

READ THE LABEL BEFORE USE

GRASIDIM^{*}

240 EC



Reg. No./Nr. L10781 Act/Wet 36/1947

A Selective, emulsifiable systemic weedkiller for the post-emergence control of certain grasses in various crops, forestry plantations, volunteer maize (including Glyphosate tolerant maize) and industrial sites as listed;

'n Selektiewe emulgeerbare sistemiese onkruidodder vir die na-opkomsbeheer van sekere grasse in verskillende gewasse, bosbouplantasies, opslagmielies (insluitend Glifosaat tolerante mielies) en industriële gebiede as gelys;



DANGER

Hazard statements

- Harmful if swallowed
- Harmful in contact with skin
- Causes severe skin irritation and eye damage
- May cause genetic defects

Precautionary statements

- Obtain, read and follow all safety instructions before use
- Wash hands thoroughly after handling. Do not touch eyes
- IF SWALLOWED: Get medical help. Avoid breathing dust/fume/gas/mist/vapours/spray

HERBICIDE GROUP CODE

A

ONKRUIDDODDER GROEPKODE

ACTIVE INGREDIENT

Clethodim (cyclohexanedione)

/
240 g/l

AKTIEWE BESTANDDEEL

Kletodim (sikloheksaandion)

NET VOLUME 5 l

NETTO VOLUME 5 l

Distributed by/ Versprei deur:

Ecoguard Biosciences (Pty) Ltd.

Reg. 1988/001616/07

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ECOGUARD

Environmentally compatible solutions for
pest & vegetation management

Registration holder/Registrasie houër :

Rainbow Agrosiences (Pty) Ltd

2011/008674/07

*Registered trademark of Rainbow
Agrosiences (Pty) Ltd

UN NUMBER

3082

UNNUMMER

BATCH NUMBER

LOTNUMMER

DATE OF MANUFACTURE

DATUM VAN VERVAARDIGING

EMERGENCY CONTACT Tel: 011 463 5842

TYGERBERG POISON INFO CENTRE: 086 155 5777

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

WARNINGS:

When using **GRASIDIM 240 EC**, allow 14 days after last application and harvesting of onions and cabbages.

For all other crops - allow 28 days after last application and harvesting or feeding of crop.

- Handle with care.
- May be harmful if swallowed.
- May be harmful in contact with skin.
- Harmful if inhaled.
- Causes skin irritation.
- Causes serious eye damage.
- May cause an allergic skin reaction.
- May cause genetic defects.
- May cause cancer.
- Suspected of damaging fertility or the unborn child.
- May cause drowsiness or dizziness.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Toxic to aquatic life.
- Harmful to aquatic life with long lasting effects.
- Do not spray over or allow drift to contaminate water or adjacent areas.
- Re-entry. Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- Store away from food and feeds, fertilizers and other chemicals.
- 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 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 weeds 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 instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration.

Consult the supplier or registration holder in the event of any uncertainty.

PRECAUTIONS:

- Obtain, read and follow all safety instructions before use.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash body thoroughly after handling.
- Wash hands thoroughly after handling. Do not touch eyes.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- In case of inadequate ventilation - wear respiratory protection.
- IF SWALLOWED: Obtain medical attention.
- IF ON SKIN: Obtain medical attention.
- IF ON SKIN: Wash with plenty water.
- IF INHALED: remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned, obtain medical attention.
- Obtain medical attention if you feel unwell.
- If skin irritation occurs: obtain medical attention.
- If skin irritation or rash occurs: obtain medical attention.
- If experiencing respiratory symptoms: Obtain emergency medical attention immediately.
- Take off contaminated clothing and wash it before reuse.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not eat, drink or smoke whilst mixing or applying, or before washing hands and face and changing clothes.
- Avoid spray drift onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- Rinse the container three times with a volume of water equal to a minimum of 10 % of the container. Add the rinsing to the contents of the spray tank before destroying the empty container by perforation and flattening. Do not use empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

RELEVANT SUBSTANCES

Chemical Name	Concentration (g/l)
Clethodim	240
Phenylethyl phenol polyoxyethylene ether	>40
Calcium dodecylbenzene sulfonate	>40
Solvent naphtha	>600

FIRST AID TREATMENT

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Inhalation: Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily.

