## Herbicide



# **IMMIMOX 48 SL**

Reg. No. L 10960 Act/Wet No. 36 of/van 1947

A soluble concentrate, post-emergent herbicide used for the control of certain annual broadleaf- and grass weeds in Clearfield® production systems.



'n Oplosbare konsentraat, na-opkoms onkruiddoder vir die beheer van sekere brëeblaarplante en grasse in Clearfield® produksiesisteme.

#### **ACTIVE INGREDIENTS / AKTIEWE BESTANDDELE**

imazapyr (imidazolinone) 15 g/e imasapir (imidasolinoon) imazamox (imidazolinone) 33 q/\elli imazamox (imidasolinoon)

#### HRAC HERBICIDE GROUP CODE 2 HRAC ONKRUIDDODER GROEPKODE



Registration holder / Registrasiehouer: Villa Crop Protection (Ptv) Ltd. Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07 PO Box / Posbus 10413, Aston Manor, 1630 Tel: 011 396 2233

Website / Webblad: www.villacrop.co.za



24 HR EMERGENCY NUMBERS: Griffon Poison Information Centre: +27 82 446 8946 24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

UN Number: 3082

Willow Set & Print 011 394-4486















### **IMMIMOX 48 SL**

Reg. No. L 10960 Act/Wet No. 36 of/van 1947 HRAC HERBICIDE GROUP CODE / HRAC ONKRUIDDODER GROEPKODE: 2

#### **ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**

Registration holder / Registrasiehouer: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.
P.O. Box / Posbus 10413, ASTON MANOR, 1630
Tel. (011) 396 2233

#### **CAUSTION / VERSIGTIG**

#### **WARNINGS**

### Withholding period:

Minimum time between the last application and harvest or grazing:		
Clearfield® sunflowers	70 days	
Clearfield® canola	60 days	

- Handle product with caution.
- May cause skin and eye irritation.
- Toxic to fish.
- Store in a cool, dry, well-ventilated place.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: 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 products 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**

- Do not inhale the spray mist.
- Avoid contact with the skin and eyes.
- Wear chemical safety goggles, rubber gloves and boots when handling and preparing the spray mixture.
- · Wash contaminated clothes after use.
- Wash with soap and water after use and after accidental skin contact.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Clean the applicator with a household ammonia solution (1 %) before using other pesticides. Let the solution stand for several hours, preferably over-night. Rinse at least twice. This applicator should not be used for applying chemicals other than herbicides.
- Thoroughly clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, 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 (3) 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

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dispose of via an approved collector or recycler (<a href="www.croplife.co.za">www.croplife.co.za</a>). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Do not** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

### **RESISTANCE WARNING**

**IMMIMOX 48 SL** is a group code 2 herbicide. Any weed population may contain individuals naturally resistant to **IMMIMOX 48 SL** and other group code 2 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **IMMIMOX 48 SL** or any other group code 2 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**

• All recommendations on this label should be followed. Do not make any changes to dosage rates, product combinations or adjuvants, indicated on this label. A test planting is recommended.

Re-cropping intervals \*:

The following waiting periods should lapse between applica	tion of IMMIMOX 48 SL and the planting of
follow-up crops so as to prevent damage	
Clearfield® sunflowers and canola	None
Wheat	4 months
Maize	10 months
All other crops	20 months

<sup>\*</sup> re-cropping interval = time period between the last application of **IMMIMOX 48 SL** and the anticipated date of planting of a follow-up crop.

The re-cropping intervals mentioned above only apply when average or above average rainfall conditions prevails throughout a season, i.e. a minimum of 350 mm rain between application and planting. An extra 12 months should be added to the re-cropping interval when below average rainfall is recorded. Please contact the registration holder if any for further assistance is needed.

