

# RELEASE



South Africa Reg.No: L 6020 Act No. 36 of 1947

A granular root absorbed herbicide for dry application, possessing residual action, for the control of weeds on non-crop areas and in plantations of certain Pinus species, as specified, in the Southern Cape region bounded by Stutterheim in the east and Mosselbay in the west.

HRAC HERBICIDE GROUP CODE: C1

**ACTIVE INGREDIENT:**

Hexazinone (triazinone).....200g/kg

Product Information Tel no: 072 678 8226

In case of poisoning: 082 446 8946

[www.envirobiochem.co.za](http://www.envirobiochem.co.za)

Batch No:

Date of Manufacture:



**Registration holder:**

Enviro Industries (Pty) Ltd t/a Enviro Weed Control Systems

Reg No. 1999/006136/07

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CAUTION  
VERSIGTIG



## **WARNINGS:**

- Poisonous if swallowed.
- Irritating to eyes.
- Is non-selective and may kill trees and desirable plants if applied incorrectly.
- Keep out of reach of children and uninformed persons.
- Store in original container in a cool place out of direct sunlight, and away from food, feed, seed and fertilizer.

**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 disease 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:**

### **a) Health and safety precautions:**

- Do not inhale spray mist or dust. Avoid skin and eye contact. Wear a disposable nose mask, PVC gloves and a face shield or goggles when pouring, or if using a broadcast spreader.
- In the event of eye contamination flush eyes copiously with clean water for 15 minutes and seek medical attention.
- Wash contaminated clothing daily.
- Do not smoke, eat or drink when applying and wash hands and face before smoking, eating or drinking.
- Wash with soap and water after accidental skin contact.

### **b) Container disposal:**

- Container and package must be completely emptied before being disposed of. Shake empty into the application equipment.
- Do not use the empty package for any other purpose.
- Destroy empty bag by shredding. Do not burn empty package.

### **c) Environmental precautions:**

- Do not contaminate streams, rivers or dams with the chemical or used containers or packages.
- Do not apply the product in a water course within the maximum flood level, or in a wetland.
- Do not apply on sloping ground where surface wash could carry the product to sensitive areas, or into which the roots of desirable may extend.
- Do not apply within the root zone of desirable trees or plants. Allow at least twice the height of the tree to determine root spread.
- Do not load within 20 metres of any body of water.
- Do not load within 20 metres of a well unless on an impervious pad to prevent groundwater contamination.

## **ENVIRONMENTAL RESTRICTIONS:**

1. **Highly Vulnerable Sites** - (less than 0.5% organic matter, greater than 60% sand, water table less than 2 metres below surface and annual rainfall greater than 1 000mm). Do not apply more than 10kg per hectare per year. Spot treatments will effectively reduce the total quantity applied.
2. **Moderately Vulnerable Sites** - (at least two of the factors, shown above characterising a vulnerable site are not present) Do not apply more than 30kg per hectare per year. Spot treatments will effectively reduce the total quantity applied.
3. **Low Vulnerability Sites** (at least three of the factors above characterising a vulnerable site are not present): Do not apply more than 50kg per hectare per year.

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

**RELEASE** is a broad spectrum herbicide which controls many annual and perennial weeds, both grasses and broadleaved weeds as well as a number of woody and semi-woody trees and shrubs. It is root absorbed and requires leaching into the root zone of the weeds to be controlled. Adequate rainfall is required for this purpose. It also is a pre-emergence herbicide with residual action and will control several weed species that may germinate after application. It should be applied just prior to or at the commencement of active weed growth preferably at the beginning of the rainfall period where seasonal rain occurs. Under dry conditions results may be slow to appear. Soil type has an influence on the activity of the product, higher rates being required as the clay and humus contents of the soil increases. It is not recommended on soils containing under 5% or over 35% clay. The length of residual weed control obtained is dependant on the dosage rate, rainfall subsequent to application, soil type and species of weed seeds present in the soil bank. Weeds which are entering the dormant cycle, or which have shed seed, or suffering from moisture stress or cold may not be adequately controlled. Do not apply during periods of heavy rainfall.

**RELEASE MAY BE USED FOR:**

- i) Total vegetation control applied broadcast or by means of the Weed-a-Meter (WAM) for localised weed control.
  - ii) Localised weed control in plantations of certain *Pinus* species under restricted conditions using the Weed-a-Meter.
- Refer to the appropriate sections for details.

