# Insecticide



# **PARATHION 500 EC**

Reg. No. L 4297 Act No. 36 of 1947

6: 22/6/2022 - Oct2022

An emulsifiable concentrate contact and stomach poison for the control of insect pests on agricultural crops as indicated.

#### **ACTIVE INGREDIENT**

parathion (organophosphate) 500 g/e

**GROUP** 

**INSECTICIDE** 



#### **Hazard Statements:**

lasting effects.

Flammable liquid and vapour. Fatal if swallowed Fatal in contact with skin Causes skin irritation. Fatal if inhaled Causes damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long

**Precautionary Statements:** 

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Avoid release into the environment.





Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07 PO Box 801, Kempton Park, 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: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

#### **PARATHION 500 EC**

Reg. No. L 4297 Act No. 36 of 1947 IRAC INSECTICIDE GROUP CODEE: 1B

**ACTIVE INGREDIENT:** 

parathion (organophosphate) ...... 500 g/t

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1983/008184/07

P.O. Box 801

KEMPTON PARK, 1620 Tel. (011) 396 2233

#### **WARNINGS**

Minimum time between last application and harvest or feeding or grazing:

- Allow 21 days between last treatment and harvest.
- Do not use on tomatoes, potatoes, cucurbits and grapevines or in deciduous fruit orchards.

#### **Hazard statements:**

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Flammable liquid and vapour.		
Fatal if swallowed.		
Fatal in contact with skin.		
Causes skin irritation.		
Fatal if inhaled.		
Causes damage to organs through prolonged or repeated exposure.		
Very toxic to aquatic life with long lasting effects.		

- Handle with extreme care.
- Toxic to Bees and wildlife.
- Volatile: do not open in enclosed spaces.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within two (2) days after treatment unless wearing protective clothing.
- In case of poisoning call a physician and make this label available to him/her.

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 the pests to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further 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 event of any uncertainty.

### **PRECAUTIONS**

#### **Precautionary statements:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use explosion-proof equipment.
Use non-sparking tools.

Take action to prevent static discharges.

Do not breathe mists, vapours, or spray.

Do not get in eyes, on skin, or on clothing.

Wash hands and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

PARATHION 500 EC PAGE 2 OF 5

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing, and chemical safety goggles.

In case of inadequate ventilation wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER.

IF INHALED OR ON SKIN: Get emergency medical help immediately.

IF ON SKIN: Wash with plenty of water and non-abrasive soap.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Get medical help if you feel unwell.

Rinse mouth.

Take off immediately all contaminated clothing and wash before reuse.

Collect spillage.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, 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 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 <a href="www.croplife.co.za">www.croplife.co.za</a>. Do not bury, burn, or donate the container to
  any other parties that may use it as a container for food or beverages.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Ethyl parathion	500 g/ℓ	
Xylene	< 450 g/ℓ	

## **SYMPTOMS OF HUMAN POISONING**

Nausea, headache, tiredness, giddiness, blurred vision and pupillary constriction, vomiting, abdominal pain, diarrhoea, sweating and salivation. Confusion, ataxia, slurred speech, loss of reflexes are some of the central nervous system effects, which may lead to misdiagnosis as acute alcoholism. After inhalation of vapours, ocular and respiratory effects appear within minutes. These include marked miosis, ocular pain, conjuctival congestion, diminished vision, ciliary spasm and brow ache. With acute systemic absorption: rhinorrhea, hyperemia of upper respiratory tract, tightness in the chest and wheezing respiration. Severe intoxication: salivation, involuntary defecation and urination, sweating, lacrimation, penile erection, bradycardia and hypotension.

## 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.**
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. **Do not** apply mouth-to-mouth respiration. **Seek medical attention immediately**.
- <u>Skin contact:</u> Remove contaminated clothing, shoes and leather goods. Gently wipe of excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Persons who become sensitized may require specialized medical management with anti-inflammatory agents. **Seek medical attention immediately**.
- <u>Eye contact:</u> Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Obtain medical attention if irritation persists.
- If swallowed: Seek medical attention immediately or call a poison control centre for treatment advice. Do not induce vomiting, due to the aromatic solvent. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

