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

‘n Emulgeerbare konsentraat kontak- en maaggif vir die beheer van insekplae op landbougewasse soos aangedui.

**IRAC INSECTICIDE GROUP CODE**  1B  **IRAC INSEKDODER GROEPKODE**

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**
parathion (organophosphate)

............................................................ 500g/l
paration (organofosfaat)

**Net volume / Netto volume:**

Registration holder / Registrasiehouer:

**UNIVERSAL CROP PROTECTION (PTY) LTD**
P.O. Box / Posbus 801
KEMPTON PARK, 1620
TEL: (011) 396 2233

Distributed by / Versprei deur:

**UN number: 3018**

**Batch number:**

**Lotnommer:**

**Date formulated:**

**Formuleringsdatum:**

Vir volledige besonderhede, sien ingeslote pamflet.
For full particulars, see enclosed leaflet.
UNIVERSAL PARATHION EC
Reg. No. L 4297 Act/Wet No. 36/1947
IRAC INSECTICIDE GROUP CODE / IRAC INSEKDODER GROEPKODE: 1B

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:
parathion (organophosphate)/paration (organofosfaat) ......................... 500g/l

Registration holder / Registrasiehouer:
UNIVERSAL CROP PROTECTION (PTY) LTD
P.O. Box / Posbus 801
KEMPTON PARK, 1620 Tel: (011) 396 2233

VERY TOXIC  UITERS GIFTIG

WARNINGS
Minimum time between last application and harvest or feeding:
• Allow 21 days between last treatment and harvest.
• Do not use on tomatoes, potatoes, cucurbits and grapevines or in deciduous fruit orchards.
• Handle with extreme care.
• Poisonous when absorbed through the skin or swallowed or inhaled.
• Toxic to fish, 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, fertilizer and other agricultural remedies.
• Keep out of reach of children, uninformed persons and animals.
• Re-entry: Do not enter treated area within 2 days 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 lands to be sprayed and issue the necessary warnings. Do not spray over or allow 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 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
• Avoid inhalation of spray mist or fumes.
• Wear protective clothing, suitable mask, rubber gloves and boots when handling the product, preparing the spray mixture and during application.
• Wash with soap and water after use and after accidental skin contact.
• Wash contaminated clothing after use.
• Do not eat, drink or smoke whilst mixing or applying the product, or before washing hands and face and change of clothing.
• 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 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 rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- Never re-use the empty container for any other purpose.
- Never clear choked sprayer by blowing with the mouth.
- Dampen spillage of concentrate with washing soda and wash area thoroughly with plenty of water.
- Prevent contamination of food, feeds, drinking water and eating utensils.

**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, conjunctival 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 patient from source of poisoning and keep him calm and reassured.
- Skin contact: Remove contaminated clothing and rinse contaminated body area thoroughly with plenty of soap and cold water. Do not rub skin.
- Eye contact: Flush contamination out of eyes with clean water for at least 15 to 20 minutes, holding the eyelid(s) open.
- If swallowed: If water diluted mixture has been swallowed, rinse mouth thoroughly with water.
- Do not induce vomiting due to the aromatic solvent.
- Seek medical attention immediately.
- Administer artificial respiration or closed chest cardiac massage if necessary.
- Do not apply mouth-to-mouth respiration.
- Never give anything by mouth to an unconscious person.
- Take the patient immediately to the nearest physician.

**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 the patient unconscious 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 insecticide from the same insecticide group code. Alternate or tank mix with products form different insecticide group codes,
- integrate the control methods (chemical, cultural, biological) into insect control programmes.

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

**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.

**Aerial application:**
Aerial application of PARATHION EC may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). 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. 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:** 30 to 40 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 250 to 280 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- **Use suitable atomising 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 atomisers 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/h.
- **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.
<table>
<thead>
<tr>
<th>Crop/Pest</th>
<th>Dosage Rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Crop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ants</td>
<td>4 l / 100 l water</td>
<td>Spray the infested soil thoroughly. Apply as a spot treatment in autumn or when ant activity is on the increase.</td>
</tr>
<tr>
<td>Chafer beetles</td>
<td>75 ml / 100 l water</td>
<td>Spray young growth regularly when the beetles appear.</td>
</tr>
<tr>
<td>Castor oil</td>
<td>600 to 900 ml / ha</td>
<td>Aerial or ground application. Dosage depends on size of plants.</td>
</tr>
<tr>
<td>Cruciferae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagrada bugs</td>
<td>75 ml / 100 l water</td>
<td>Spray full cover as soon as the bugs are noticed, also on the surrounding soil. This bug is usually more troublesome in autumn.</td>
</tr>
<tr>
<td>Caterpillars of the Diamond back moth and Greater cabbage moth</td>
<td>75 ml / 100 l water</td>
<td>Spray full cover, paying special attention to the undersides of the leaves, as soon as the infestation is noticed. Repeat when necessary.</td>
</tr>
<tr>
<td>Citrus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red-, Mussel-, Circular purple scale, Australian bug and Mealy bug</td>
<td>125 ml / 100 l water</td>
<td>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 sometimes young trees may be re-sprayed 6 to 8 weeks later.</td>
</tr>
<tr>
<td>Onions</td>
<td>75 ml / 100 l water</td>
<td>Apply at first sign of infestation and repeat at 7 to 10 day intervals. Do not use on spring onions.</td>
</tr>
<tr>
<td>Sorghum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>650 ml / ha or 200 to 300 ml plus 300 to 500 ml / ha</td>
<td>Spray when the numbers are increasing. Dosage depends on plant size and stage of growth.</td>
</tr>
<tr>
<td>Spineless cactus (prickly pear)</td>
<td>60 ml / 100 l water</td>
<td>Full cover spray when pest is noticed.</td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids (green and brown)</td>
<td>650 ml / ha or 200 to 300 ml plus 300 to 500 ml dimethoate EC per ha</td>
<td>Spray when the numbers are increasing and very few ladybirds; other predators or parasites are present. Dosage depends on plant size and stage of growth.</td>
</tr>
<tr>
<td>Russian aphid</td>
<td>650 ml / ha plus 500 ml demeton-S-methyl EC per ha</td>
<td>Spray young wheat as soon as the first aphids are noticed. From the pipe stage onwards, only spray when 20 % of the plants are infested.</td>
</tr>
</tbody>
</table>