

Eco-Imazapyr 100 SL

Reg. Nr./No. L8202 Wet/Act 36/1947

'n Nie-sistemiese onkruidoder met nawerking vir die beheer van gelyste plante in bosbou gebiede, natuurbewaringsgebiede, nywerheidsgebiede en grasweidings.

A non-selective herbicide with residual activity for the control of plants as listed in forestry areas, nature conservation, industrial and grazing areas

HERBICIDE GROUP CODE	B	ONKRUIDDODER GROEPKODE
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Aktiewe Bestanddeel

Imazapyr (Imidazolinone)
100 g ae / liter

Active Ingredient

Imazapyr (Imidazolinone)
100 g ae / liter

NETTO VOLUME / NET VOLUME: 5L

Registration holder/Registrasie houer :

Future Farm & Forest Services & Supplies (Pty) Ltd
Reg. 1998/014639/07
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Lot nr./Batch No.: _____

Datum van Vervaardiging / Date of Manufacture: _____

24Hour Emergency Tel No:
Tygerberg Poison Information Centre – (021) 931 6129
Griffon Poison Information Centre – (082) 446 8946
Information Hotline Tel No: (033) 330 6985



WARNINGS

- Poisonous by swallowing.
 - Keep out of reach of children and unqualified personnel.
 - Store in a cool dry place away from food and feed.
 - This product may cause allergic skin reactions
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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 weed 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 in the event of any uncertainty.

PRECAUTIONS

- Do not inhale spray mist.
- Do not eat, drink or smoke while mixing or spraying.
- Wash hands and face with soap and water after use and accidental skin contact.
- Avoid spray drift onto other crops, grazing, rivers, dams and any area not under treatment.
- Thoroughly wash and rinse spray equipment after use and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
- 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 container three times with a volume of water equal to a minimum of 10 % of that of the container.
- Add the rinsings to the contents of the spray tank before destroying the container by perforation, flattening and burying, and never re-use for any other purpose.
- Prevent contamination of food, feedstuffs, drinking water and eating utensils.

USE RESTRICTIONS

General

- Care should be taken when treating the stumps of woody species to avoid unnecessary run-off. Although **ECO-IMAZAPYR 100 SL** movement in- or on soil is limited, residues in soil may adversely affect sensitive seedlings and established non-target vegetation.

FORESTRY

- **Waiting periods for replant after clear fell *Eucalyptus* cut stump treatments:**

SPECIES	COMMENTS	WAITING PERIOD
<i>Eucalyptus spp.</i> (blue gums)	On all soils other than light sandy soils blue gums may be planted into treated compartments four months after stump treatments.	4 months
	On light sandy soils (e.g. northern Kwa-Zulu Natal), a waiting period of 12 months is required.	12 months
<i>Pinus spp.</i> (pines)	If pine seedlings are to be planted in the same row as the old stumps, at least 1 month must lapse between stump treatment and planting to avoid possible run-off residues from the treated stumps.	1 month
	Pines may be planted directly after stump treatment, provided they are planted in the inter-row space between the old treated stumps rows.	Nil
Wattle	Wattles may be planted directly after <i>Eucalyptus</i> stump treatment.	Nil

- The above-mentioned waiting periods are valid only if the correct dosage rate of **ECO-IMAZAPYR 100 SL** was applied and a normal or above average rainfall occurred between **ECO-IMAZAPYR 100 SL** application and planting of seedlings.
- Within compartment weed control operations (*Pinus spp.* & *Acacia mearnsii* only), no more than 3 ℓ product / ha should be applied.
- Do not use foliar applications of **ECO-IMAZAPYR 100 SL** in newly established pine and wattle compartments where there is a risk of it coming into contact with tree foliage.
- Do not use **ECO-IMAZAPYR 100 SL** for weed control (foliar or cut-stump) in *Eucalyptus spp.* compartments.

