

**FARM-AG INTERNATIONAL (Pty) Ltd**

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

**1. PRODUCT & COMPANY IDENTIFICATION**

**Product Name:** FARM-AG PARAQUAT 200  
**Product Use:** Herbicide  
**Effective Date:** 2012  
**Revision Date:** March 2021

**24 Hr Emergency Number:** 082 771 2712

**In case of poisoning:**  
 Poison Information Centre: 082 446 8946  
 Tygerberg Hospital: (021) 931 6129  
 Poison Emergency Enquiries (021) 689 5227

**In case of Spillage:**  
 HAZMAT: 0800 147 112

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**Common Name:** Paraquat dichloride  
**Chemical Name:** 1,1'-dimethyl-4,4'-bipyridinium dichloride (IUPAC)  
**CAS No.:** 1910-42-5  
**Chemical Family:** Bipyridylum, dipyridylum  
**Chemical Formula:** C<sub>12</sub>H<sub>12</sub>C<sub>12</sub>N<sub>2</sub>  
**Molecular weight:** 257.2  
**Formulation:** Paraquat (bipyridyl) 200 g/l  
 Soluble Liquid

**Use:** Weedkiller 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.

Hazardous ingredients	CAS No.	g/L	Hazard symbols	Risk Phrases
Paraquat ion	4685-14-7	200	T	R24/25- R36/37/38
Pyridine Bases	68391-11-7	10	T	R24-R20/22-R34
Paraquat Emetic	27277-00-5	<10	T	R25
Alkylphenol Ethoxylate		<100	Xn	R22-R36/38-R53

**3. HAZARD IDENTIFICATION****Health and Environmental**

DO NOT PUT IN A FOOD OR DRINKS CONTAINER

Harmful in contact with skin and if swallowed.

Irritating to eyes and skin. May cause irritation to the respiratory system.

**Toxicity class:** WHO Ib**4. FIRST AID MEASURES AND PRECAUTIONS**

OBTAIN IMMEDIATE MEDICAL ATTENTION.

SPEED IS ESSENTIAL

For further advice on treatment, contact:

**DR H.O. FOURIE (24 HOURS) PHONE 082 881 8065.****Inhalation:**

Remove patient from exposure, keep warm and at rest. Obtain medical attention.

**Skin contact:**

Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be washed before re-use. Obtain medical attention.

**Eye contact:**

Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

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**Ingestion:**

OBTAIN IMMEDIATE MEDICAL ATTENTION.

SPEED IS ESSENTIAL.

Immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that start of treatment is not delayed. Induce vomiting, if this is not already occurring by tickling the back of the throat with a clean, blunt instrument (e.g. spoon handle).

**Advice to physician:**

Hospital TREATMENT:

Wash out stomach and test urine and gastric aspirate (if clear) for presence of paraquat. Give up to 1 litre of 15% aqueous suspension of Fuller's Earth orally or via gastric tube, together with a suitable purgative (200 ml of a 20% aqueous solution of Mannitol). Repeat administration of absorbents plus purgative until absorbent is seen in the stools. This should normally take between 4 and 6 hours after the start of treatment. Do not use supplemental oxygen.

**5. FIRE-FIGHTING MEASURES**

Keep fire exposed containers cool by spraying with water.

**Extinguishing agents:**

For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

**Protective equipment:** A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.**6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)****Personal precautions:**

Ensure suitable personal protection during removal of spillage. This means precautions: wearing eye protection, chemically resistant gloves, boots and coveralls.

**Environmental precautions:**

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

**Occupational spill:**

Adsorb spillage onto sand, earth or any suitable adsorbent material.

Transfer to a container for disposal. Wash the spillage area with water.

Washings must be prevented from entering surface water drains.

**7. HANDLING AND STORAGE REQUIREMENTS****Handling:**

Read the label before use.

Safe handling: Avoid contact with skin and eyes. Do not breath spray.

When using do advice: not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

**Storage:**

Store under lock and key. Keep in original container, tightly sealed.

Store in a cool, dry place away from farm feeds and food stuff.

**Storage stability:**

Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

**8. EXPOSURE CONTROL/PERSONAL PROTECTION**

When using this product refer to label for details.