PARATHION 500 EC PAGE 3 OF 5

#### **NOTE TO PHYSICIAN**

Administer atropine as early as possible in an adequate dosage until signs of atropinisation (dry flushed skin, tachycardia and pulse rate of over 120 per minute) occur. To prevent gastrointestinal absorption by an unconscious patient that has swallowed this product, perform stomach lavage using bicarbonate solution and activated charcoal. In less severe cases begin with 2 mg atropine intravenously for adults, or 0.05 mg atropine/kg body weight for children under 12 years of age and repeat administration of the drug at 15 to 30 minutes intervals. Morphine and similar drugs are contra-indicated. Avoid aminoglycosides and succinylcholine, which have a blocking effect on the neuromuscular junction. Phenothiazines, reserpine and theophylline are contra-indicated.

### **RESISTANCE WARNING**

**PARATHION EC** is a group code 1B insecticide. Any insect population may contain individuals naturally resistant to **PARATHION EC** and any other group code 1B insecticide. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **PARATHION EC** or any other group code 1B insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

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

#### Mode of action:

**Parathion** is an organophosphate and belongs to IRAC mode of action group 1B. It is a non-systemic insecticide and acaricide that is active through contact, ingestion and to some extent respiration. It acts by inhibiting the acetylcholinesterase through covalent reaction with the enzyme and blocks hydrolysis of acetylcholine and results in hyperexcitation.

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

#### Compatibility:

- Not compatible with alkaline spray products such as Urea, Bordeaux or Lime Sulphur.
- The compatibility of PARATHION EC may be influenced by several factors. As factors influencing compatibility may vary, a physical compatibility test must always be performed before such tank mixture is sprayed.
- When **PARATHION EC** is used in conjunction with any other agricultural remedy, all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to.

#### **APPLICATION RATES**

Crop / Pest	Dosage Rate	Remarks
Any Crop Ants	4 ε / 100 ε water	Spray the infested soil thoroughly. Apply as a spot treatment in autumn or when Ant activity is on the increase.
Chafer beetles	75 mℓ / 100 ℓ water	Spray young growth regularly when the Beetles appear.
Castor oil Stinkbug	600 to 900 mℓ / ha	Ground application. Dosage depends on size of plants.
<u>Cruciferae</u> Bagrada bugs	75 mℓ / 100 ℓ water	Spray full cover as soon as the Bugs are noticed, also on the surrounding soil. This Bug is usually more troublesome in autumn.
Caterpillars of the Diamond back moth & Greater cabbage moth	75 mℓ / 100 ℓ water	Spray full cover, paying special attention to the undersides of the leaves as soon as the infestation is noticed. Repeat when necessary.
Citrus Red-, Mussel-, Circular purple scale, Australian bug & Mealy bug	125 mℓ / 100 ℓ water	Full cover spray early in the season only, after the previous crops has been picked. Usually at 80 to 100 % petal drop. Mature trees are sprayed once, while young trees may be re-sprayed sometimes, 6 to 8 weeks later.

PARATHION 500 EC

Crop / Pest	Dosage Rate	Remarks	
Onions Thrips	75 mℓ / 100 ℓ water	Apply at first sign of infestation and repeat at 7-to-10-day intervals. <b>Do not</b> use on spring onions.	
Sorghum	650 mℓ / ha		
Aphids	OR		
	200 to 300 mℓ	Spray when the Aphid numbers are increasing Dosage depends on plant size and stage of growth.	
	PLUS		
	300 to 500 mℓ		
	Dimethoate EC per ha		
Spineless cactus	00/ 400		
(prickly pear) Cochineal	60 mℓ / 100 ℓ water	Full cover spray when pest is noticed.	
Wheat	650 mℓ / ha		
Aphids (green &	OR	Carey when the Aphid numbers are increasing and	
brown)	200 to 300 mℓ	Spray when the Aphid numbers are increasing and very few Ladybirds or other predators and parasites are present. Dosage depends on plant size and	
	PLUS		
	300 to 500 mℓ stage of growth.	stage of growth.	
	Dimethoate EC per ha		
Russian aphid	650 mℓ	Spray young wheat as soon as the first Aphids are noticed. From the pipe stage onwards, only spray	
	PLUS		
	500 mℓ Demeton-S-methyl	when 20 % of the plants are infested.	
	<b>EC</b> per ha	20 % of the plante are infloored.	

PARATHION 500 EC PAGE 5 OF 5