

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. SHAKE THE BOTTLE WELL BEFORE USE

Herbicide



TETRAMET SC

Reg. No. L 8158 Act No. 36 of 1947

3: 24/1/2023 – March 2023

A suspension concentrate herbicide with benoxacor for selective control of most annual broadleaf weeds as well as grasses in maize.

ACTIVE INGREDIENTS

atrazine (triazine)	174 g/l
terbutylazine (triazine)	174 g/l
metolachlor (α - Chloroacetamide)	252 g/l
benoxacor (safener)	8 g/l

GROUP 5:15 HERBICIDE



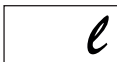
Hazard Statements:

Harmful if swallowed.
May cause an allergic skin reaction.
May cause cancer.

Precautionary Statements:

Obtain, read, and follow all safety instructions before use.
Do not breathe dust, fume, gas, mist, vapours, and spray.
Avoid breathing dust, fumes, mists, gas, vapours, or spray. (respiratory sensitization).
Wash hands and face thoroughly after handling.

DANGER



villa

UN Number: 3082

Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07

P.O. Box 10413, Aston Manor, 1630

Tel. (011) 396 2233

Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946

24 HR Transport / Spill Emergency no: (Hazcal24) +27 86 044 4411

(Client: Villa Crop Protection)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

TETRAMET SC

Reg. No. L 8158 Act No. 36 of 1947

HRAC HERBICIDE GROUP CODE: 5/15

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WARNINGS**Withholding periods:**

Allow the following number of months between last application and harvest of the crops listed below:	
a) Maize and Sugarcane	None
b) Grain Sorghum	12 months
c) Sunflowers, Groundnuts, Soybeans, Potatoes, Dry Beans, Forage Sorghum and Small Grains	18 months
d) All Other Crops (a testing planting is recommended)	24 months

IMPORTANT

The above-mentioned withholding periods are valid only if the correct dosage rate of **TETRAMET SC** according to soil type was applied and normal or above average rainfall occurred after the **TETRAMET SC** application.

Hazard Statements:

Harmful if swallowed.
May cause an allergic skin reaction.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Store under lock and key in a cool, dry, well-ventilated place, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Product contains **Atrazine**, which has a high potential for groundwater contamination.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- **In case of poisoning call a physician immediately 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. 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, 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:**

Obtain, read, and follow all safety instructions before use.
Do not breathe dust, fume, gas, mist, vapours, and spray.
Avoid breathing dust, fumes, mists, gas, vapours, or spray. (respiratory sensitization).
Wash hands and face thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing, and chemical safety goggles.
IF SWALLOWED: Get medical help.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF exposed or concerned, get medical advice.
Get medical help if you feel unwell.
Rinse mouth.
If skin irritation or rash occurs: Get medical help.
Collect spillage.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Avoid contact with skin and eyes.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Do not apply where roots of desirable plants can absorb the chemical.
- Do not mix and load within at least 15 m from boreholes, streams, rivers and dams.
- Do not apply within at least 60 m from dams.
- Ensure that no back siphoning to boreholes or dams takes place, where **Atrazine** is applied through the irrigation system.
- Clean the applicator thoroughly after use and before using with other products - dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Atrazine	174 g/l
Benoxacor	8 g/l
Metolachlor	252 g/l
Terbuthylazine	174 g/l
Polysilicate	<0.5 %
Poly-glycol	<10 %
Formaldehyde	<0.5 %

SYMPTOMS OF HUMAN POISONING

Acute toxicity to this herbicide is expected to be low and no adverse effects from exposure have been reported. It can be absorbed orally, dermally and by inhalation. Symptoms of poisoning include abdominal pain, diarrhea and vomiting, eye irritation, irritation of mucous membranes and skin irritations.

FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.
- **Skin contact:** If irritation occurs, remove contaminated clothing, shoes and leather goods (e.g., watchbands and belts). Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. If irritation persists, obtain medical assistance.
- **Eyes:** Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing.
- **Ingestion:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.
- **Inhalation:** Remove source of contamination or move patient to fresh air and assist breathing if needed. Keep patient under observation and obtain medical attention if irritation persists.

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 with water.

RESISTANCE WARNING

TETRAMET SC is a group code 5/15 herbicide. Any weed population may contain individuals naturally resistant to **TETRAMET SC** and other group code 5/15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled with **TETRAMET SC** or any other group code 5/15 herbicide.

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

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

Mode of action:

Atrazine is a selective systemic herbicide, absorbed principally through the roots, but also through the foliage, with translocation acropetally in the xylem and accumulation in the apical meristems and leaves.

Terbutylazine is a photosynthetic electron transport inhibitor at the photosystem II receptor site.

Metolachlor is a cell division inhibitor.

USE RESTRICTIONS

- When **TETRAMET SC** is applied to soils that expand on wetting and crack or crumble on drying out, such as turf soils, the **TETRAMET SC** may remain active in the soil for much longer than the above-mentioned waiting periods. Thus, **TETRAMET SC** should not be used on such soils if sensitive crops might be planted in the foreseeable future. On such soils **TETRAMET SC** may also give poor control of the weeds when applied pre-emergence.
- Do not apply **TETRAMET SC** to inbred parent plants of maize and grain sorghum hybrids or experimental or newly released maize and grain sorghum cultivars without first referring to the distributor or seed supplier.
- **TETRAMET SC** can cause damage to maize on poorly drained soils.

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

- **The product may flocculate when tank mixed with Paraquat, therefore do not mix with Paraquat.**
- The compatibility of **TETRAMET SC** may be influenced by several factors. As factors influencing compatibility may vary, a physical compatibility test must always be performed before a tank mixture is sprayed.
- When **TETRAMET SC** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to.