DIRECTIONS FOR USE

USE ONLY AS DIRECTED

General information

- **ECO-IMAZAPYR 100 SL** is a non-selective, systemic herbicide for the control of invader plants as listed in forestry, grazing and conservation areas and *Eucalyptus* eradication in clear fell forestry operations.
- The product is readily absorbed through foliage, roots and freshly cut sapwood regions and is rapidly translocated to the meristematic regions.
- Plant growth is arrested shortly after application, but time to kill the plant is relative to the sensitivity of the species being treated and climatic conditions affecting plant vigour.
- Severely malformed re-growth may occur but further action is not necessary unless healthy shoots develop.
- In multi-stem treatments care should be taken to treat all cut surfaces as individual stumps. Old cut surfaces should be re-cut and treated. Alternatively, the sapwood region can be exposed by a complete frill close to the ground and treated.
 - Cut stump treatments are regarded as being more effective than foliar treatments as the herbicide can be placed directly and accurately on the target plant.
 - Rain two hours after application will not reduce efficacy.
 - Stumps must be cut as close to the soil surface as possible prior to treatment.
 - Addition of adjuvants is not necessary.

Mixing instructions: Three-quarter fill the spray tank with clean water. Shake the **ECO-IMAZAPYR 100 SL** container well, measure the required volume and add it to the spray tank. Fill the spray tank with water to the required level while maintaining agitation to ensure thorough mixing. The prepared spray mixture must not be left in the spray tank for any length of time.

A. **GENERAL PLANT CONTROL: CUT STUMP TREATMENT OF INVADER PLANTS IN FORESTRY, GRASS PASTURES, CONSERVATION, NON-CROP AND INDUSTRIAL AREAS.**

COMMON NAME	BOTANICAL NAME	IMAZAPYR DOSE / 10 ℓ WATER	DIRECTIONS FOR APPLICATION
Blue-gum spp.	<i>Eucalyptus grandis</i>	500 ml (5,0 %)	<p>As a cut stump treatment in grazing and conservation areas as well as in pine and wattle compartments.</p> <p>Apply the mixture to the sapwood region of freshly cut-stump surfaces (i.e. before the surfaces dry) using a low pressure applicator such as a hand held sprayer, a calibrated dosing gun or a knapsack sprayer at not less than 10 ml mixture per 100 mm of stump diameter. High pressure applications are not recommended.</p> <p>See also USE RESTRICTIONS and General information above.</p>
	<i>Eucalyptus macarthurii</i>	750 ml (7,5 %)	
	<i>Eucalyptus maculata</i> and <i>Eucalyptus paniculata</i>	1 250 ml (12,5 %)	
Bug weed	<i>Solanum mauritianum</i>	200 ml (2,0 %)	
Castor oil plant	<i>Ricinus communis</i>	300 ml (3,0 %)	
Grey poplar	<i>Populus canescens</i>	500 ml (5,0 %)	
Guava	<i>Psidium guajava</i>	1 250 ml (12,5 %)	
Ink berry	<i>Cestrum laevigatum</i>	200 ml (2,0 %)	
Jacaranda	<i>Jacaranda mimosifolia</i>	1 000 ml (10,0 %)	
Lantana	<i>Lantana camara</i>	200 ml (2,0 %)	
Ouhout	<i>Leucosidea sericea</i>	300 ml (3,0 %)	
Privet	<i>Ligustrum</i> spp.	500 ml (5,0 %)	
Syringa	<i>Melia azedarach</i>	300 ml (3,0 %)	
Triffid weed	<i>Chromolaena odorata</i>	200 ml (2,0 %)	

