE WARNING:

For resistance management **HEXAZINONE 240 SL** is a **group code C1** herbicide. Any weed population may contain individuals naturally resistant to H**EXAZINONE 240 SL** and other **group code C1** herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. **HEXAZINONE 240 SL** or any other **group code C1** herbicide may not control these resistant weeds.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code.
- Alternate or tank mix with 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.

DIRECTIONS FOR USE: SUGARCANE Use only as directed.

General:

1. **HEXAZINONE 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.
2. Rainfall within a few weeks after application will enhance the herbicidal action of the product. Effects of **HEXAZINONE 240 SL** on existing weeds are slow to appear, and may take several weeks for maximum effect to become visible.
3. The degree of control and duration of effect will depend on the dosage rate, rainfall and soil type.
4. Do not exceed the recommendations given on this label and do not repeat an application during the same season.
5. Do not add an additional wetter, additive or surfactant.
6. Do not plant crops other than sugar cane within 12 months of a **HEXAZINONE 240 SL** application. Before replanting to any other crop ensure that the soil is thoroughly ploughed and harrowed.
7. **HEXAZINONE 240 SL** should be diluted with water; apply 200 to 400 litres per ha for sugar cane, depending on the density of weeds, apply to the weeds and soil as an overall broadcast or directed spray.

SUGARCANE:

Do not use on plant sugarcane crops. Do not apply directly over the ratoon foliage but direct the sprays across the inter-row to avoid, as far as possible, wetting the crop foliage.

HEXAZINONE 240 SL APPLICATION:

Always keep the spray mixture agitated to ensure adequate and uniform mixing. Spray the soil surface by means of a tractor-mounted boom sprayer or knapsack sprayer. Use an application volume of 200 - 400 litres water per ha. Ensure that the application

equipment is correctly calibrated and that a uniform and even distribution of spray is obtained. Agitate the spray mixture continuously to ensure adequate mixing. Best results are obtained when **HEXAZINONE 240 SL** is applied to moist soil and when the climate is warm and favorable for active weed growth. Thoroughly clean all traces of herbicide from application equipment immediately after use. Flush tank, pumps, hoses and boom with clean water after removing nozzle tips and screens. (Clean these parts separately).

AERIAL APPLICATION:

Aerial application of **HEXAZINONE 240 SL** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS 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 be met:

- Volume: A spray mixture volume of 30 to 35 ℓ 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: 30 to 40 droplets per cm^2 must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 300 to 350 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 15km/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:
  - 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 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.

RECOMMENDATIONS FOR RATOON SUGARCANE:

For pre-emerge residual weed control apply **HEXAZINONE 240 SL** in 200 - 400 litres of water/ha according to the season and soil type. Apply as a uniform overall spray at a pre-emergence stage of weed growth. After post-harvest operations have been completed, **HEXAZINONE 240 SL** may be applied before the weeds emerge.

In emerged sugarcane, treatment can cause damage if the spray is not directed and hot humid conditions prevail. The danger of this occurring will be minimised if the spray is directed to the interrow so as to avoid wetting the cane leaves.

HEXAZINONE 240 SL should normally control weeds for a period of 8 – 12 weeks.

APPLICATION RATES PER ha:			
TIME OF APPLICATION	**SOIL TYPE**	**CLAY %**	**PRE-EMERGENCE OF WEEDS HEXAZINONE 240 SL ℓ/HA**
Early Season	Light to Loamy Sand	5 - 15%	1.75 - 2.25ℓ
	Loamy Sands to Sandy Clay Loams	16 - 35%	2.25 - 2.75ℓ
	Sandy Clay to Clay or soils with high organic matter	>35%	2.5 - 3ℓ (Read notes below)
Mid-Season	Light to Loamy Sand	5 - 15%	1.75 - 2ℓ
	Loamy Sands to Sandy Clay Loams	16 - 35%	2 - 2.25ℓ
	Sandy Clay to Clay or soils with high organic matter	>35%	2 - 2.5ℓ (Read notes below)
TIME OF APPLICATION	**SOIL TYPE**	**CLAY %**	**PRE-EMERGENCE OF WEEDS HEXAZINONE 240 SL ℓ/HA**
Late Season	Light to Loamy Sand	5 - 15%	1 - 1.15ℓ
	Loamy Sands to Sandy Clay Loams	16 - 35%	2ℓ
	Sandy Clay to Clay or soils with high organic matter	>35%	2.25ℓ (Read Notes below)

IMPORTANT NOTES:

- These dosage rates are for pre-emerge weed control only.
- Always use the lower rate for light, less absorptive soils with a low cation exchange capacity.
- For extremely heavy soils (usually with a high cation exchange capacity) confirm actual dose rate with Technical Advisor.

RECOMMENDATIONS FOR SUGAR CANE FIELD VERGES AND BREAKS:

- Apply the product in 200 - 400 litres water per ha as a uniform overall spray at a pre-emergence or very early post-emergence stage of weed growth.
- It should be applied prior to, or during the period of active growth of the weeds.
- The treatment is not designed to completely destroy all weeds and leave bare ground; some weeds may be only severely stunted. Growth will be retarded. The weeds listed will be controlled for a longer period.

Dose Rates – verges of sugar cane fields:

SOIL TYPE	DOSAGE/HA	SPOT TREATMENT (PER 10m²)	REMARKS
Sand and Sandy Loam (<20% clay) Sand and Clay Loam (21-35% clay) Sand Clay to Clay (>35% clay)	7.5ℓ 11.3ℓ 15ℓ	7.5mℓ 11.3mℓ 15mℓ	Apply as a directed spray to avoid wetting the leaves of the sugar cane.

WEEDS NORMALLY CONTROLLED:

GRASSES	
COMMON NAME	BOTANICAL NAME
Sweet Signal Grass	*Brachiaria Eruciformis*
Crab Finger Grass	*Digitaria Sanguinalis*
Finger Grass	*Digitaria Spp.*
GRASSES	
COMMON NAME	BOTANICAL NAME
Goose Grass	*Eleusine Indica*
Sweet Buffalo Grass	*Panicum Schinzii*
Elbow Buffalo Grass	*Panicum Subalbidum*
Common Buffalo Grass	*Panicum Maximum*
Sticky Bristle Grass	*Setaria Verticilata*
Red Bristle Grass	*Setaria Pallide-Fusca*
BROADLEAF WEEDS	
Invading Ageratum	*Ageratum Conyzoides*
Yellow-Flowered Mexican Poppy	*Argemone Mexicana*
Black Jack	*Bidens Pilosa*
Nettle-Leaved Goosefoot	*Chenopodium Murale*
Cosmos	*Cosmos Bipinnatus*
Thorn-Apple	*Datura Stramonium*
Spiny Emex	*Emex Australis*
Gallant Soldier	*Galinsoga Parviflora*
Bladderweed	*Hibiscus Trionum*
Apple Of Peru	*Nicandra Physaloides*
Purslane	*Portulaca Oleracea*
Nightshade	*Solanum Nigrum*
St Paul's Wort	*Sigesbeckia Orientalis*
SEDGES	
	Fimbristylis Dichotoma

	Fimbristylis Bispidula
	Cyperus Distans

Weeds not normally controlled:
Purple nutsedge - *Cyperus rotundus*
Common couch - *Cynodon dactylon*

Variable weed control:
Wild sorghum - *Sorghum species*
Common buffalo grass - *Panicum maximum*