

DIRECTIONS FOR USE ENCLOSED Batch Number: Date of Manufacture:

SERIES 240 EC

Reg. No. L 8913 / W 130874 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 1

ACTIVE INGREDIENT:

clethodim (cyclohexanedione)240 g/ℓ

Registration holder: **UNIVERSAL CROP PROTECTION (PTY) LTD.** Co. Reg. No. 1983/008184/07 P.O. Box 801, KEMPTON PARK, 1620, Tel. (011) 396 2233

WARNINGS Withholding periods:

Minimum number of days between the last application and harvest:			
Canola	90 Days		
Other crops	28 Days		

Hazard statements:

May be harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Harmful if inhaled.
May cause genetic defects.
May cause cancer.
May damage the unborn child.
Harmful to aquatic life with long lasting effects.

- Handle with care.
- **Do not induce vomiting** if swallowed, due to an aromatic solvent.
- Do not contaminate dams, rivers, lakes or any other water sources.
- Store in a cool, dry, well-ventilated area.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- <u>Re-entry</u>: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

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 weeds to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further 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 event of any uncertainty.

PRECAUTIONS

Precautionary statements:

Obtain, read and follow all safety instructions before use.

Avoid breathing dust, fume, gas, mists, vapours or spray.

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 impervious rubber gloves and boots, protective clothing and chemical safety goggles. IF SWALLOWED: Get emergency medical help immediately. IF ON SKIN: Wash with plenty of water and non-abrasive soap.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.

IF exposed or concerned, get medical advice.

Do NOT induce vomiting.

If skin irritation or rash occurs: Get medical help.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

- Do not eat, drink or smoke while mixing, applying or before washing hands and face or change of clothing.
- Prevent drift on to other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Keep the product away from sources of ignition.
- Clean the applicator after use and dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: 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 <u>www.croplife.co.za</u>. Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components			
Clethodim	240 g/ℓ		
N-methyl-2-Pyrrolidone	< 10%		
Naphtha (heavy aromatic solvent)	< 40 %		
Liquid Petroleum	< 40 %		
Calcium dodecylbenzene sulfonate	< 10 %		
Pesticide Emulsifier 1601	< 10 %		

FIRST AID TREATMENT

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and immediately consult a doctor.

- <u>Skin contact:</u> Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.
- <u>Eye contact</u>: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Seek medical attention immediately.**
- <u>Inhalation:</u> Remove from exposure area to fresh air immediately. If breathing has stopped, perform mechanical artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. **Get medical attention immediately.**
- <u>Ingestion:</u> Seek medical attention or call a poison control centre for treatment advice. **Do not induce vomiting, product contains aromatic solvent.** Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

NOTE TO PHYSICIAN

No specific antidote. Treat symptomatically and supportively.

Mode of Action:

SERIES 240 EC contains **Clethodim**, a cyclohexane oxime compound which belongs to HRAC group 1. It is used as a post-emergence herbicide to control annual and perennial grass weeds in broad leaf crops. **Clethodim** is a selective, systemic herbicide that is absorbed by the foliage and translocated acropetally and basipetally in the phloem and xylem to the root system and the growing parts of the plant.

RESISTANCE WARNING

SERIES 240 EC is a group code 1 herbicide. Any weed population may contain individuals naturally resistant to **SERIES 240 EC** and other group code 1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **SERIES 240 EC** or any other group code 1 herbicide.

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.

USE RESTRICTIONS

- Where follow-up crops are to be planted after SERIES 240 EC applications, apply the following withholding periods:
 - Broadleaf crops: None

Maize, other grains and grass crops: The pre-plant interval for the 0.5 litre per hectare dosage rate is seven (7) days for dosages higher than 0.5 litre per hectare the pre-plant interval should not be less than 30 days.

The higher pre-plant dosage rates (<**0.5 litre per hectare**) are **NOT** recommended where grass crops (maize and other grain crops) are to be planted.