B. GENERAL PLANT CONTROL: FOLIAR APPLICATION TO INVADER PLANTS IN CONSERVATION, NON-CROP AND INDUSTRIAL AREAS

COMMON NAME	BOTANICAL NAME	IMAZAPYR DOSE / 10 ℓ WATER	DIRECTIONS FOR APPLICATION
Blue-gum spp.	<i>Eucalyptus grandis</i>	125 ml (1,25 %)	Apply as a full cover spray to point of run-off to coppice, which should be 0.5 to 1.0 m high at treatment.
Bug weed	<i>Solanum mauritianum</i>	63 ml (0,63 %)	Apply as a full cover spray to point of run-off to coppice, which should be 0.5 to 1.0 m high at treatment.
Common bulrush	<i>Typha capensis</i>	63 ml (0,63 %)	Apply as a full cover spray to point of run-off, before flowering. DO NOT apply over water systems which will be used for irrigation purposes.
Common reeds	<i>Phragmites australis</i>		
Lantana	<i>Lantana camara</i>	200 ml (2,0 %)	Apply as a full cover spray to point of run-off to coppice, which should be 0.5 to 1.0 m high at treatment.
Setaria	<i>Setaria megaphylla</i>	63 ml (0,63 %)	Apply as a full cover spray to point of run-off, to actively growing plants.

C. FORESTRY: EUCALYPTUS CLEAR FELL.

BLUE-GUM SPECIES	IMAZAPYR DOSE / 10 ℓ WATER	DIRECTIONS FOR APPLICATION
<i>Eucalyptus grandis</i>	500 ml (5,0 %)	<p>As a cut stump treatment: Use only for clear fell operations. Apply the mixture to the sapwood region of freshly cut stump surfaces (i.e. before the surfaces dry) using a low pressure applicator such as a hand held sprayer, a calibrated dosing gun or a knapsack sprayer at not less than 10 ml mixture per 100 mm of stump diameter. High pressure applications are not recommended.</p> <p>See also further information under USE RESTRICTIONS and General information above.</p>
<i>Eucalyptus macarthurii</i>	750 ml (7,5 %)	
<i>Eucalyptus maculata</i> and <i>Eucalyptus paniculata</i>	1 250 ml (12,5 %)	

WAARSKUWINGS

- Giftig indien ingesluk word.
 - Hou buite bereik van kinders en onopgeleide personeel.
 - Bêre in 'n koel droë plek, weg van voedsel en voer.
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Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie, aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder, aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in geval van enige onsekerheid.

VOORSORGMAATREËLS

- Moenie dampe of sproeinewel inasem nie.
- Moenie eet, drink of rook terwyl die produk vermeng of aangewend word nie.
- Was hande en gesig met seep en water ná gebruik of toevallige velkontak.
- Vermoed oorwaai van sproeinewel na oesgewasse, weiding, riviere, damme en enige area wat nie behandel word nie.
- Matig korroderend. Was toerusting deeglik na gebruik en gooi die waswater weg waar dit nie oesgewasse, weiding, riviere en damme sal besoedel nie.
- Leë houer moet DRIEKEER UITGESPOEL word soos volg: Keer die leë houer om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloeï tot 'n gedrup verminder het. Spoel die houer daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van die houer.
- Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word. Vernietig die leë houer deur gate daarin te maak en dit plat te slaan. Verseker dat die leë houer in 'n veilige plek weggegooi word en moet dit nooit vir enige ander doel hergebruik nie.
- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

GEBRUIKSBEPERKINGS

Algemeen

- Verhoed onnodige afloop van die spuitmengsel of toedieningsmengsel, wanneer stompe van houtagtige plante behandel is, na die grond. Alhoewel **ECO-IMAZAPYR 100 SL** nie maklik loog nie, kan **ECO-IMAZAPYR 100 SL** residue in die grond 'n nadelige effek hê op aangeplante saailinge en bestaande nie-teiken plantegroei.

BOSBOU

- **Wagperiodes vir heraanplantings na afgekapte *Eucalyptus* stompbehandelings:**

<u>SPEISIE</u>	<u>OPMERKINGS</u>	<u>WAGPERIODE</u>
Eucalyptus spp. (bloekom)	Bloekoms kan ná vier maande van stompbehandelings, op alle gronde behalwe ligte sandgronde, in behandelde vakke geplant word.	4 Maande
	Op ligte sandgrond (bv. noordelike Kwa-Zulu Natal) word 'n wagperiode van 12 maande vereis.	12 Maande
<i>Pinus</i> spp. (den)	Indien die dennesaailinge in dieselfde rye as die stompbehandelings geplant word, moet ten minste een maand gewag word tussen stompbehandeling en die aanplanting, om moontlike residue as gevolg van afloop van die stompbehandelings te vermy.	1 Maand
	Dennebome kan direk na stompbehandelings geplant word, op voorwaarde dat hulle in die tussenryspasies van die ou behandelde stomprye geplant word.	Geen
Wattel	Wattels mag direk ná <i>Eucalyptus</i> stompbehandeling aangeplant word.	Geen

