

SPEAR[®] 240 SL

Reg. no. L9101 Act/Wet 36 of/van 1947



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

GROUP	B	HERBICIDE
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A water soluble non-selective herbicide for the control of perennial and annual weed plants in afforestation, non-crop and industrial areas.	'n Water oplosbare nie-selektiewe onkruidodder vir die beheer van eenjarige- en meerjarige onkruid plante in bosbou, industriële persele en nie-gewas gebiede.
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NO HAZARD SYMBOLS AND SIGNAL WORD ARE REQUIRED	Hazard statements No hazard statements are required (Not classified).
	Precautionary statements If medical advice is needed, have product container or label at hand. Keep out of reach of children.

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

imazapyr (imidazolinones) 240 g/L imasapir (imidasolinoon)

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER
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UN no.: Not regulated

EMERGENCY NUMBERS:
Griffon Poison Information Centre: +27 82 446 8946
Tygerberg Poison Information Centre: +27 861 555 777

Batch number
Date of Manufacture
Expiry date

Lotnommer
Datum van Vervaardiging
Vervaldatum

WARNINGS

- No hazard statements are required. (not classified)
- Could be harmful if swallowed.
- May irritate skin.
- Store in a cool dry place away from food, feedstuffs, fertilizer and other agricultural products.
- **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 variety of conditions the registration holder does not warrant that it will be effective under all conditions. The activity and efficacy of the product 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 against the remedy, 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 the 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 the event of any uncertainty.

PRECAUTIONS

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Do not inhale fumes or spray mist.
- Wear protective clothing e.g., face shield, gloves and boots when handling concentrate.
- Avoid skin and eye contact. Wash with soap and cold water after accidental skin contact. Flush eyes with clean running water after accidental eye contact.
- Wash contaminated clothing with water and soap.
- Do not eat, drink or smoke when mixing or applying or before hands and face have been washed.
- Avoid drift of spray to other crops, grazing, rivers, dams or any other area that is not under treatment.
- Clean the applicator after use. Dispose of the rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the empty container three times in with a volume of water equal to a minimum of 10% of that container. Add the rinsings to the contents of the spray tank.
- Destroy the empty container and do not re-use for any other purpose.



- Prevent contamination of food, feedstuffs, drinking water and eating utensils.

RELEVANT SUBSTANCES

None – Not classified as hazardous according to GHS.

FIRST AID

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection.

Take the container label or product name with you when seeking medical attention.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Ingestion: If conscious, rinse mouth thoroughly with water. Drink plenty of water. Never give anything by mouth to an unconscious or convulsing person. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomit, rinse mouth and administer more water. If symptoms persist, call a physician.

TOXICOLOGICAL INFORMATION

Antidotes

No specific antidote. Treat symptomatically.

Symptoms of human poisoning

None known.

NOTICE TO THE USER: This agricultural remedy is to be used only according to the directions of this label. It is an offense under the Act to use this product inconsistent with the directions on the label.

RESISTANCE WARNING

For the purpose of resistance management **SPEAR® 240 SL** is classified as a HRAC group code B herbicide. Any weed population may contain individuals which are naturally resistant to **SPEAR® 240 SL** and other group code B herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used continuously and exclusively. These resistant weeds may not be controlled by **SPEAR® 240 SL** or any group code B herbicides.

To delay 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 and a different mode of action.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes

For specific information on resistance management contact the registration holder of this product.

MODE OF ACTION

B: Inhibition of acetolactate synthase.

USE RESTRICTIONS

- Use low pressure nozzles and anti-drift agents to avoid drift onto non-target plants.
- Avoid applying **SPEAR® 240 SL** within the root zone of non-target plants. When applying **SPEAR® 240 SL** on stumps, avoid run off. Residues in soil will negatively affect seedlings and other established plants.
- Use **SPEAR® 240 SL** only on industrial areas, forestry and non-crop areas only.

After treating Eucalyptus cut stumps, observe the following waiting periods before re-planting plants listed below:

Eucalyptus spp. (blue gums) on light sandy soils	12 months
Eucalyptus spp. (blue gums) on heavier soils	4 months
Pinus spp. (pines seedlings planted in same row with old stumps)	1 month
Pinus spp. (pines seedlings planted in the inter row space with old stumps)	Nil
Wattle	Nil

DIRECTIONS FOR USE

Use only as directed.

Compatibility

It is advisable to always carry out a physical compatibility test prior to application when **SPEAR® 240 SL** is tank mixed with other pesticides. The restrictions on the labels of the products with which **SPEAR® 240 SL** is mixed should be adhered to.

APPLICATION

SPEAR® 240 SL can be applied by any suitable medium or high-volume applicator provided it is equipped with an efficient agitation mechanism, can distribute the spray mixture evenly over the target area and is correctly calibrated. **SPEAR® 240 SL** can be applied either as a pre-emergence or post-emergence although it is more effective when applied post-emergence to actively growing plants.