- Important Applications in sandy soils (< 10 % clay) may still result in slight phytotoxicity where these crops are planted as follow-up crops.
- Allow at least four (4) days after a **SERIES 240 EC** application before applying any other agrochemical treatment. Do not tank mix **SERIES 240 EC** with a fungicide application in Canola.
- Weeds that have not emerged at the time of application will not be controlled by SERIES 240 EC.
- Do not apply to crop or weeds under stress conditions such as moisture (drought or if the area to be treated is severely waterlogged), extreme temperatures, insect damage, nutrient deficiencies, herbicide carry over or wind damage as poor control and/or crop damage may occur.
- Apply **only** during moist conditions when the weeds are growing actively.
- Rain or irrigation within one (1) hour after a **SERIES 240 EC** application may require a follow-up application.
- Do not apply **SERIES 240 EC** to large areas of newly released cultivars, before consulting your local **SERIES 240 EC** representative or distributor, or prior to testing phytotoxicity.
- Under certain conditions **SERIES 240 EC** may cause some crinkling and cupping of emerging *Eucalyptus* leaves. However, this is normally of a temporary nature and growth will not be affected adversely.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- SERIES 240 EC may be applied in tank mixtures with Slash 710 SG/Glygran 710 SG/Lynch 710 SG and Slash Plus 540 SL/Panga Plus 540 SL/Lynch Plus 540 SL.
- For pre-plant control of volunteer Glyphosate resistant maize plus broadleaf weeds SERIES 240 EC may be applied in tank mixtures with Slash 710 SG/Glygran 710 SG/Lynch 710 SG and 2,4 D AMINE 480 SL (L 4505 / N-AR 1096 / W 130459) or Lexus 480 SL/Lotus 480 SL or Trade 700 WDG/Transfer 700 WDG.
- **SERIES 240 EC** must <u>NOT</u> be applied in tank mixtures with any other agrichemical products, other than the ones listed above.
- SERIES 240 EC must always be used in combination with one of the following adjuvants:
 - Link / Direct / Solwet plus Velocity[®] Super/AMS-Super or Velocity[®]-DryMax/AMS-Granule.
 - OR Summit Super/Benefit Plus.
 - OR DESTINAIRE® plus INTERLOCK®.
- Always consult the applicable product labels for WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE.

Mixing instructions:

- Shake the **SERIES 240 EC** container before use. Close the container tightly after use.
- Half fill spray tank with clean water and ensure agitation. Add the required volume of **SERIES 240 EC** to the water in the spray tank.
- Fill the mixing tank to the required final volume while agitating, to ensure thorough mixing.
- Ensure thorough agitation of the mixture in the spray tank during mixing and spraying.

• Prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

Cleaning of spray equipment after application:

- Clean spraying equipment immediately after application of the final tank mixture of **SERIES 240 EC** for each day's spraying operation.
- Thoroughly clean the sprayer, including the boom and boom and nozzles by flushing the system with water and detergent and spraying it through the boom and nozzles.
- Flush and spray the remaining detergent solution out of the complete system with clean water.

Ground application:

- Apply **SERIES 240 EC** with a properly calibrated sprayer, in good working order, with flat fan spray nozzles.
- Apply at a low spray pressure (100 to 200 kPa) to obtain a medium to coarse droplet spray spectrum.
- Apply in at least 200 litres water per hectare, to ensure complete and even spray coverage over the entire leaf area of the target plant, especially where the crop canopy is dense.

APPLICATION RATES

IMPORTANT NOTES

- Apply SERIES 240 EC only on actively growing grass weeds and/or volunteer maize, which are within the recommended growth stages as directed below.
- Apply the lower recommended dosage rates on younger grass weeds and the higher dosage rates on older grass weeds as required for the different species as indicated in the list below.

Сгор	Dosage per hectare ℓ or kg/ha	Remarks		
<u>Green beans,</u> <u>Soybeans,</u> <u>Sunflowers,</u> <u>Groundnuts,</u> <u>Dry beans,</u> <u>Potatoes</u> <u>Lucerne,</u> <u>Onions,</u>	0.5 to 1.0 <i>t</i> (25 to 50 m <i>t</i> / 10 <i>t</i>) PLUS Adjuvants*	Apply as a post-emergent application on grass weeds during the weeds' growth stages as indicated below. Refer also " USE RESTICTIONS " above.		
<u>Carrots</u>	0.375 <i>l</i>	Apply the SERIES 240 EC when the carrots are between the 2 to 6 true leaf stage.		
<u>Orchards</u> (Citrus, Pome & <u>Stone fruit) &</u> Vines	0.5 to 1.0 <i>t</i> (25 to 50 m <i>t</i> / 10 <i>t</i>) PLUS Adjuvants*	Apply to actively growing grass weeds during the weeds' growth stages as indicated below.		
<u>Canola</u>	0.5 ℓ (25 mℓ / 10 ℓ) PLUS Adjuvants*	Apply once the Canola has reached at least the 2 to 3 leaf stage, and not later than the 8-leaf growth stage (prior to the beginning of stem elongation). Apply to actively growing weeds at the correct growth stage as indicated in the "WEEDS CONTROLLED" table. Refer "USE RESTRICTIONS" .		
<u>Leguminous</u> pastures	0.5 to 1.0 <i>t</i> (25 to 50 m <i>t</i> / 10 <i>t</i>) PLUS Adjuvants*	Apply prior to the beginning of flowering, as Clethodim may cause flower-drop in leguminous pastures. Apply to actively growing weeds at the correct growth stage as indicated in the " WEEDS CONTROLLED " table.		