- Bogenoemde wagperiodes is slegs geldig, as die korrekte dosis van **ECO-IMAZAPYR 100 SL** toegedien is en normale of bo-normale reënval plaasgevind het, tussen die **ECO-IMAZAPYR 100 SL** toediening en die aanplant van die saailinge.
- Moenie meer as 3 liter produk / ha toedien, waar onkruidbeheer binne vakke toegepas word nie.
- Moenie blaarbespuitings in nuut gevestigde wattel- en dennevakke spuit, waar daar 'n risiko is dat **ECO-IMAZAPYR 100 SL** in aanraking kan kom met die blare nie. Moenie blaarbespuitings óf afgekapte stompbehandelings, in *Eucalyptus*-vakke spuit nie.

GEBRUIKSAANWYSINGS

GEBRUIK SLEGS SOOS AANGEDUI

Algemene inligting

- **ECO-IMAZAPYR 100 SL** is 'n nie-selektiewe sistemiese onkruidoder vir die beheer van indringerplante soos genoem in bosbou-, weiding- en bewaringsgebiede sowel as vir bloekomuitroeing in afgekapte bosbouoperasies.
- Die produk word gereedlik opgeneem deur blare, wortels en splinthout van varsgekapte oppervlaktes vanwaar dit vinnig na plantmeristeme vervoer word.
- Groei van plante staak kort na toediening, maar uiteindelijke afsterwe is relatief tot die sensitiwiteit van die spesie wat behandel is en klimaatstoestande wat plantegroei beïnvloed.
- Hewig misvormde hergroei mag voorkom maar herbehandeling is nie nodig nie, tensy gesonde uitloopsels voorkom.
- By veelstammige behandelings, moet sorg gedra word dat alle gesaagde oppervlaktes as afsonderlike stompe behandel word. Ou afgesaagde oppervlaktes moet weer gesaag en behandel word. Alternatiewelik, kan die splinthoutgedeelte ontbloot word, deur die ou afgekapte stomp in groewe te kap naby die grond (ringeeler) en dan te behandel.
- Afgekapte stompbehandelings word meer effektief geag as blaartoedienings, omdat die onkruidoder direk en akkuraat op die plant wat behandel moet word, toegedien kan word.
- Reënval, twee ure na toediening, sal nie die werking van die produk verlaag nie.
- Stompe moet so na as moontlik aan die grond afgesaag word, voor behandeling.
- Die byvoeg van bymiddels is onnodig.

Menginstruksies: Vul die spuittenk driekwart vol water. Skud die houer met **ECO-IMAZAPYR 100 SL** deeglik en voeg die benodigde hoeveelheid in die tenk. Vul die tenk verder met water tot by die verlangde volume terwyl voortdurend geroer word om goeie vermenging te verseker. Aangemaakte spuitmengsels moenie in die spuittenk gelaat word vir 'n onbepaalde tyd nie.