**APPLICATIONS:**

The product should be distributed dry over the weeds using a calibrated mechanical distributor for broadcast application, or by means of a calibrated Weed-a-Meter for localised control.

**TOTAL VEGETATION CONTROL:**

DOSAGE RATES – TOTAL VEGETATION CONTROL				
SOIL TYPE	ANNUAL WEEDS		PERENNIAL WEEDS	
	g/ha	g/m <sup>2</sup>	kg/ha	g/m <sup>2</sup>
5 - 20% clay (sand)	15 - 20	1.5 - 2.0	20 - 25	2.0 - 2.5
	20 - 25	2.0 - 2.5	25 - 30	2.5 - 3.0
21 - 35% clay (sandy clay loam)	20 - 25	2.0 - 2.5	25 - 30	2.5 - 3.0

Where *Cynodon dactylon* or *Paspalum spp* are a problem use 30 to 40kg/ha (3.0 to 4.0g/m<sup>2</sup>) and repeat is necessary towards the end of the growing season using half the initial rate.

**USE OF THE Weed-a-Meter (WAM):**

For spot application the WAM maybe used to apply **RELEASE** over a circle from 1.0 to 1.5 metres in diameter depending on the height held above the ground. The table below gives the dosage applied in grams per m<sup>2</sup> using different trigger sizes when the trigger is held at a height of approximately 90cm giving 1.2 metres diameter spot.

WAM APPLICATION GUIDE				
TRIGGER#	NUMBER OF SHOTS	SPREAD IN METRES	G/m <sup>2</sup>	g/shot
#1	1	1.2	0.8	0.9
#2	1	1.2	1.5	1.7
#2	2	1.2	3.6	1.7
#3	1	1.2	2.25	2.55
#3	2	1.2	4.50	2.55

Always check the delivery of the product prior to usage. Do not use the WAM under windy or rainy conditions.

## **USAGE COMMENTS:**

1. Refer to the weeds list for species controlled.
2. Use the lower rate on young weeds, and the higher rate for more mature plants, or where a longer residual control is required.  
Weeds should be actively growing at the end of the treatment. Plant stressed from drought, cold or which are waterlogged will not be adequately controlled.
3. Watch for escape weeds and repeat on a spot basis.
4. Residual control obtained may vary from 2 to 4 months, depending on conditions. Where a bare ground situation is required for a longer period in the same growing season, re-apply at the rate of 12.5 to 15kg/ha to the emerging weeds.

## **PINE TREE RELEASE APPLICATION:**

RELEASE may be used under certain conditions for weed control in plantations of *Pinus radiata* and *Pinus elliotti* in the Southern Cape region, using the Weed-a-Meter. As young trees **may be killed or injured**, it is important that the following restrictions be observed:

- Select only strong rooted, hardened, stress free plants for transplanting purposes.
- Do not apply to young trees until at least 4 months after transplanting. Where interplanting of trees is practiced, 4 months should elapse from this date.
- Do not apply to trees which have poor vigour due to inadequate root systems, or suffering from drought, waterlogging, disease or other adverse environmental factors.
- Do not apply to trees planted in light sandy or gravelly soils with less than 15% clay content, or on soils with a high leaching index, or on poorly drained soils subject to waterlogging.
- Do not exceed the dosage specified.
- Do not apply during cold weather causing tree stress.
- Do not repeat an application in the same season.

## **DIRECTIONS FOR USE:** *Pinus radiata* and *Pinus elliotti*.

### **General:**

RELEASE is applied to weeds around individual trees using the Weed-a-Meter held centrally over the tree at the correct height to provide a 1.2 metres diameter spot. Refer to Weed-a-Meter instructions leaflet before using the product. **Trees should be growing vigorously at the time of application.** Apply either before or after weed germination but preferably before the weeds become competitive to the tree. Familiarise yourself with the precautions and general instructions for using the product. Ensure that persons assigned to apply the product are properly trained, and are aware of the danger of killing trees from overapplication.

## **COMMENTS:**

- Use the 0.8g/m<sup>2</sup> rate for pre-emergence weed control or where weeds are in die seeding stage.
- The 2.26g/m<sup>2</sup> rate is suggested for the use on robust trees where "fynbos" type weeds are a problem and where extended residual control is required. The safety of this rate in respect to tree injury should be established by treating a limited area in the first instance under the local conditions prevailing in the area.
- If in doubt to procedure contact your distributor or a representative of Enviro Weed Control Systems.

