

**THIS REMEDY IS RESTRICTED DUE TO ITS INCLUSION ON ANNEX III OF THE ROTTERDAM CONVENTION.
THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR,
OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR,
AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION,
AND ONLY AS DIRECTED ON THIS LABEL.**

Paraquat 200 SL

South Africa Reg. No: L 10180 Act/Wet No. 36 of/van 1947

Herbicide in the form of a solution for the control of annual grasses and broadleaf weeds in crops as listed and for fire breaks. Inactivated on contact with the soil.

ACTIVE INGREDIENT

Paraquat ion (bypiridyl) 200 g/l
(as dichloride salt) 276 g/l

GROUP	22	HERBICIDE
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DANGER

HAZARD STATEMENTS:

- Fatal if inhaled.
- May cause respiratory irritation.
- Very toxic to aquatic life with long-lasting effects.

PRECAUTIONARY STATEMENTS:

- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust, fumes, gas, mist, vapours, spray.
- Wash hands and face thoroughly after handling.

Registration holder: Green Island Investments (Pty) Ltd.
Co. Reg. No.: 2013/043963/07
P.O. Box 1822, Heidelberg 1438, South Africa
Tel: 078 737 9236

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, C/O Farm Vlakfontein
Corner of the R23 Benoni Road & R550 Nigel Road
Brakpan District, Heidelberg 1438, Gauteng, South Africa
Tel: 078 737 9236

Net Volume:

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Expiry Date:
Batch No:
Date of Manufacture:
U.N. No. 3016

 **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.



WARNINGS:

HAZARD STATEMENTS:

- Toxic if swallowed.
- Harmful in contact with skin.
- Causes skin irritation.
- Causes serious eye irritation.
- Fatal if inhaled.
- May cause respiratory irritation.
- Causes damage to organs through prolonged or repeated exposure.
- Very toxic to aquatic life.
- Very toxic to aquatic life with long lasting effects.

• KEEP LIVESTOCK OUT OF TREATED AREA FOR 3 WEEKS.

- Handle with extreme care.
- Toxic by swallowing or inhalation.
- Moderate to severe irritant to skin and eyes.
- Store in original container, in a cool, dry place.
- Store under lock and key and out of reach of children, uninformed persons and animals.
- Store away from food, feeds, fertilizers, seed and drink water.
- **PARAQUAT 200 SL** is highly toxic if swallowed, and can cause death.
- Never repack from this container.
- Toxic to wildlife.
- **Re-entry: Do not** enter treated area within 2 days after treatment 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 efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions; quality of dilution water, incompatibility with other substances not indicated on the label and the occurrence of resistance of the weeds to 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 performance of the remedy concerned due to failure of the user to follow the label instruction 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:

- P260: **Do not** breathe dust, fume, gas, mist, vapours and spray
- P261: Avoid breathing mist, vapours and spray.
- P264: Wash hands and face thoroughly after handling.
- P264+P265: Wash hands thoroughly after handling. **Do not** touch eyes.
- P270: **Do not** eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release into the environment.
- P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
- P284: In case of inadequate ventilation wear respiratory protection.

- **Do not** inhale fumes or spray mist.
- Avoid eye and skin contact.
- Wear protective overalls, rubber gloves, rubber boots and face mask or suitable respirator.
- Wash contaminated clothing daily.
- Wash with soap and water after accidental skin contact.
- **Do not** eat, drink, or smoke during application or before washing hands and face and change of clothing.
- Avoid spray drift onto crops, grazing, rivers or areas not under treatment.
- Spray drift may cause damage to neighbouring crops.
- Wash application equipment after use, using a wetting agent. Dispose of wash water in a safe manner and do not contaminate crops, grazing, rivers, dams, boreholes, fountains, etc.
- This applicator should not be used for applying chemicals other than herbicides.
- **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 described manner.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **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.	
Paraquat Tech 42%	1910-42-5	27.6%
Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether	134180-76-0	1-5%

SYMPTOMS OF HUMAN POISONING:

Inhalation of spray mist may cause nose bleeding and soreness of mouth and throat. Early signs of Paraquat poisoning, when ingested, are burning of the mouth and throat, gastrointestinal tract irritation, abdominal pain, loss of appetite, nausea, vomiting and diarrhoea. Other symptoms include thirst, shortness of breath, rapid heart rate, kidney failure, lung sores and liver injury. In severe cases of poisoning diarrhoea follows and kidney and liver damage may develop 1 to 3 days after exposure. Lung damage can be observed after about 3 days and may lead to death.

FIRST AID TREATMENT:

Remove the patient from the exposure area and keep the patient warm and at rest.

Eye contact: Flush eyes with lukewarm, gently flowing water for at least 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. If irritation, redness or burning sensations develop, get medical attention immediately.