Сгор	Dosage per hectare ℓ or kg/ha	Remarks
Afforestation (<i>Eucalyptus</i> and Pine trees)	0.5 to 1.0 <i>t</i> (25 to 50 m <i>t</i> / 10 <i>t</i>) PLUS	Apply to actively growing grass weeds during the weeds' growth stages as indicated below.
Pre-plant control of volunteer Glyphosate resistant maize plus broadleaf weeds and grasses	Adjuvants* 0.5 to 1.0 ℓ (25 to 50 mℓ / 10 ℓ) PLUS 1.5 kg (75 g / 10 ℓ) Slash 710 SG	For the control of volunteer Glyphosate resistant maize plus broadleaf weeds and grasses (as specified in tables below) in pre-plant situations. Apply the higher dosage rate to bigger plants up to 8-
Post emergence Glyphosate resistant soybeans	OR 2.0 ℓ (100 mℓ / 10 ℓ) Slash Plus 540 SL PLUS Adjuvants*	leaf stage. PLEASE NOTE THE PRE-PLANT INTERVAL FOR THE 0.5 litre per hectare DOSAGE RATE IS seven (7) DAYS FOR FOLLOW UP GRAIN CROPS (MAIZE AND OTHER GRASS CROPS). FOR DOSAGES HIGHER THAN 0.5 litre per hectare THE PRE-PLANT INTERVAL SHOULD NOT BE LESS THAN 30 DAYS.

Сгор	Dosage per hectare	Remarks
-	ℓ or kg/ha	
Pre-plant control	0.5 to 1.0 ℓ	
of volunteer	(25 to 50 mℓ / 10 ℓ)	
<u>Glyphosate</u> resistant maize		
plus difficult to	PLUS	
control broadleaf		
weeds and	1.5 kg	
<u>grasses</u>	(75 g / 10 <i>t</i>)	
	Slash 710 SG	
	AND	For the control of volunteer Glyphosate resistant maize plus broadleaf weeds and grasses (as specified in tables
	1 <i>e</i>	below) in pre-plant situations.
	(50 mℓ / 10 ℓ)	Apply the higher decays acts to bigger plants on the C
	2,4 D Amine 480 SL	Apply the higher dosage rate to bigger plants up to 8- leaf stage.
	_,	
	OR	PLEASE NOTE THE PRE-PLANT INTERVAL FOR
	000	THE 0.5 litre per hectare DOSAGE RATE IS seven (7)
	320 m <i>l</i>	DAYS FOR FOLLOW UP GRAIN CROPS (MAIZE AND OTHER GRASS CROPS). FOR DOSAGES HIGHER
	(16 mℓ / 10 ℓ)	THAN 0.5 litre per hectare THE PRE-PLANT
	Lexus 480 SL	INTERVAL SHOULD BE NOT LESS THAN 30 DAYS.
	OR	
	220 g	
	(11 g / 10 l)	
	Trade 700 WDG	
	PLUS	
	Adjuvants*	
Strawberries	0.5 to 1.0 <i>l</i>	
	(25 to 50 m ^ℓ / 10 ℓ)	
		Apply to actively growing grass weeds during the weeds'
	PLUS	growth stages as indicated below.
	Adjuvants*	
* NOTE - ADJUVAN		

1. For all crops **except Canola**, one of the following adjuvants may be added to **SERIES 240 EC** spray mixtures:

• 0.1 % Link plus 2.0 % Velocity[®] Super or 1.0 % Velocity[®] DryMax.

OR

• 0.3 % Summit Super plus 2.0 % Velocity[®] Super or 1.0 % Velocity[®] DryMax.

OR

• 1ℓ / ha (50 m ℓ / 10 ℓ) **Destinaire**[®] plus 0.3 ℓ / ha (15 m ℓ / 10 ℓ) **Interlock**[®] per hectare.

2. For Canola, add 0.1 % Link plus 2.0 % Velocity[®] Super or 1.0 % Velocity[®] DryMax.

Consult the applicable product labels for WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE.