Mixing instructions:

- Half fill the spray tank with water.
- Add the required amount of **TETRAMET SC** through a 50-mesh sieve to the tank, while agitating.
- Fill the spray tank with water to the required level.

- When **TETRAMET SC** is tank mixed with other pesticides, the **TETRAMET SC** should be mixed first using a tank half filled with water and agitated well after which the spray tank should be filled almost to capacity. Only then should the other pesticides be added, whilst the spray tank is filled to its final volume.
- Maintain agitation during application.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g. overnight.

Application:

TETRAMET SC must be applied before or shortly after weeds emerge. The soil should preferably have a smooth surface, free of large clods.

If dry conditions prevail for a period of 7 to 14 days after application, weeds may emerge and develop. In such cases it is recommended that a light cultivation be carried out with a rotary cultivator to destroy these weeds and to mix the herbicide into the top 10 to 20 mm of soil.

Ground application: Flat fan type spray nozzles:

TETRAMET SC can be applied with any medium or high volume sprayer, with efficient agitation and which is capable of adequate coverage and even distribution. Best results are obtained using flat fan-type spray nozzles and applying a minimum spray volume of 200 litres per hectare spray mixture.

Aerial application:

TETRAMET SC aerial application must be done according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides) by a registered aerial application operator with a correctly calibrated registered aircraft. Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A spray mixture volume of 30 litres per hectare is recommended. **Pre-emergence** – 30 litres per hectare. **Post-emergence** – 30 to 35 litres per hectare. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: The following number of droplets per cm² must be recovered at the target area: **Pre-emergence** - 20 to 30. **Post-emergence** - 35 to 45.
- Droplet size: The following droplet spectra are recommended: **Pre-emergence** - VMD of 350 to 400 micron. **Post-emergence** - VMD of 300 to 350 micron. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 meters above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomizing equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomizers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

Table 1: TETRAMET SC applied pre-emergence or pre-plant incorporated or post-emergence.

Soil type	% Clay	Overall Application l / ha
Light sand / sand	0 to 10	3.0
Loamy sand / sandy loam	11 to 20	3.5
Sandy clay loam	21 to 30	4.2

TETRAMET SC can only be applied post-emergence if broadleaved weeds have not developed beyond the 4-leaf stage and grasses have not yet emerged. Where grasses have already emerged and broadleaf weeds have developed beyond the 4-leaf stage, these weeds must first be destroyed by cultivation and **TETRAMET SC** then applied onto clean soil. When **TETRAMET SC** is applied post-emergence to the weeds, a suitable surfactant **Villa 51** should be added to the spray mixture.

Crop rotation with triazine sensitive crops:

In the Northwest Province and North Western Free State, on 11 to 20 % clay soils where the carry-over effect of **Triazines** to groundnuts or other sensitive crops needs to be avoided, an application rate of 3.0 litres per hectare is recommended. On soils with high lime content these rates might however still damage follow-up crops.

IMPORTANT

Ensure that sufficient fertilizer is band-placed near the seed at planting to promote vigorous seedling growth.

WEEDS NORMALLY CONTROLLED BY TETRAMET SC:	
Broadleaf weeds:	
<i>Acanthospermum australe</i>	Eight-seeded prostrate starbur
<i>Acanthospermum glabratum</i>	Five-seeded prostrate starbur
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Bidens bipinnata</i>	Spanish blackjack
<i>Bidens pilosa</i>	Blackjack
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Cleome monophylla</i>	Spindlepod
<i>Cleome rubella</i>	Pretty lady
* <i>Commelina benghalensis</i>	Bengal wandering Jew
* <i>Cosmos bipinnatus</i>	Cosmos
<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria
* <i>Datura ferox</i>	Large thorn apple
* <i>Datura stramonium</i>	Thorn apple
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Gisekia pharnaceoides</i>	Gisekia
* <i>Hibiscus cannabinus</i>	Kenaf
<i>Hibiscus trionum</i>	Bladderweed
<i>Nicandra physaloides</i>	Apple of Peru
<i>Physalis angulata</i>	Wild gooseberry
<i>Portulaca oleracea</i>	Purslane
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Tagetes minuta</i>	Khaki weed
<i>Vigna vexillata</i>	Wild cow-pea
Grasses:	
<i>Eleusine indica</i>	Goose grass
<i>Chloris virgata</i>	Feathertop Chloris
<i>Panicum schinzi</i>	Sweet buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass

* If dry conditions prevail for a period of 7 to 14 days after pre-emergence application these weed species may not be adequately controlled, especially on heavy soils:
Under abnormal wet conditions late-season weed control may be inadequate.

COMMENTS

- All the above broadleaved weeds excluding grass weeds will be well controlled by **TETRAMET SC** if applied post-emergence.
- The following broadleaved weeds are also well controlled when **TETRAMET SC** is applied post emergence: Cocklebur (*Xanthium strumarium*), Dubbeltjie (*Tribulus terrestris*), Common morning glory (*Ipomoea purpurea*) and Striped wild cucumber (*Cucumis melo*).
- Variable to good control of the following annual grass weeds can be expected after a pre-emergence application of **TETRAMET SC**: Herringbone grass (*Urochloa panicoides*) and Crab fingergrass (*Digitaria sanguinalis*).
- Improved but variable control of Yellow nutsedge (*Cyperus esculentus*) can also be expected.

The following products mentioned in this label may be replaced with equivalent products:

- **VILLA 51** (L 8050 / W 130454 / N-AR 1090) = **WEN 51** (L 8315).

VILLA 51 and **WEN 51** are registered products of **UNIVERSAL CROP PROTECTION (PTY) LTD.**