**Occupational Exposure Limits**

Hazardous ingredient:	Paraquat Emetic SYNGENTA Standard 8 hr TWA 0,02 mg/m <sup>3</sup>
Hazardous ingredient:	Pyridine Bases SYNGENTA Standard 8 hr TWA 1 ppm 5 mg/m <sup>3</sup> Sk : Can be absorbed through skin
Hazardous ingredient:	Paraquat dichloride OES/HSE (Respirable Dust)

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**Tel + 27 31 003 3486 • Fax + 27 31 502 5825**8 hr TWA 0,1 mg/m<sup>3</sup>

Not applicable to field use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	: liquid.
<b>Colour</b>	: dark blue / green
<b>Odour</b>	: characteristic of pyridine bases
<b>Boiling point</b>	: approx. 100 °C aqueous solution
<b>Melting Point</b>	: Not available.
<b>Flash point</b>	: does not flash
<b>Autoignition temp.</b>	: Not available.
<b>Vapour Pressure</b>	: Not available.
<b>Density</b>	: 1,08 g/m <sup>l</sup>
<b>Solubility</b>	: soluble in/with water.
<b>pH-value (quant.)</b>	: 6,5 .. 7,5
<b>Partition Coefficient</b>	: Not available.
<b>Oxidising Properties</b>	: Not applicable.

**10. STABILITY AND REACTIVITY****Hazardous Reactions (materials to avoid):**

Paraquat is highly corrosive to most metals e.g., aluminium, zinc, iron.

**Hazardous decomposition product(s):**

Combustion or thermal decomposition will evolve toxic and irritant vapours.

**11. TOXICOLOGICAL INFORMATION****ACUTE TOXICITY (LETHAL DOSES)****LD<sub>50</sub> Oral male rats:** 707 mg formulation/kg**LD<sub>50</sub> Oral female rats:** 612 mg formulation/kg

Harmful if swallowed.

**LD<sub>50</sub> Dermal male rats:** 590 mg formulation/kg**LD<sub>50</sub> Dermal female rats:** 735 mg formulation/kg

Harmful in contact with the skin.

**Inhalation:** Nose bleeding and soreness of the throat may result from spray mist or dust trapped on the nasal mucosa. If this occurs review spraying and handling technique.**ACUTE TOXICITY (IRRITATION, SENSITISATION ETC.)****Skin Irritation:** Moderate/severe irritant to rabbit skin.**Eye Irritation:** Moderate irritant to rabbit eyes.

May cause eye irritation in man.

**Skin Sensitisation:** It is not a skin sensitiser in animal tests.**Respiratory Irritation:** High concentrations of mist may be irritant to the respiratory tract.**CHRONIC TOXICOLOGICAL EFFECTS / LONG TERM EXPOSURE****Long Term Exposure:** No long term risks to man are associated with the normal handling and use of this material.

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**12. ECOLOGICAL INFORMATION****ENVIRONMENTAL FATE AND DISTRIBUTION**

Liquid with low volatility

Information applies to: Paraquat ion

The substance is soluble in water.

The substance does not leach.

The substance does not bioaccumulate.

Paraquat is rapidly absorbed and de-activated by soil.

**ECOTOXICITY**

Unlikely to be hazardous to aquatic life, soil organisms and wildlife under normal use.

Harmful if drunk by livestock.

**13. DISPOSAL CONSIDERATION**

Do not contaminate rivers, dams or any other water source with the chemical or used containers. Drain and triple rinse containers and then destroy by perforation and flattening. Bury in an approved dumping site. Do not re-use for any other purpose.

**14. TRANSPORT INFORMATION****Road Transport**

UN No. : UN3016

Class- primary : 6.1 Toxic Substance

P.S.N : 3016 BIPYRIDYLIUM PESTICIDES, LIQUID, TOXIC,  
PARAQUAT MIXTURE**Maritime transport IMDG**

UN No. : UN3016

Class- primary : 6.1 Toxic Substance

UN Pack Group : III

P.S.N : BIPYRIDYLIUM PESTICIDES, LIQUID, TOXIC, (contains paraquat  
as dichloride salt)

Marine pollutant : No

ROAD/RAIL : TREMCARD 2

**Air transport ICAO/ IATA**

UN No. : UN1760

Class- primary : 8 Corrosive

UN Pack Group : III

P.S.N : CORROSIVE LIQUID, N.O.S., (contains paraquat as dichloride salt).

**15. REGULATORY INFORMATION****Danger Group II (SABS 0028-1990)**

Classification : HARMFUL

Hazard symbols : Xn

Risk Phases : (R21/22) Harmful in contact with skin and if swallowed.

: (R36/38) Irritating to eyes and skin.

Safety Phrases : (S2) Keep out of reach of children.

: (S13) Keep away from food, drink and animal feeding stuff.

: (S20/21) When using do not eat, drink or smoke.

: (S26) In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

: (S46) If swallowed, seek medical advice immediately and show this container or label.

Special label : (SO53) Do not reuse container, keep tightly closed in a safe place.

**16. OTHER INFORMATION**

Use : An agricultural/horticultural herbicide.

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Read the label before you buy: use pesticides safely.

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors or omissions or the consequence thereof.