

TBZ 500 SC

South Africa Reg. No: L 10072 Act/Wet No. 36 of/van 1947



A suspension concentrate pre-emergence herbicide for the control of a broad spectrum of annual weeds in apples, vines and citrus as well as for the prevention of weed growth on industrial sites and other non-crop areas.

ACTIVE INGREDIENT

Terbuthylazine (triazine) 500 g/l

GROUP

C1

HERBICIDE

WARNING

HAZARD STATEMENTS:

- May be harmful if swallowed.
- May be harmful in contact with skin.
- Causes mild skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye damage.
- May be harmful if inhaled.
- May cause damage to organs.
- Very toxic to aquatic life.
- Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

- Avoid release to the environment.
- Wear impervious rubber gloves and chemical safety goggles.



Registration holder: Green Island Investments (Pty) Ltd.

Co. Reg. No.: 2013/043963/07

P.O. Box / Posbus 1822, Heidelberg 1438.

Tel: 010 035 4143

24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre: +27 82 446 8946

24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411 (Typhoon Plant Protection)

Distributed by: Typhoon Plant Protection (Pty) Ltd.

Co. Reg. No.: 1998/006156/07

P.O. Box 1822, Heidelberg 1438

Tel: 010 035 4143

Net Volume:

ℓ

Expiry Date:

Batch No:

Date of Manufacture:

U.N. No. 3082

 **Typhoon**
PLANT PROTECTION

READ LABEL IN DETAIL BEFORE OPENING THE CONTAINER. FOR FULL PARTICULARS, SEE ENCLOSED LEAFLET.
KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



WITHHOLDING PERIODS:**Withholding periods for follow-up crops:**

Grain Sorghum and Maize	None
Potatoes, Dry beans, Groundnuts, Soya beans and sunflowers	9 months
All other crops	18 months

WARNINGS:**HAZARD STATEMENTS:**

- Harmful if swallowed.
 - May cause damage to organs.
 - Very toxic to aquatic life with long lasting effects.
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- Harmful when swallowed.
 - Store in a cool, dry place.
 - Store away from food, feeds and other agricultural remedies.
 - Keep out of reach of children, uninformed persons and animals.
 - Very toxic to fish and aquatic organisms.
 - **Re-entry: Do not** enter treated area within 1 day after treatment unless wearing protective clothing.
 - **In case of poisoning call a physician and make this label available to him/her.**

Aerial Application: Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. **Do not** spray over or allow the drift to contaminate water or adjacent areas.

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 weeds 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:

PRECAUTIONARY STATEMENTS:

- Avoid release to the environment.
 - Wear impervious rubber gloves and chemical safety goggles.
 - **IF ON SKIN:** Wash with plenty of water and soap.
 - Immediately call a **POISON CENTRE**.
 - Dispose of contents/container in accordance with local regulations.
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- **Do not** inhale spray mist.
 - Wear protective clothing, a face shield, rubber gloves and rubber boots when handling the concentrate, preparing the spray mixture and when applying.
 - Wash contaminated clothing after use.
 - Wash with soap and water after use.
 - **Do not** eat, drink or smoke while mixing or applying the product or before washing hands and face.
 - Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
 - Clean applicator before using with other materials. Dispose of wash water where it will not contaminate food, grazing, rivers or dams.
 - **TRIPLE RINSE** empty containers 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 in the prescribed manner.
 - Destroy empty container by perforation and flattening and dispose of it in a safe way.
 - **Never** re-use the empty container for any other purpose.
 - Prevent contamination of food, feeds, drinking water and eating utensils.

Related ingredients:

Substance name (IUPAC)	CAS - No.	Concentration % By weight
	EC - No.	
Terbutylazine	5915-41-3	50%
Polyaryl phenyl ether phosphate, amine salt / calcium salt	105362-40-1	1-5%
Ethylene Glycol	107-21-1	1-5%

FIRST AID TREATMENT:

Inhalation: Remove source of contamination or move patient to fresh air. Keep patient under observation and obtain medical attention if necessary.

Skin contact: If irritation occurs, remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. If irritation persists, obtain medical assistance.

Eye contact: Immediately flush the contaminated eyes with gently flowing clean water for 20 minutes, holding the eyelid(s) open until no evidence of chemical remains. If irritation persists, obtain medical assistance.

Ingestion: Have patient rinse mouth thoroughly with water. **Do not** induce vomiting. In severe cases, obtain medical advice immediately.

NOTE TO PHYSICIAN:

No signs and symptoms of triazine poisoning are known or expected in humans. No specific antidote is available. Treat symptomatically and supportively when required. When large amounts have been ingested, consider gastric lavage or administer activated charcoal.

RESISTANCE WARNING:

For resistance management, **TBZ 500 SC** is a **group code C1 herbicide**. Any weed population may contain individuals naturally resistant to **TBZ 500 SC** 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 **TBZ 500 SC** or any other **group code C1 herbicide**.

To delay weed resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank-mix with products from different herbicide group codes.
- Integrate the control methods (chemical, cultural, biological) into weed control programmes.