Rain fast period for **SPEAR® 240 SL** is two hours. Rain falling after two hours of application will not affect the effectiveness of the herbicide. **SPEAR® 240 SL** is taken up through foliage and roots and moves quickly to the meristematic tissue. In the case of control of trees, cut stump applications of **SPEAR® 240 SL** are considered more effective than foliar applications since the product is applied precisely on the target plant. Under good weather conditions, when plants are actively growing, complete kill of plants can be expected within 3 months after application of **SPEAR® 240 SL**, while in dry conditions complete kill is achieved only after nine months due to slow plant growth. **SPEAR® 240 SL** residual action is determined by soil moisture, dosage rate used, and the susceptibility of the target weed species.

APPLICATION RATES AND WEEDS CONTROLLED

1. WEED CONTROL ON INDUSTRIAL SITES, ROADSIDES, RAILWAY RESERVES AND NON-CROP AREAS

TARGET REGION	DOSAGE (L/ha)	REMARKS
Winter rainfall areas	3–4 L	Apply full cover spray. Depending on density of vegetation, use 300–1000 L/ha water. Use high rates where longer residual is required, where common couch (<i>Cynodon dactylon</i>) and tufted perennial grasses are present and on coarse soils with less than 10% clay. SPEAR® 240 SL controls yellow nutsedge, most grasses and herbaceous broadleaf weeds at 4 L/ha.
Summer rainfall areas (inland)	4–6 L	
Summer rainfall areas (coastal)	6–8 L	
Summer rainfall areas (coal and ash)	6–8 L	

Weed spectrum

The following grass weeds are normally controlled by **SPEAR® 240 SL**:

BOTANICAL NAME	COMMON NAME
<i>Chloris virgata</i>	feather-top Chloris
<i>Cynodon dactylon</i>	common couch
<i>Cynodon aethopicus</i>	star grass
<i>Digitaria sanguinalis</i>	crab fingergrass
<i>Eleusine coracana</i>	goose grass

BOTANICAL NAME	COMMON NAME
<i>Eragrostis</i> spp.	lovegrass (control of these weeds species variable)
<i>Hyparrhenia hirta</i>	common thatching grass
<i>Panicum maximum</i>	common buffalo grass
<i>Paspalum dilatatum</i>	common Paspalum
<i>Pennisetum clandestinum</i>	kikuyu
<i>Rhynchelytrum repens</i>	Natal red-top
<i>Sorghum halepense</i>	Johnson grass
<i>Sporobolus africanus</i>	ratstail dropseed
<i>Themeda triandra</i>	red grass
<i>Urochloa panicoides</i>	herringbone grass

The following broadleaf weeds are normally controlled by SPEAR® 240 SL:

BOTANICAL NAME	COMMON NAME
<i>Amaranthus hybridus</i>	common pigweed
<i>Asclepias physocarpa</i>	milkweed
<i>Bidens pilosa</i>	common blackjack
<i>Chenopodium album</i>	white goosefoot
<i>Conyza albida</i>	tall fleabane
<i>Plantago major</i>	broadleaf ribwort
<i>Portulaca oleracea</i>	purslane
<i>Schkuhria pinnata</i>	dwarf marigold
<i>Tagetes minuta</i>	tall khaki
<i>Tribulus terrestris</i>	common dubbeltjie

2. CUT STUMP APPLICATIONS OF SPEAR® 240 SL

PLANT SPECIES	APPLICATION RATE (ml/10 L water)	REMARKS
Eucalyptus – <i>Eucalyptus grandis</i>	200 ml	Treat sapwood areas of freshly cut stumps using low pressure equipment such as a dosing gun or knapsack sprayer. The application equipment should deliver not less than 10 ml per 100 mm diameter of stump. Avoid applying mixture at high pressure.
Guava – <i>Psidium guajava</i>	520 ml	
Lantana – <i>Lantana camara</i>	80 ml	
Bug weed – <i>Solanum mauritianum</i>	80 ml	
Ink berry – <i>Cestrum laevigatum</i>	80 ml	
Ouhout – <i>Leucosidea sericea</i>	125 ml	
Triffid weed – <i>Chromolaena odorata</i>	80 ml	
Syringa – <i>Melia azedarach</i>	125 ml	

3. FOLIAR APPLICATIONS OF SPEAR® 240 SL

WEED SPECIES	APPLICATION RATE	REMARKS
Common bulrush – <i>Typha capensis</i> Common reed – <i>Phragmites australis</i>	SPEAR® 240 SL alone at 250 ml/100 L water (0.25%) OR SPEAR® 240 SL 2–3 L/ha Plus glyphosate (360 g ae/L) 7.5 L/ha	Apply full cover spray up to run-off point. Apply before flowering. Apply SPEAR® 240 SL in a tank mix with glyphosate for enhanced control. Apply when weeds are actively growing in early summer. Application can be repeated same season or next season when necessary. Avoid spraying over the water to be used for irrigation purposes.
WEED SPECIES	APPLICATION RATE (ml/10 L water)	REMARKS
Bracken fern – <i>Pteridium aquilinum</i>	25 ml	Apply full cover spray to actively growing plants. Spray should be applied up to point of run-off.
Katbos – <i>Asparagus</i> spp.	25 ml	
Ribbon bristle grass – <i>Setaria megaphylla</i>	25 ml	
Lantana – <i>Lantana camara</i>	80 ml	