A. ALGEMENE PLANTBEHEER: AFGEKAPTE STOMPBEHANDELING VAN INDRINGERPLANTE IN BOSBOU, WEIDING EN BEWARINGSGBIEDE.

GEWONE NAAM	<u>ONKRUIDSPESIE</u>	IMAZAPYR DOSIS / 10 ℓ WATER	TOEDIENINGSVOORSKRIFTE
Bloekom spp.	<i>Eucalyptus grandis</i>	500 ml (5,0 %)	<p>As afgekapte stompbehandeling: In weiding- en natuurbewaringsgebiede sowel as in denne- en wattelvakke.</p> <p>Rig behandeling op splinthout gebied van varsgesaagde stompe (voordat die gesaagde houtoppervlakte uitdroog). Dien toe met 'n laedruk handsput, gekalibreerde doseerapparaat of rugsakspuit, teen nie minder as 10 ml spuitmengsel / 100 mm stompeursnee nie. Hoëdruk spuittoediening word nie aanbeveel nie.</p>
	<i>Eucalyptus macarthurii</i>	750 ml (7,5 %)	
	<i>Eucalyptus maculata</i> <i>Eucalyptus paniculata</i>	1 250 ml (12,5 %)	
Inkbessie	<i>Cestrum laevigatum</i>	200 ml (2,0 %)	<p>Kyk ook onder GEBRUIKSBEPERKINGS en Algemene inligting hierbo.</p>
Jakaranda	<i>Jacaranda mimosifolia</i>	1 000 ml (10,0 %)	
Kasterolieplant	<i>Ricinus communis</i>	300 ml (3,0 %)	
Koejawel	<i>Psidium guajava</i>	1 250 ml (12,5 %)	
Lantana	<i>Lantana camara</i>	200 ml (2,0 %)	
Liguster	<i>Ligustrum</i> spp.	500 ml (5,0 %)	
Luisboom	<i>Solanum mauritianum</i>	200 ml (2,0 %)	
Ouhout	<i>Leucosidea sericia</i>	300 ml (3,0 %)	
Paraffienbos	<i>Chromolaena odorata</i>	200 ml (2,0 %)	
Populier	<i>Populus canescens</i>	500 ml (5,0 %)	
Sering	<i>Melia azedarach</i>	300 ml (3,0 %)	

B. ALGEMENE PLANTBEHEER: BLAARTOEDIENINGS VIR INDRINGERPLANTE IN WEIDING EN BEWARINGSGBIEDE.

GEWONE NAAM	<u>ONKRUIDSPESIE</u>	IMAZAPYR DOSIS / 10 ℓ WATER	TOEDIENINGSVOORSKRIFTE
Bloekom spp.	<i>Eucalyptus grandis</i>	125 ml (1,25 %)	Dien toe as 'n volle deктоediening, tot die punt van afloop, op hergroei van stamlote wat 0,5 tot 1,0 m hoog is.
Papkuil	<i>Typha capensis</i>	63 ml (0,63 %)	Dien toe as 'n volle deктоediening, tot die punt van afloop, vóór blomstadium. MOENIE oor waterkanale, wat vir besproeiing gebruik word, toedien nie.
Fluitjiesriet	<i>Phragmites australis</i>		
Lantana	<i>Lantana camara</i>	200 ml (2,0 %)	Dien toe as 'n volle deктоediening, tot die punt van afloop, op hergroei van stamlote wat 0,5 tot 1,0 m hoog is.
Luisboom	<i>Solanum mauritianum</i>	63 ml (0,63 %)	Dien toe as 'n volle deктоediening, tot die punt van afloop, op hergroei van stamlote wat 0,5 tot 1,0 m hoog is.
Setaria	<i>Setaria megaphylla</i>	63 ml (0,63 %)	Dien toe as 'n volle deктоediening, tot die punt van afloop, aan aktiefgroeiende plante.

C. BOSBOU: EUCALYPTUS KAALKAPBEWERKINGS.

BLOEKOMSPESIES	IMAZAPYR DOSIS / 10 ℓ WATER	TOEDIENINGSVOORSKRIFTE
<i>Eucalyptus grandis</i>	500 ml (5,0 %)	As afgekapte stompbehandeling: Gebruik slegs vir kaalkapbewerkings. Rig behandeling op splinthoutgebied van varsgeaade stompe (voordat die gesaagde houtoppervlakte uitdroog). Dien toe met 'n laedruk handspuit, gekalibreerde doseerapparaat of rugsakspuit, teen nie minder as 10 ml spuitmengsel / 100 mm stompdeursnee nie. Hoëdruk spuittoediening word nie aanbeveel vir vakaanplantings nie. Kyk ook onder GEBRUIKSBEPERKINGS en Algemene inligting vir verdere inligting.
<i>Eucalyptus macarthurii</i>	750 ml (7,5 %)	
<i>Eucalyptus maculata</i> <i>Eucalyptus paniculata</i>	1 250 ml (12,5 %)	