



# BOMBACIL

Reg. No. /Nr L 9730, Act/Wet No. /Nr 36 Of Van 1947  
N-AR 1785, W 130941

**GROUP C1 HERBICIDE**

A soil applied suspension concentrate herbicide for the control of certain tree and shrub species as listed.

'n Grondtoegediende suspensie konsentraat onkruidodder vir die beheer van sekere boom-en bosspesies soos aangedui



**WARNING**

### Hazard Statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Very toxic to aquatic life

### Precautionary Statements

Avoid breathing dust/fume/gas/mist/vapours/spray  
Wash hands thoroughly after handling. Do not touch eyes.  
IF SWALLOWED - Get medical help.  
IF ON SKIN: Wash with plenty of water  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### Active ingredient/Aktiewe bestanddeel

500 g/ l Bromacil (Substituted Uracil) 500 g/l Bromasil (Gesubstitueerde urasil)

Net volume 1 l Netto volume

### REGISTRATION HOLDER / REGISTRASIEHOUER:

Agritech Bioscience (Pty) Ltd / (Edms) Bpk t/a Carabiner  
Reg. No. 2008/004392/07  
PO Box / Posbus 1224  
Isando  
1600  
South Africa / Suid-Afrika

Batch No. ....



Date of Manufacture .....  
Expiry date (2 years) .....

..... Lot Nr.

..... Datum van Vervaardiging  
..... (2 jr) Vervaldatum



UN No. 3082

### In case of poisoning, call the following number:

Poison centre (Unitas hospital): Emergency Number: 012 664 1100  
TYGERBERG: Emergency Number: 021 931 6129  
RED CROSS: Emergency Number: 021 689 5227  
RAPID SPILL RESPONSE: Emergency Number: 0800 775 3305  
GRIFFON POISON CENTRE: Emergency Number: 082 446 8946.

## WARNINGS

- GHS Hazard statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Very toxic to aquatic life

- Poisonous if swallowed.
- May irritate the nose, skin, throat, and eyes.
- Store under a lock and key in a cool place away from food, feed, seed, fertilizers or other agricultural remedies
- Keep out of reach of children, animals, and uninformed people.
- Toxic to fish and aquatic organisms
- **Re-entry:** Do not enter the treated area within 1 day 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 effective under all conditions. The activity 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, 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 herbicide concerned due to failure by 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

- GHS Precautionary statements

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read carefully and follow all instructions.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash hands thoroughly after handling. Do not touch eyes.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.  
Wear protective gloves.  
IF SWALLOWED - Get medical help.  
IF ON SKIN: Wash with plenty of water  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical help if you feel unwell.  
If eye irritation persists: Get medical help.  
Rinse mouth.  
Collect spillage  
Store in a well ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local / regional / national / international regulations.

- Do not inhale the spray mist.
- Mixers, loaders, applicators, spray tank cleaners and all other handlers must wear suitable long-sleeved shirts, long pants, socks, and protective eyewear.
- Avoid contact with the skin, eyes, and clothing.
- In the case of contamination, flush immediately with water.
- Wash with soap and water directly after use or skin contact.
- Do not smoke, eat, drink, or use the toilet whilst handling this product or before washing hands and face with soap and water.
- Prevent contamination of food, feed, drinking water as well as eating utensils.
- Wash contaminated clothing daily.
- Do not apply where the roots of any desirable plants may absorb the product.
- Do not apply where the run-off from the treated area will contaminate water or within 10 meters of permanent water.
- Do not mix or load within 20 meters of any water body.
- Do not mix, clean, or load the spraying equipment within 20 meters of a well or fountain unless on an impervious pad in order to prevent groundwater contamination. Prevent ground water contamination through back-siphoning when filling the spray tank by means of an anti-siphoning device or an air break between the water hose and the spray tank contents.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container in the prescribed manner.
- Avoid spray drift onto other crops, grazing, rivers, dams or other areas not under treatment.
- In order to avoid injury to any desirable plants, the spray equipment used must be thoroughly washed and rinsed in the following way: The spray equipment must be drained immediately following application. Thoroughly rinse the sprayer and flush the hoses, boom and nozzles with clean water. Loosen and physically remove and visible deposits. Remove and clean the nozzles, screens and strainers. Flush the entire system thoroughly with clean water. Thoroughly clean all other associated application equipment.
- Do not use the empty container for any other purpose.
- **Store at a temperature not exceeding 40 °C.**

