

Eco-Imazapyr[®]

100 sl



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

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

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

**WARNING****Hazard statements**

- Causes serious eye irritation

Precautionary statements

- Wash skin thoroughly after handling
- Do not touch eyes
- Wear eye protection/ face protection

HERBICIDE GROUP CODE	B	ONKRUIDDODER GROEKODE
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ACTIVE INGREDIENT

Imazapyr (Imidazolinone)

/

100 g/l

AKTIEWE BESTANDDEEL

Imazapyr (Imidazolinon)

NET VOLUME (5 ℥ / 20 ℥)**NETTO VOLUME (5 ℥ / 20 ℥)****REGISTRATION HOLDER / REGISTRASIE HOUER:**

Future Farm & Forest
Services & Supplies (Pty) Ltd.
Reg. 1998/014639/07
P.O. Box 98165
Sloane Park
2152

DISTRIBUTED BY / VERSPREI DEUR:

Ecoguard Biosciences (Pty) Ltd.
Reg. 1988/001616/07
Tel: 011 463 6057
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**ECOGUARD**Environmentally compatible solutions for
pest & vegetation management

UN NUMBER

3082

BATCH NUMBER

UNNOMMER

DATE OF MANUFACTURE

LOTNOMMER

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:

- Poisonous by swallowing.
- This product may cause allergic skin reactions.
- Serious eye damage/eye irritation.
- Keep out of reach of children and unqualified personnel.
- Store in a cool dry place away from food and feed.

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.
- Wash skin thoroughly after handling. Do not touch eyes.
- Wear eye protection/ face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/ attention.
- 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.

RELEVANT SUBSTANCES

Imazapyr (Imidazolinone)

Weight (%)

8-12%

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</i> spp. (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 12months is required.	12 months
<i>Pinus</i> spp. (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.

RATE AND METHOD OF APPLICATION:

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

PLANT	RATE/ 10 ℥ WATER	DIRECTIONS FOR APPLICATION
Black wattle <i>Acacia mearnsii</i>	1 000 ml (10.0 %)	As a cut stump treatment in grazing and wattle compartments.
Blue-gum spp. <i>Eucalyptus grandis</i>	500 ml (5.0 %)	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.
Woollybutt gum <i>Eucalyptus macarthurii</i>	750 ml (7.5 %)	
Spotted gum <i>Eucalyptus maculata</i>	1 250 ml (12.5 %)	
Grey ironbark <i>Eucalyptus paniculata</i>		
Bug weed <i>Solanum mauritianum</i>	200 ml (2.0 %)	
Castor oil plant <i>Riccinus 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 spp.</i>	500 ml (5.0 %)	
Sesbania <i>Sesbania punicea</i>	200 ml (2.0 %)	
Syringa <i>Melia azedarach</i>	300 ml (3.0 %)	
Triffid weed <i>Chromolaena odorata</i>	200 ml (2.0 %)	
Turpentine tree <i>Syncarpia spp.</i>	750 ml (7.5 %)	

See **USE RESTRICTIONS** and **General Information** above.

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

PLANT	RATE/ 10 ℥ 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.
Bracken fern <i>Pteridium aquilinum</i>	63 ml (0.63 %)	Apply as a full cover spray to point of run-off, to actively growing plants
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.
Katbos <i>Protasparagus spp.</i>	63 ml (0.63 %)	Apply as a full cover spray to point of run-off, to actively growing plants.
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	RATE/ 10 ℥ WATER	DIRECTIONS FOR APPLICATION
Saligna gum <i>Eucalyptus grandis</i>	500 ml (5.0 %)	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-

Woollybutt gum <i>Eucalyptus macarthurii</i>	750 ml (7.5 %)	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.
Spotted gum <i>Eucalyptus maculata</i> and Grey ironbark <i>Eucalyptus paniculata</i>	1 250 ml (12.5 %)	See further information under USE RESTRICTIONS and General information above.

WAARSKUWINGS:

- Giftig deur te sluk.
- Hierdie produk kan allergiese velreaksies veroorsaak.
- Ernstige oogskade/oogirritasie.
- Hou buite bereik van kinders en ongekwalifiseerde personeel.
- Berg in 'n koel droë plek weg van voedsel en voer.

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 sputnewel inasem nie.
- Moet nie eet, drink of rook tydens meng of bespuiting nie.
- Was hande en gesig met seep en water na gebruik en toevallige velkontak.
- Was vel deeglik na hantering. Moenie aan oë raak nie.
- Dra oogbeskerming/ gesigbeskerming.
- INDIEN IN OË: Spoel versigtig uit met water vir 'n paar minute. Verwyder kontaklense, indien teenwoordig en maklik om te doen. Gaan voort met spoel.
- Indien oogirritasie voortduur: Kry mediese advies/ aandag.
- Vermy wegdrywing van sputnewel na ander gewasse, weiding, riviere, damme en enige gebied wat nie onder behandeling is nie.
- Was en spoel sputtoerusting deeglik uit na gebruik en gooi spoelwater weg waar dit nie gewasse, weiding, riviere en damme sal besoedel nie.
- SPOEL leë houer DRIEKEER uit op die volgende wyse: Keer die leë houer om oor die spuit- of mengtenk en laat dreineer vir minstens 30 sekondes nadat die vloeistof gedrup verminder het. Spoel die houer daarna drie keer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van dié van die houer.
- Voeg die spoelwater by die inhoud van die spuitenk voordat die houer vernietig word deur gate daarin te kap, plat te druk en te begrawe, en moet nooit vir enige ander doel hergebruik nie.

- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.

RELEVANTE STOWWE

Imazapyr (Imidazolinoon)

Inhoud (%)

8-12%

GEBRUIKSBEPERKINGS

Algemeen:

- Verhoed onnodige afloop van die sputmengsel 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:

SPESIE	OPMERKINGS	WAGPERIODE
<i>Eucalyptus</i> 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 stompye 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 dennevakte sput, 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 sput nie.

GEBRUIKSAANWYSINGS: Gebruik slegs soos aangedui

ALGEMENE INLIGTING

- **ECO-IMAZAPYR 100 SL** is 'n nie-selektiewe sistemiese onkruiddoder vir die beheer van indringerplante soos genoem in bosbou-, weiding- en bewaringsgebiede sowel as vir bloekomuitroeïng in afgekapte bosbouoperasies.
- Die produk word geredelik opgeneem deur blare, wortels en splinthout van varsgekapte oppervlaktes vanwaar dit vinnig na plantmeristemme vervoer word.
- Groei van plante staak kort na toediening, maar uiteindelike afsterwe is relatief tot die sensitiwiteit van die spesie wat behandeld 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 gesaaagde oppervlaktes as afsonderlike stompe behandel word. Ou afgesaaagde 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 (ringeleer) en dan te behandel.
- Afgekapte stompbehandelings word meer effektiel geag as blaartoedienings, omdat die onkruiddoder 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 afgesaaag word, voor behandeling.
- Die byvoeg van bymiddels is onnodig.

MENGINSTRUKSIES:

Vul die sputtent drie kwart 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 sputmengsels moenie in die sputtent gelaat word vir 'n onbepaalde tyd nie.

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

PLANTSOORT	DOSIS / 10 ℥ WATER	TOEDIENINGSVOORSKRIFTE
Bloekom spp. <i>Eucalyptus grandis</i>	500 ml (5.0 %)	As afgekapte stompbehandeling: In weiding- en natuurbewaringsgebiede sowel as in denne- en wattelvakke.
Wolstambloekom <i>Eucalyptus macarthuri</i>	750 ml (7.5 %)	
Gevlektebloekom <i>Eucalyptus maculate</i> en Grysysterbasbloekom <i>Eucalyptus paniculata</i>	1 250 ml (12.5 %)	Rig behandeling op splinthout gebied van varsgesaagde stompe (voordat die gesaadde houtoppervlakte uitdroog). Dien toe met 'n laedruk handspuit, gekalibreerde doseerapparaat of rugsakspuit, teen nie minder as 10 ml sputmengsel / 100 mm stompdeursnee nie. Hoëdruk spuittoediening word nie aanbeveel nie.
Inkbessie <i>Cestrum laevigatum</i>	200 ml (2.0 %)	
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 %)	Kyk ook onder
Lantana <i>Lantana camara</i>	200 ml (2.0 %)	GEBRUIKSBEPERKINGS en Algemene inligting hierbo.
Liguster <i>Ligustrum spp.</i>	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 %)	
Sesbania <i>Sesbania punicea</i>	200 ml (2.0 %)	
Swart Wattel <i>Acacia mearnsii</i>	1 000 ml (10.0 %)	

Terpentynboom <i>Syncarpia</i> spp.	750 ml (7.5 %)	
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B. ALGEMENE PLANTBEHEER: BLAARTOEDIENINGS VIR INDRINGERPLANTE IN WEIDING EN BEWARINGSGEBIEDE.

PLANTSOORT	DOSIS / 10 ℥ WATER	TOEDIENINGSVOORSKRIFTE
Adelaarsvaring <i>Pteridium aquilinum</i>	63 ml (0.63 %)	Dien toe as 'n volle dektoediening, tot die punt van afloop, aan aktiefgroeiende plante.
Bloekom spp. <i>Eucalyptus grandis</i>	125 ml (1.25 %)	Dien toe as 'n volle dektoediening, 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 dektoediening, tot die punt van afloop, vóór blomstadium. MOENIE oor waterkanale, wat vir besproeïng gebruik word, toedien nie.
Fluitjiesriet <i>Phragmites australis</i>		
Katbos <i>Protasparagus</i> spp.	63 ml (0.63 %)	Dien toe as 'n volle dektoediening, tot die punt van afloop, aan aktiefgroeiende plante.
Lantana <i>Lantana camara</i>	200 ml (2.0 %)	Dien toe as 'n volle dektoediening, 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 dektoediening, 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 dektoediening, tot die punt van afloop, aan aktiefgroeiende plante.

C. BOSBOU: EUCALYPTUS KAALKAPBEWERKINGS.

PLANTSOORT	DOSIS / 10 ℥ WATER	TOEDIENINGSVOORSKRIFTE
Bloekom spp. <i>Eucalyptus grandis</i>	500 ml (5.0 %)	As afgekapte stompbehandeling: Gebruik slegs vir kaalkapbewerkings.
Wolstambloekom <i>Eucalyptus macarthurii</i>	750 ml (7.5 %)	Rig behandeling op splinthoutgebied van varsgesaade stompe (voordat die

<p>Gevlektebloekom <i>Eucalyptus maculate</i> en Grysysterbasbloekom <i>Eucalyptus paniculata</i></p>	<p>1 250 ml (12.5 %)</p>	<p>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.</p> <p>Kyk ook onder GEBRUIKSBEPERKINGS en Algemene inligting vir verdere inligting.</p>
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