Skin contact: Gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye contact: No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Advice to doctors: Treat symptomatically.

RESISTANCE WARNING

For resistance management, **GRASIDIM 240 EC** is a group code A herbicide. Any weed population may contain individual weeds naturally resistant to **GRASIDIM 240 EC** and other group code A herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **GRASIDIM 240 EC** or any other group code A herbicide. In order to delay herbicide resistance:

- Avoid the exclusive and repeated use of herbicides from the same herbicide group code.
- Alternate or tank mix with products from different herbicide group codes.
- Integrate chemical and cultural control methods into weed control programmes.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

For optimum weeds control ensure a thorough spray coverage over the entire leaf area of the targeted plants. Before applying **GRASIDIM 240 EC** it is advisable to wait until the majority of the grass weeds are within the optimum stages for control as mentioned in the "Weeds controlled and **GRASIDIM 240 EC** dose rates" list. Since **GRASIDIM 240 EC** has a limited soil residual action, the weeds to be controlled must have emerged before applying **GRASIDIM 240 EC**. Do not apply to crops or weeds stressed by abnormal weather or growing conditions, drought, insect damage, diseases, nutrient deficiencies, waterlogged soils or plants under stress through prior use of agrochemicals.

Compatibility:

- **GRASIDIM 240 EC** is compatible with most of no-ionic surfactant.

Use Restrictions

Apply **GRASIDIM 240 EC** only on actively growing grass weeds which are within the recommended growth stages as stipulated under "Weeds controlled and **GRASIDIM 240 EC** dose rates". Do not apply to plants/weeds that are stressed from whatever cause, e.g., moisture or temperature extremes, insect damage, nutrient deficiencies, herbicide carry over or wind damage.

Allow at least 4 days after **GRASIDIM 240 EC** application, before applying any other treatment. Where follow-up crops are to be planted after **GRASIDIM 240 EC** applications, apply the following safety periods:

- | | |
|--|--------|
| • Broadleaf crops | None |
| • Maize and other grains and grass crops | 21Days |

Rain or irrigation within 1 hour after a **GRASIDIM 240 EC** application may necessitate a second application. Thorough and uniform spray coverage over the entire leaf area of the target plant is necessary for optimum weed control, especially where the crop is very dense. **GRASIDIM 240 EC** has been tested on the most important crop varieties which were commercially used at the date of registration. Do not apply **GRASIDIM 240 EC** to large areas of newly released cultivars before consulting your local **GRASIDIM 240 EC** representative or distributor, or prior phytotoxicity testing.

Mixing Instructions:

Shake the GRASIDIM 240 EC container thoroughly just before use. Close the container tightly after use. Thoroughly clean the sprayer by flushing the system with water containing detergent before spraying. Half fill the spray tank with clean water and add the required quantity of **GRASIDIM 240 EC** as recommended below. Then fill the tank to the required volume with clean water, ensuring thorough agitation. Do not allow the mixture to stand overnight. Thoroughly flush out spraying equipment at the end of the spraying operation.

Ground Application:

- **GRASIDIM 240 EC** can be applied with conventional ground equipment (tractor mounted sprayers, knapsack sprayers) capable of producing a uniform spray distribution.
- Flat fan nozzles are recommended.
- Use a low spray pressure (100-200 kPa) so that **GRASIDIM 240 EC** is applied as a coarse droplet spray.
- Ensure thorough coverage of the weeds by applying at least 150 l of spray mixture per hectare.
- Do not spray during severe drought or when the area to be treated is severely waterlogged, thus restricting the growth of the crops and weeds.