#### RELEVANT SUBSTANCES

Chemical name	Composition	CAS No.	Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]
Bromacil	>43%	314-40-9	Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2; STOT SE 3 Aquatic Acute 1; M-Factor - Aquatic Acute: 10
Monoethylene glycol	≥ 5% - <5.5%	107-21-1	Acute Toxicity Oral: Cat 4 H302

## FIRST AID

Provide medical personnel with the container label, product name or safety data sheet (SDS) when seeking medical attention.

## TOXICOLOGICAL INFORMATION:

General Information: Remove patient from exposed area. Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

Inhalation: Remove victim to fresh air. Keep patient calm. Monitor for respiratory distress. Apply oxygen or artificial respiration if necessary. Keep the patient warm and at rest. Treat symptomatically. **Get emergency medical assistance.**

Skin contact: Immediately remove contaminated clothing and flush body and clothes with large amounts of water. Wash thoroughly with soap and clean running water (including hair, skin and fingernails) for at least 15 minutes. Wash contaminated clothing before re-use. Seek medical assistance if irritation persists. Persons providing first aid must wear gloves to avoid self-contamination.

Eye contact: Flush eyes with plenty of clean water for at least 15 minutes holding eyelids open. Remove contact lenses. Call a doctor for treatment advice. Obtain medical attention immediately if irritation persists. If symptoms (e.g., redness, irritation, pain etc) persist after 15 minutes of irrigation, refer the patient to an ophthalmologist for an eye examination.

Ingestion: Seek medical attention. Do not induce vomiting. Rinse the mouth if the patient is conscious and able. Never induce vomiting. Contraindications to emesis induction include signs of oral, pharyngeal, or oesophageal irritation; a depressed gag reflex; or central nervous system excitation or depression. If the above symptoms are experienced, EMESIS SHOULD NOT BE INDUCED. Give 1 or 2 glasses of water to drink and induce vomiting if the patient is able and conscious. Emesis is most effective if initiated within 30 minutes of ingestion. Never give anything by mouth to a victim who is unconscious or is having convulsions. **Get medical help.**

Carefully observe patients with inhalation exposure for the development of any systemic signs or symptoms and administer symptomatic treatment, as necessary. There is no specific antidote known.

**Ingestions of small amounts** (less than 10 mg Bromacil / kg body weight) occurring less than an hour before treatment, are probably best treated as follows:

Syrup of Ipecac, followed by 1 – 2 glasses of water.

Dosage for adults and children over 12 years: 30 mL

Dosage for children younger than 12 years: 15 mL. If effective emesis has already occurred, or if treatment is delayed, administer activated charcoal and sorbitol by mouth.

Ingestions of **large** amounts (more than 10 mg Bromacil / kg body weight) occurring less than an hour before treatment should be treated by gastric lavage:

- a) Intubate the stomach and aspirate the contents.
- b) Lavage the stomach with a slurry of activated charcoal in 0.9% saline.
- c) Leave 30 – 50 g activated charcoal in the stomach before withdrawing the tube.
- d) Use Sodium sulphate at 0.25 g / kg in tap water as a cathartic.

**Caution:**

Hydrocarbons (kerosene, petroleum distillates) may be included in some formulations of these chemicals. Ingestion of **very large** amounts may cause Central Nervous System depression. In this case, **IPEPAC IS CONTRAINDICATED**. Additionally, gastric intubation incurs a risk of **HYDROCARBON PNEUMONITIS**.