Skin contact: Remove contaminated clothing, shoes and leather goods immediately. Wash contaminated areas with soap and water. Paraquat can be absorbed through damaged skin. Emergency personnel should wear gloves and avoid contamination. If irritation persists, get medical attention immediately.

Inhalation: Get medical attention immediately. **Do not administer supplementary oxygen.**

Ingestion: Do not induce vomiting. Wash mouth with water and give the patient water to drink.

Seek medical advice immediately.

NOTE TO PHYSICIAN:

Rapid treatment is essential. Wash out stomach and test urine and gastric aspirate, if clear, for presence of Paraquat. Give the patient up to 1 litre of 15 % aqueous suspension of **Fuller's Earth**, orally or via gastric tube, together with suitable purgative (200 ml of aqueous solution of **Mannitol**). Repeat administration of absorbent plus purgative until absorbent is seen in stools. This should normally take between 4 to 6 hours after start of treatment.

Do not administer supplement oxygen.

RESISTANCE WARNING:

PARAQUAT 200 SL is a **Group code D herbicide**. Any weed population may contain individuals naturally resistant to **PARAQUAT 200 SL** and other **Group code D herbicides**. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **PARAQUAT 200 SL** or any other **Group code D 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.

DIRECTIONS FOR USE: Use only as directed.

- Mix the required amount of **PARAQUAT 200 SL** with clean water in the spray tank.
- Add non-ionic wetting agent for best results at 3 times the rate advised on the label for fungicides.
- Apply by ground sprayers in 200 to 500 litres water per hectare.
- Use the higher spray volume and higher dosage rate for spraying dense weed growth.
- Ensure thorough wetting of the weeds.
- **Do not** spray buds or green parts of any crop.
- **PARAQUAT 200 SL** kills green tissue but does not harm mature bark.
- Paraquat is inactivated rapidly on contact with the soil and has therefore no residual action.

APPLICATION RATES:

CROP:	DOSAGE RATE:	REMARKS:
VINEYARDS	2,5 to 5 l/ha	Apply overall when weeds are 10 to 15 cm high before bud burst of the vines. Subsequently as a directed spray.
DECIDUOUS FRUIT	2,5 to 5 l/ha	Spray as necessary from spring onwards. Pome fruit only: Mix with SIMAZINE for residual effect.
CITRUS, AVOCADOS, PECANS & PAPAYAS	1,25 to 5 l/ha	In citrus only, PARAQUAT 200 SL can be mixed with a suitable residual herbicide.
BANANAS, TEA & COFFEE	1,25 to 2,5 l/ha	Apply through a low pressure floodjet nozzle.
SUGAR CANE	1,5 to 3 l/ha	Directed post-emergence in plant and ratoon cane. Should the spray come into contact with green cane leaves scorching will occur but this is only a temporary effect. Other suitable herbicides may be added for residual effect.
LUCERNE (Over 6 months old)	2,5 to 5,5 l/ha	Apply just before dormancy breaks or after cutting before regrowth of lucerne occurs.
VEGETABLES (Grown in rows)	1,25 to 2,5 l/ha	Use a knapsack sprayer with suitable shield to protect all parts of the crops from spray mist.
ALL CROPS Stale seedbed method	1,25 to 2,0 l/ha	Prepare seedbed with fertilizer, irrigate and let the weeds come up to cover the surface. Spray and sow within 3 days without reworking the seedbed. This method is especially useful for crops for which only a few herbicides have been registered e.g. lettuce, chicory, cucurbits. These may be sown a few days before spraying.
MINIMUM CULTIVATION	1,5 to 4 l/ha	Apply before or just after planting annual crops. May be mixed with a corresponding residual herbicide.

CROP:	DOSAGE RATE:	REMARKS:
POTATOES (Haulm destruction)	2,5 to 5 l/ha	Use 200 to 500 litres water per hectare. Do not apply if haulms show signs of wilting as tuber damage may occur. Spray ONLY when at least 5 hours of intensive sunshine are expected to follow.
INDUSTRIAL AREAS		Use 500 to 1 000 litres spray mixture per hectare depending on density of vegetation.
Young weeds	2,5 l/ha	
Mature weeds	5 l/ha	
FIRE BREAKS	2,5 to 3,75 l/ha	Two months before the onset of the fire season: Spray a 1 to 2 metre wide band (the sparser the vegetation, the wider the band) on both sides of a 5 to 12 metre wide untreated strip (or about 10 metre from a road or canal). Burn the sprayed bands 3 weeks later, while the unsprayed areas are still green and unburnable. The strip in between can be burned relatively safely after the first frost or drought when the vegetation in the strip has dried out.
AFFORESTATION	2,5 to 3,75 l/ha	Spray around young trees with a shield to protect the plant.

WEEDS CONTROLLED:

All above ground green tissue of actively growing plants is killed off by **PARAQUAT 200 SL**.

Annual weeds are well controlled.

Weeds with reserves stored underground recover eg. sedges, bulbs, Karoo daisy, oxalis, kikuyu, etc.