### **General restrictions**

- Apply the product strictly in accordance with the application directions.
- IMMIMOX 48 SL can only be used on Clearfield® hybrids (canola & sunflowers). The use of IMMIMOX 48 SL in non-Clearfield® hybrids will result in 100 % crop loss. Please consult your local agent for the availability of Clearfield® hybrids.
- **IMMIMOX 48 SL** should not be applied to soils with a pH (KCl) below 4.5 or above 7.2.
- DO NOT overlap when spraying.
- DO NOT apply IMMIMOX 48 SL more than once a year.
- DO NOT apply by air.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Spraying under temperature inversion conditions 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.
- Sensitive crops include but are not limited to vegetable crops cereals and other grain crops and sunflower varieties other than Clearfield® sunflowers.

#### **DIRECTIONS FOR USE: Use only as directed.**

## Compatibility:

• IMMIMOX 48 SL is compatible with Velocity® Drymax (L 9454 / N-AR 1528 / W 130995) and INTERLOCK® (L 10254 / W 130875 / N-AR 1856).

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Do not mix IMMIMOX 48 SL with any organophosphate or carbamate insecticides.

#### **General information**

- The "Clearfield® production system" includes both the Clearfield® advanced seeds, which is produced through natural selection (not a GMO), and custom designed herbicides.
- **IMMIMOX 48 SL** is a systemic contact and residual ALS inhibiting herbicide, meaning foliage will take up the herbicide, from where it is translocated to the growth points. This results in leaf chlorosis and growth inhibition or weed death.
- Please note: at 5 to 8 days post application, the crop plants may show symptoms of chlorosis (yellow flash) and internode shortening, however this is short lived and does not influence yield. These symptoms are more pronounced when the crop is under stress, thus ensure that good agricultural practices are maintained i.e. proper soil preparation, enough fertiliser and disease and insect control.
- **DO NOT** apply the product to crops that have been subjected to or are experiencing stress conditions.

### Mixing and application:

- Half fill the mixing tank with clean water.
- Dissolve the desired adjuvant in a small amount of water (e.g. 1 kg of **Velocity® Drymax** should be mixed with two (2) litres of water) before adding to the spray tank while agitating.
- Shake the container well and measure the required volume of **IMMIMOX 48 SL** and add it to the container.
- Stir the contents of the container continuously while filling to the required level with clean water.
- Maintain constant agitation while spraying.
- The prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

# APPLICATION INSTRUCTIONS

**IMPORTANT NOTES** 

Refer to USE RESTRICTIONS, DIRECTIONS FOR USE and APPLICATION INSTRUCTIONS ABOVE

### **APPLICATION RATES**

## 1. PROGRAMME APPLICATION:

- Post-emergence application of IMMIMOX 48 SL plus Velocity® Drymax in Clearfield® sunflower hybrids:
- Always apply IMMIMOX 48 SL in a SPRAY PROGRAMME, with a pre-emergent grass herbicide such as Palladium 960 EC or Palladium Plus 915 EC.
- Apply **IMMIMOX 48 SL** when the Clearfield® sunflowers are between the 2- to 4-leaf stage.
- Apply **IMMIMOX 48 SL** post weed emergence in the 2- to 6-leaf stage, ensuring thorough coverage and wetting of weeds.
- Any grass weeds must be treated before tillering starts.
- Ensure adequate soil moisture for optimal weed control.
- DO NOT apply by air.
- Ground application: Use 200 to 250 litres spray mixture per hectare for overall ground application.
- Do not apply **IMMIMOX 48 SL** when the crop has a full leaf canopy, as this can prevent the herbicide from reaching the targeted weeds.
- The timing of application should be **COMPLETED** within 32 days after planting.
- Weeds should be actively growing and not be under stress as this could inhibit uptake and translocation resulting in poor weed control.
- Apply only one (1) application of IMMIMOX 48 SL per growing season.
- **Do not** re-apply **IMMIMOX 48 SL** a second time if re-planting occurred.
- Should a crop failure (re-cropping) should occur, it is recommended to perform a shallow cultivation (< 5 cm) to apply a pre-emergent grass herbicide.