Therefore, observe the following precautions:

- 1) If the victim is unconscious or obtunded and facilities are at hand, insert an **endotracheal tube** (cuffed, if available) prior to gastric intubation.
- 2) Keep the victim's head **below the level of the stomach** during intubation and lavage (Trendelenburg, or left lateral decubitus, with head of table tipped downward). Keep the victim's head turned to the left.
- 3) **Aspirate the pharynx** as regularly as possible in order to remove gagged or vomited stomach contents.

Ingestions occurring more than an hour before treatment are probably best treated only by 30 – 50 g activated charcoal, and 0.25 g/kg Sodium or Magnesium sulphate as described above.

There is no specific antidote. As manifestations of toxicity may occasionally occur in peculiarly predisposed individuals, contact with the victim must be maintained for at least 72 hours so that any unexpected adverse effects can be promptly treated.

Monitoring of blood electrolytes and fluid balance are necessary if serious dehydration due to vomiting or diarrhoea have occurred. The administering of intravenous infusions of glucose, normal saline, Ringer's solution or Ringer's-lactate should be done to restore extracellular fluid volume and electrolytes. This should follow with oral nutrients as soon as fluids can be retained. Fluids serve to support excretion of the toxicants. If the patient's condition deteriorates in spite of good supportive care, the operation of an alternative or additional toxicant should be suspected.

#### **NOTICE TO USER**

This agricultural remedy is to be used only in accordance with the instructions on this label. It is an offence under the Act to use this product in a manner contrary with the directions on the label.

#### **RESISTANCE MANAGEMENT WARNING STATEMENT**

For resistance management, **BOMBACIL** is a group code C1 herbicide. Any weed population may contain individuals naturally resistant to **BOMBACIL** and other Group Code C1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **BOMBACIL** or any other Group Code C1 herbicide.

##### **To delay herbicide 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.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

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

The presence of resistant weeds is difficult to detect prior to use and therefore neither the Registration Holder nor the Distributor can accept responsibility for any losses as a result of **BOMBACIL** not controlling resistant weeds. Do not apply **BOMBACIL** alone in situations where weed resistance has been confirmed. Sub-standard application of **BOMBACIL** will lead to inferior weed control and may assist in the development of herbicide resistance. It is of the utmost importance to inspect treated areas at regular intervals in order to identify the occurrence of herbicide-resistant weeds timeously.

#### **MODE OF ACTION**

**BOMBACIL** is a systemic soil herbicide, absorbed mainly by the roots, with slight absorption through the leaves and stems. It is a photosynthetic electron transport inhibitor at the photosystem II receptor site.

## USE RESTRICTIONS

- **BOMBACIL** should not be used in areas near trees or other desirable plants, or where their roots are present as **BOMBACIL** may leach into the root zone of these plants and cause severe injury or death of these plants.
- Do not apply to any crop or situation not mentioned in this label.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Agritech Bioscience (Pty) Ltd. accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless an Agritech Bioscience representative was consulted beforehand.
- Do not apply on or within 50 meters of desirable plants or trees (e.g., windbreaks, ornamental trees and shrubs along roads) or on areas where their roots may extend, or where the product may be washed or moved into contact with their roots as these plants may be killed or severely damaged.
- Do not use on soils where susceptible crops are to be grown within 5 years.
- Over-application, or any use not in accordance with the directions on this label may cause adverse effects.

## DIRECTIONS FOR USE

**Use only as directed.**

Read all the instructions carefully before application. **BOMBACIL** is a herbicide with a long residual action. The degree of the control and the duration of the effects will depend on the dosage rate, rainfall and soil type.

**BOMBACIL** diluted for use is non-corrosive, non-volatile and non-flammable

**BOMBACIL** treatments will only become effective once sufficient rainfall has occurred to leach the chemical into the root zone where it can be taken up by the target plant. It is therefore recommended to apply **BOMBACIL** just before, or at the beginning of the rainy season in order to obtain the best results. Do not apply towards the end of the rainy season. **BOMBACIL** is slow acting and susceptible species may take up to 24 months to die, depending on the soil texture, species, and effective rainfall. During this period the treated plants should show repeated defoliation and re-growth, with progressive dieback until death occurs. Therefore, a second application is not recommended within 24 months or until the symptoms of defoliation no longer occur.