### **MAXIMUM DOSAGE RATES FOR *Pinus radiata* and *Pinus elliotti***

SITUATION		g/m <sup>2</sup>	g/tree PER 1.2m DIAMETER	WAM TRIGGER #	NUMBER OF SHOTS
AGE OF TREES	SOIL TYPE % CLAY				
4 - 6 months	15 - 20%	0.8	0.96	#1	One
	21 - 35%	1.5	1.7	#2	One
Older than 6 months	15 - 35%	1.5	1.7	#2	One
Older than 12 months	15 - 35%	2.26	2.55	#3	One

Partial list of southern cape forestry weeds controlled by 1.5g/m<sup>2</sup> release #2 WAM trigger:

BOTANICAL NAME	COMMON NAME	COMMENTS
<i>Acacia Mearnsii</i>	Black Wattle	Pre-emergence or early seedling stage, rainfall essential shortly after application.
<i>Acacia Melanoxylon</i>	Blackwood	
<i>Chrysanthemoides Monilifera</i>	Brother Berry	
<i>Conyza Canadensis</i>	Horseweed	
<i>Digitana Sanguinalis</i>	Crab Fingergrass	
<i>Ehrharta Calycina</i>	Ehrhata	
<i>Ehrharta Subspicata</i>	Ehrhata	
<i>Fimbristylis Hispidula</i>	Sedge	
<i>Fimbristylis Dichotoma</i>	Sedge	
<i>Gleichenia Polypodioides</i>	Creeping Fern	Young plants only. Suppression of mature plants.
<i>Helichrysum Cripum</i>	Everlasting	
<i>Helichrysum Cymosum</i>	Everlasting	
<i>Helichrysum Riveum</i>	Everlasting	
<i>Hydrocotyl Americana</i>	Navelwort	
<i>Hypochoeris Radicata</i>	Hairy Wild Lettuce	
<i>Lobelia Erinus</i>	Lobelia	
<i>Lolium Spp</i>	Ryegrass	
<i>Metalasia Muricata</i>	Blombos	
<i>Paspalum Dilatatum</i>	Common Paspalum	
<i>Pennisitum Clandistinum</i>	Kikuyu Grass	
<i>Phylicia Spp</i>		
<i>Pteridium Aquilinum</i>	Bracken	Suppression only
<i>Restio Triticus</i>	Sedge	
<i>Stoebe Incana</i>	Slangbos	
<i>Solanum Nigrum</i>	Nightshade	
<i>Stoebe Plumose</i>	Slangbos	
<i>Tetradenia Riparia (Sp)</i>	Watersalie	
<i>Virgilla Oroboides</i>	Snowdrop Tree	

**PARTIAL LIST OF WEEDS CONTROLLED ON NON-CROP SITES:**

<b>ANNUAL WEEDS</b>	
<b>BOTANICAL NAME</b>	<b>COMMON NAME</b>
<i>Amaranthus Hybridus</i>	Common Pigweed
<i>Argemone Mexicana</i>	Mexican Poppy
<i>Cosmos Bipianatus</i>	Cosmos
<i>Bromus Uniolooides</i>	Rescue Grass
<i>Commelina Benghalensis</i>	Wandering Jew
<i>Conyza Albida</i>	Tall Fleabane
<i>Conyza Bonariensis</i>	Flax-Leaf Fleabane
<i>Conyza Canadenis</i>	Horseweed Fleabane
<i>Cyperus Esculentus</i>	Yellow Nutgrass
<i>Digitaria Sanguinalis</i>	Crab Fingergrass
<i>Eleusine Africana</i>	Goose Grass
<i>Panicum Schinzii</i>	Sweet Buffalo Grass
<i>Pseudo Gnaphalium Luteo-Album</i>	Jersey Cudweed
<i>Tagetes Minuta</i>	Khaki Weed
<b>PERENNIAL WEEDS</b>	
<i>Cynodon Dactylon</i>	Common Kweek Grass
<i>Eragrostis Chloromelas</i>	Lovegrass
<i>Eragrostis Curcula</i>	Weeping Love Grass
<i>Eragrostis Lehmanniana</i>	Lovegrass
<i>Hyparrhenia Hirta</i>	Common Thatch Grass
<i>Panicum Maximum</i>	Buffalo Grass
<i>Pennisetum Clandistum</i>	Kikuyu Grass
<i>Themeda Triandra</i>	Red Grass