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<u>Table 1.</u> Always apply IMMIMOX 48 SL in a SPRAY PROGRAMME, with a pre-emergent grass herbicide such as Palladium 960 EC or Palladium Plus 915 EC.

IMMIMOX 48 SL 1000 me/ha	PLUS  Velocity® Drymax 1 % (1000 mε / 100 ε)		
WEEDS CONTROLLED			
Botanical name	Common name		
Amaranthus hybridus	Cape pigweed		
Chenopodium album	White goosefoot		
Chenopodium carinatum	Green goosefoot		
Datura ferox	Large thorn apple		
Digitaria sanguinalis	Crab fingergrass		
Eleusine indica subsp. africanum	Goose grass		
Hibiscus trionum	Bladderweed		
Portulaca oleracea*	Purslane		
Schkuhria pinnata*	Dwarf marigold		
Tagetes minuta*	Khaki weed		
Tribulus terrestris	Devils thorn		

<sup>\*</sup> Variable control of these weeds.

Refer also to the labels of the pre-emergent grass control products **Palladium 960 EC or Palladium Plus 915 EC,** for the spectrum of weeds controlled.

### **CLEARFIELD® CANOLA**

- Apply after the Clearfield<sup>®</sup> Canola has reached the 5-leaf stage, but prior to bud and flower formation.
- Spray trials early post emergence of weeds at 2 to 5 leaf stage (preferably around 4-leaf stage) of broadleaf weeds and from 1st leaf to 1st node stage of grass weeds.
- Weeds must be actively growing and not under stress at time of application.
- Apply in at least 200 litres water per hectare as an overall application. Ensure thorough coverage and wetting of the weeds.
- Apply only one (1) application of **IMMIMOX 48 SL** per growing season.

IMMIMOX 48 SL 1000 to 1400 mt/ha	PLUS  Velocity® Drymax 1 % (1000 g / 100 ℓ)	PLUS  Interlock® 250 m//ha		
WEEDS CONTROLLED				
Botanical nam	е	Common name		
Arctotheca calendula*	Cape marigold			
Bromus diandrus	Ripgut brome			
Emex australis**	Spiny emex			
Erodium moschatum**	Musk heron's bill			
Malva parviflora	Small mellow			
Pentzia suffruticoza	Karoobush			
Raphanus raphanistrum	Wild radish			

<sup>\*</sup> Use higher rates.

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<sup>\*\*</sup> in certain instances, variable control may be achieved.

Consult all product labels mentioned in this label for **DIRECTION FOR USE**, **APPLICATION RATES**, **WARNINGS**, **PRECAUTIONS**, **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

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

- PALLADIUM PLUS 915 EC (L 9359/ W 1301000) = PENTIUM PLUS 915 EC (L 9741) = PARTISAN PLUS 915 EC (L 9942) (S-metolachlor),
- PALLADIUM 960 EC (L 9922 / W 130772) = PENTIUM 960 EC (L 9830) = PARTISAN 960 EC (L 9964) (S-metolachlor) and
- VELOCITY®-DRYMAX (L 9454 / W 130995 / N-AR 1528) = AMS-GRANULE (L 9610).

PENTIUM PLUS 915 EC and/en PENTIUM 960 EC are registered products of/is geregistreerde produkte van

**UNIVERSAL CROP PROTECTION (PTY) LTD** 

PALLADIUM PLUS 915 EC, PALLADIUM 960 EC and/en AMS-GRANULE are registered products of/is geregistreerde produkte van

VILLA CROP PROTECTION (PTY) LTD.

PARTISAN PLUS 915 EC and/en PARTISAN 960 EC are registered products of/is geregistreerde produkte

**CROPASURE (PTY) LTD.** 

INTERLOCK® is a registered trade mark of / is 'n geregistreerde handelsmerk van WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

VELOCITY® DRYMAX is a registered trademark of / is 'n geregistreerde handelsmerk van VILLA CROP PROTECTION PTY LTD.

**CLEARFIELD**® is a registered trademark of / is 'n geregistreerde handelsmerk van **BASF.** 

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