**Under high rainfall conditions, leaching of this product may occur which may result in product loss and reduced efficacy. BOMBACIL may cause injury to grasses in the treated area, but these should recover and proliferate as the tree and shrub competition is removed and the product leaches deeper into the soil. Heavy rainfall may increase lateral movement of the product in the soil and thus area of grasses affected.**

## MIXING INSTRUCTIONS

The mixture to be used is dependent on the species to be treated. Refer to the recommendations below in order to determine the mixture to be used.

This product must be mixed as follows:

Empty the entire quantity of **BOMBACIL** to be prepared into a suitable container. Add a small quantity of water and stir thoroughly into a smooth cream. Thereafter, add the rest of the water while stirring constantly until a lump-free suspension is obtained. Agitate the mixture thoroughly and then pour into the applicator tank and shake the tank frequently while the application is in progress in order to keep the mixture in suspension.

## APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.

For ease and accuracy of application, the use of an automatic vaccinator or a similar applicator is recommended.

Applicators with a reasonable squirting distance (2 – 3 meters) greatly facilitate ease of application in areas densely populated with the target species. The applicator should be calibrated to deliver 2 m ℓ at a time. Using the recommended mixture, apply one or more applications to the soil at the base of the stem of the target plant stem.

**Do not apply on the stem of the plant or on grass and dead leaves at the base of the stem – apply directly to the soil at the recommended distance of 15 – 20 cm from the base of the stem.** When more than one application is applied, place the applications evenly around the base of the stem.

**Maintain constant agitation.**

**Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank for more than 6 hours after mixing.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

## RECOMMENDATIONS

The recommended application rates below are for soils with a clay content of 10-30%. Consult your supplier regarding applications on very shallow and gravelly soils.

Weed species	Common name	Mixture of BOMBACIL and water	Number of doses (2 m ℓ) per Tree or Bush according to tree height	
			Seedlings (up to 0.5 m tall)	Established trees (taller than 0.5 m)
<i>Acacia burkei</i>	Black Monkey Thorn	1.0 ℓ + 5.0 ℓ water	1*	Apply one additional dose for every 0.5 m increase in tree height. Do not exceed 8 doses per tree
<i>Acacia erioloba</i>	Camel Thorn			
<i>Acacia erubescens</i>	Blue Thorn			
<i>Acacia karroo</i>	Sweet Thorn			
<i>Acacia mellifera</i>	Black Thorn			
<i>Acacia nigrescens</i>	Knob Thorn			
<i>Acacia tortilis</i>	Umbrella Thorn			

<i>Colophospermum mopane</i> *	Mopane			
<i>Dichrostachys cinerea</i>	Sickle bush			
<i>Grewia flava</i>	Brandybush			
<i>Terminalia sericea</i> **	Silver terminalia			
<i>Ziziphus mucronata</i>	Buffalo thorn			
<i>Acacia mearnsii</i>	Black wattle	1.5 l + 2 l water	1	Apply as above

\* Multi-stemmed seedlings up to 0.5 metres may require 2 dosages for satisfactory control.

♣ Variable results may occur on sandy soils.

♣♣ Not recommended on soils with less than 10% clay.

#### NOTES

- Multi-stemmed trees require a higher application rate than single-stemmed trees. For multi-stemmed trees apply up to double the number of doses that would be required for a single-stemmed tree of a similar height, but do not exceed a maximum of 8 doses per tree.
- Solitary trees may need a higher dosage than those growing in close proximity. In this case a grid application pattern may be used. A grid application is permissible when a dose of **BOMBACIL** will leach into the root zones of adjacent trees.
- Depending on weather conditions, the accuracy and thoroughness of the application, etc., follow-up applications may be needed after 24 months, or once defoliation symptoms no longer occur.
- Do not apply more than 8 l of **BOMBACIL** per ha in 24 months.