WEEDS CONTROLLED BY SERIES 240 EC: Annual Grass Weeds				
Botanical name	Common name	Growth stage		
Avena sativa	Common wild oats	2 to 4 leaves		
Bromus diandrus	Ripgut brome	2 to 6 leaves		
Dactyloctenium aegyptium	Crow foot	2 to 5 leaves		
Digitaria sanguinalis	Crab fingergrass	2 to 6 leaves		
Echinochloa crusgalli	Barnyard grass	4 to 8 leaves		
Echinochloa colona	Marsh grass	3 to 6 leaves		
Eleusine coracana	Goose grass	3 to 6 leaves		
Eleusine indica	Goose grass	3 to 6 leaves		
Hordeum vulgare	Barley	3 to 4 leaves		
Lolium multiflorum	Italian ryegrass	2 to 4 leaves		
Lolium perenne	Perennial ryegrass	2 to 4 leaves		
Panicum maximum	Common buffalo grass	2 to 8 leaves		
Phalaris minor	Little seeded canary grass	2 to 5 leaves		
Setaria pallide-fusca	Red bristle grass	2 to 6 leaves		
Setaria verticillata	Sticky bristle grass	3 to 6 leaves		
Sorghum bicolor*	Wild grain sorghum	3 to 6 leaves		
Sorghum halepense*	Johnson grass	3 to 6 leaves		
Triticum aestivum	Wheat	3 to 5 leaves		
Urochloa panicoides	Herringbone grass	4 to 8 leaves		
Zea mays Volunteer maize 4 to 8 leaves				

Improved control of larger *Sorghum* grass weeds will be obtained at a dosage rate of 1.2 litres per hectare.

FOR PRE-PLANT CONTROL OF VOLUNTEER GLYPHOSATE RESISTANT MAIZE AND ADDITIONAL BROAD LEAF WEEDS:						
SERIES 240 EC	PLUS		PLUS		OR	OR
0.5 to 1.0 d/ha	Slash 710 SG		2,4 D Amine 480 SL	Lexus 480 SL		Trade 700 WDG
(25 to 50 mℓ / 10 ℓ)	to 50 mℓ / 10 ℓ) 1.5 kg / ha (75 g / 10 ℓ)		1 ℓ / ha	320 mℓ / ha (16 mℓ / 10 ℓ)		220 g/ha
			(50 mℓ / 10 ℓ)			(11 g / 10 l)
Botanical name		Common name		Growth stage		
Amaranthus spp.		Pigweed		12 leaf to pre-flower		
Hibiscus spp.		-		12 leaf to pre-flower		
Portulaca oleracea*		Purslane		12 leaf to pre-flower		
Commelina benghalensis*		Wandering Jew		3 leaf stage		
Ipomoea purpurea*		Common morning glory			12 leaf to pre-flower	

* Even at higher rates, the control of large established *Ipomoea* or *Portulaca* species may be variable, necessitating a follow-up application.

The registration holder does not accept any responsibility for control of weeds NOT listed above.

The following products mentioned in this label may be replaced with equivalent products:

- LEXUS 480 SL (L 9598) = LOTUS 480 SL (L 9599) (Dicamba),
- SLASH PLUS 540 SL (L 8819 / W 1301444) = PANGA PLUS 540 SL (L 8818) = LYNCH PLUS 540 SL (L 8816) (Glyphosate),
- SLASH 710 SG (L 8450 / W 130058 / N-AR 2190) = GLYGRAN 710 SG (L 8449) = LYNCH 710 SG (L 8670) (Glyphosate),
- TRADE 700 WDG (L 9228) = TRANSFER 700 WDG (L 9227) (Dicamba),
- LINK (L 8675) = DIRECT (L 8680) = SOLWET (L 8679),
- SUMMIT SUPER (L 8539) = BENEFIT PLUS (L 8538),
- VELOCITY[®] SUPER (L 9603 / W 130996) = AMS-SUPER (L 9758) and
- VELOCITY[®] DRYMAX (L 9454 / N-AR 1528 / W 130995) = AMS–GRANULE (L 9610).

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DIRECT, GLYGRAN 710 SG, LOTUS 480 SL, PANGA PLUS 540 SL and TRANSFER 700 WDG are registered products of VILLA CROP PROTECTION (PTY) LTD.

2,4 D AMINE 480 SL, LEXUS 480 SL, SLASH PLUS 540 SL, SLASH 710 SG, TRADE 700 WDG, BENEFIT PLUS, SUMMIT SUPER, VELOCITY® DRYMAX, AMS–GRANULE, VELOCITY® DRYMAX, AMS–SUPER and LINK are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

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