GRASIDIM 240 EC controls the grass species as indicated in the “**Weeds controlled**” table. Other grass species that were not present during the development trials of the product could possibly also be controlled to a certain degree. The registration holder does not accept any responsibility for unlisted weeds.

Application rates:

USE	DOSAGE RATE/HA	REMARKS
Seedbeds (control of volunteer maize containing the glyphosate resistant gene).	0.5 l	Apply to actively growing volunteer maize plants in the 4–8 leaf stage.
Citrus, pome fruit, stone fruit, and grapes.	0.5 - 1.5 l	Apply as a directed spray to actively growing grass weeds. Use the dose rate listed under “Weeds controlled and GRASIDIM 240 EC dose rates”.
Onions and Sunflowers, Cabbages, Lucerne and Leguminose pastures (including medics) Green beans, Soybeans, Groundnuts, Dry beans, Potatoes.	0.5 - 1.0 l	Apply to actively growing grass weeds. Use the dose rate listed under “Weeds controlled and GRASIDIM 240 EC dose rates”.
Orchards & Vines; Afforestation		Apply to actively growing grass weeds during the weeds' growth stages as indicated below.
Spray over tops of Eucalyptus and Pine trees Control of grass weeds.		

Remarks: 0.3% no-ion surfactant is preferred to make better performance.

Weeds controlled and GRASIDIM 240 EC dose rates

WEED SPECIES CONTROLLED BY GRASIDIM 240 EC		GROWTH STAGE
Common Oats	<i>Avena sativa</i>	3-4 leaves
Bidens Bipinnata	<i>Bidens bipinnat</i>	2-6 leaves
Common Lambsquarters	<i>Chenopodium album</i>	2-6 leaves
Common Couch (Regrowth May Take Place)	<i>Cynodium dactylon</i>	4-8 leaves
Crowfoot	<i>Dactyloctenium aegyptium</i>	2-5 leaves
Crab Finger-Grass	<i>Digitaria sanguinalis</i>	2-6 leaves
Marsh Grass	<i>E. colona</i>	3-6 leaves
Barnyard Grass	<i>Echinochloa crus-galli</i>	4-8 leaves
Goose Grass	<i>Eleusine coracana</i>	3-6 leaves
Barley	<i>Hordeum vulgare</i>	3-4 leaves
Italian Ryegrass	<i>Lolium multiflorum</i>	2-5 leaves
Perennial Ryegrass	<i>Lolium perenne</i>	2-4 leaves
Common Buffalo Grass	<i>Panicum maximum</i>	2-8 leaves
Sweet Panicgrass	<i>Panicum schinzii</i>	2-6 leaves
Little Seeded Canary Grass	<i>Phalaris minor</i>	2-5 leaves
Sheep Sorrel	<i>Rumex acetosella subsp. pyrenaicus</i>	2-6 leaves
Red Bristle Grass	<i>Setaria pallide-fusca</i>	2-6 leaves
Sticky Bristle Grass	<i>Setaria verticillata</i>	3-6 leaves
Wheat	<i>Triticum aestivum</i>	3-5 leaves
Herringbone Grass	<i>Urochloa panicoides</i>	4-8 leaves
Volunteer Maize Containing the Glyphosate Resistant Gene	<i>Zea mays</i>	4-8 leaves

Note. For optimal *Cynodon* control thorough pre-spray tillage operations are required to break up the sward, thereby diminishing the underground root mass. Apply **GRASIDIM 240 EC** once *Cynodon* regrowth contains approximately 2-6 leaves.

IMPORTANT NOTES

1. Poor weed control may result if **GRASIDIM 240 EC** is applied when the weeds have been subjected to moisture stress or any other stress. Apply only during moist conditions when the weeds are actively growing.
2. Weeds that have not emerged at the time of application will not be controlled by **GRASIDIM 240 EC**.
3. **GRASIDIM 240 EC** may cause the temporary cupping/ curling of emerging eucalyptus leaves but will not adversely affect the growth and the plant will ultimately recover.