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

USAGE RESTRICTIONS:

- **Do not** apply **TBZ 500 SC** to pear or stone fruit trees.
- **Do not** apply **TBZ 500 SC** to vines, citrus or apple trees within one year after transplanting. Avoid treatment of young interplants in established vineyards and orchards.
- **Do not** apply **TBZ 500 SC** to vines, apple and citrus experiencing trace element deficiencies or those growing in brackish soil conditions.
- **DO NOT APPLY TBZ 500 SC TO ALKALINE SOILS AND/OR SHALLOW SOILS THAT ARE SUBJECT TO WATERLOGGING.**
- **TBZ 500 SC** has a relatively long residual activity in the soil and susceptible crops such as winter cereals, legumes, vegetables, etc., should not be planted within 18 months of the soils being treated with **TBZ 500 SC**.
- If **TBZ 500 SC** is used in a tank mix with **Glyphosate** or **Simazine** formulations or any other herbicide, adhere to the restrictions applying to those herbicides.

WEEDS CONTROLLED:

<i>Acanthospermum australe</i>	Eight-seeded prostrate starbur	<i>Gisekia pharnaceoides</i>	Gisekia
<i>Acanthospermum glabratum</i>	Five-seeded prostrate starbur	<i>Hibiscus trionum</i>	Bladderweed
<i>Amaranthus hybridus</i>	Common pigweed	<i>Nicandra physaloides</i>	Apple of Peru
<i>Amaranthus thunbergii</i>	Red pigweed	<i>Oenothera stricta</i>	Evening primrose
<i>Bidens bipinnata</i>	Spanish blackjack	<i>Physalis angulata</i>	Wild gooseberry
<i>Bidens pilosa</i>	Blackjack	<i>Portulaca oleracea</i>	Puslane
<i>Chenopodium album</i>	White goosefoot	<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Chenopodium carinatum</i>	Green goosefoot	<i>Tagetes minuta</i>	Khaki weed
<i>Galinsoga parviflora</i>	Gallant soldier	<i>Physalis angulata</i>	Wild gooseberry

TBZ 500 SC does not control established weeds or weeds that develop from underground vegetative material such as rootstocks.

The degree of control and duration of effect depends on weed species, weed size, growing conditions at and following the period of application, rainfall and soil organic matter content.

DIRECTIONS FOR USE: (Use only as directed).**Compatibility:**

TBZ 500 SC is known to be compatible with **Glyphosate** and **Simazine** formulations. Note, however, that the formulation type of such products as well as the quality of the spray-water can affect the compatibility of **TBZ 500 SC** with other products. The registration holder does not accept responsibility for the compatibility of **TBZ 500 SC** with other products since the formulation of other products can be altered without the knowledge of the registration holder and the quality of water can vary from farm to farm. For this reason it is recommended that a compatibility test be carried out prior to application.

MIXING INSTRUCTIONS:

Shake well before use. Replace screw cap after use.

Half-fill the spray tank with water and start agitation. Pour the required quantity of **TBZ 500 SC** through a 50 mesh sieve into the tank. Top up the tank with water to the final volume required. Ensure thorough agitation during filling. When using a tank mixture with **Glyphosate** based products ensure that the **TBZ 500 SC** is added last. Ensure thorough agitation during filling and spraying operations.

APPLICATION

TBZ 500 SC can be applied with any medium-or high volume sprayer fitted with an efficient agitation mechanism, which is capable of giving adequate coverage and even distribution. Best results are obtained with fan-type spray tips that apply at least 200 ℓ spray mixture per hectare.

TBZ 500 SC is mainly absorbed by the roots of weed seedlings and has very little or no effect on established weeds. Where weeds have already emerged, these weeds must first be destroyed through cultivation or a suitable **post-emergence** herbicide before **TBZ 500 SC** is applied. In situations where the weeds are still small or where the infestation is very light.

TBZ 500 SC can be applied as a tank-mixture with a **post-emergence** herbicide provided it is compatible. Where the weed stand is well established and dense, **TBZ 500 SC** will not reach the soil surface due to the shading effect of the weeds. In such situations the weeds must first be killed with a **post-emergence** herbicide before **TBZ 500 SC** can be applied.

AGRICULTURAL USE:

CROPS: APPLES, VINES AND CITRUS

Application Rates:

CROP	TERBUTHYLAZINE (ℓ/ha)	TIMING OF APPLICATION
Dryland and Irrigated Bush Vines	3.5 ℓ/ha	Pre-bud
Irrigated Trellis Vines	3.5 ℓ/ha	Early Spring
Apples	3.5 ℓ/ha	During Spring
Citrus	3.5 ℓ/ha	During Spring

In the case of band applications, the dosage rates remain the same although correspondingly less of the spray-mixture will be applied per actual hectare. Check with your **TBZ 500 SC** supplier if in doubt.

TBZ 500 SC can be mixed with SC formulations of **Simazine** when used on apples, citrus and vines to increase the residual effect on grasses. Use an application rate of 2.7 ℓ/ha **TBZ 500 SC** plus 2 ℓ/ha **Simazine 500 SC** on soils with less than 15% clay and an application rate of 2.7 ℓ/ha. Use **TBZ 500 SC** plus 3 ℓ/ha **Simazine 500 SC** on soils with a clay content of more than 15%.

INDUSTRIAL USE:

SITE OF APPLICATION	DOSAGE	REMARKS
Along roads, railway lines and on industrial sites	8 to 20 ℓ/ha	Dosage depends on the clay content of the soil and the duration of control required. Use in combination with the required, registered rate of Glyphosate , as indicated on the Glyphosate product label. TBZ 500 SC can be mixed with Simazine 500 SC to increase the residual effect on grasses.