An emulsifiable concentrate systemic insecticide, for the control of insects on crops as indicated.

An emulgeerbare konsentraat sistemiese insekmiddel, vir die beheer van insekte in gewasse soos aangedui.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL
demeton-S-methyl (organophosphate) 250 g/l demeton-S-metiel (organofosfaat)

IRAC INSECTICIDE GROUP CODE 1B IRAC INSEKDODER GROEPKODE

Registration holder / Registraehouer: Universal Crop Protection (Pty) Ltd.
PO Box / Posbus 801, Kempton Park, 1620 Tel. (011) 396-2233
Website / Webblad: www.villacrop.co.za

UN Number: 3017
### WARNINGS

**Withholding periods:**

<table>
<thead>
<tr>
<th>Crop Type</th>
<th>Minimum Time Between Last Application and Harvest or Feeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, Cabbage, Cauliflower and Brussels sprouts</td>
<td>10 days</td>
</tr>
<tr>
<td>Green peppers and Brinjals</td>
<td>14 days</td>
</tr>
<tr>
<td>Peaches, Plums, Apricots, Apples, Barley, Pears, Peas, Tomatoes, Potatoes, Cotton, Groundnuts, Wheat, Maize, Onion tops and Sorghum</td>
<td>21 days</td>
</tr>
<tr>
<td>Olives</td>
<td>90 days</td>
</tr>
</tbody>
</table>

- Handle with extreme care.
- Poisonous when absorbed through the skin or swallowed or inhaled.
- Toxic to fish, bees and wildlife.
- **Flammable** – do not store or spray near open flames.
- 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 2 days after treatment unless wearing protective clothing.
- **In case of poisoning call a doctor 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 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

- Do not inhale the spray mist or fumes.
- Avoid contact with skin and eyes.
- Wear full protective clothing, suitable respirator, 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 the 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 draining 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.
• Prevent contamination of food, feed, 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, effects appear within minutes: ocular and respiratory effects. This includes marked miosis, ocular pain, conjunctival congestion, diminish vision, ciliary spasm and brow ache. With acute systemic absorption: rhinorrhoea, 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 patient from the source of poisoning to a well-ventilated area and keep him/her calm and reassured.
• **Skin contact:** Remove contaminated clothing and rinse contaminated body area thoroughly with plenty of soap and cold water. Do not rub the skin.
• **Eye contact:** Flush contamination out of eyes with clean running 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 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 to the nearest physician immediately.**

**NOTE TO PHYSICIAN**
Administer atropine as early as possible in an adequate dosage until signs of atropinisation (dry, flushed skin, tachycardia and pulse rate over 120 per minute) occur. To prevent gastrointestinal absorption in the unconscious that have 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**
**DEMETON 250 EC** is a group code 1B insecticide. Any insect population may contain individuals naturally resistant to **DEMETON 250 EC** and other group code 1B insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **DEMETON 250 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.
DIRECTIONS FOR USE: Use only as directed.

Compatibility:
- **DEMETON 250 EC** is compatible with chemicals such as fixed coppers and carbamates, but should not be used in combination with **Bordeaux mixture, Lime Sulphur, Spray Lime or Captab**.
- The compatibility of **DEMETON 250 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 **DEMETON 250 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.

Mixing instructions:
Pour the required amount into the water in the spray tank while agitating.

Aerial application:
Aerial application of **DEMETON 250 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**: 25 to 35 droplets per cm² must be recovered at the target area.
- **Droplet size**: A droplet spectrum with a VMD of 280 to 300 micron is recommended. 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 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 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>
<thead>
<tr>
<th>Crop / Pest</th>
<th>Dosage Rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apricots &amp; Peaches</strong></td>
<td>100 ml/100 l water</td>
<td>Cover spray when mites are noticed and repeat when necessary.</td>
</tr>
<tr>
<td>Bryobia mite</td>
<td>100 ml/100 l water</td>
<td></td>
</tr>
<tr>
<td><strong>Beans, Brinjals, Green peppers &amp; Tomatoes</strong></td>
<td>80 ml/100 l water</td>
<td>Cover spray when pest is noticed and repeat when necessary.</td>
</tr>
<tr>
<td>Aphids</td>
<td>100 ml/100 l water</td>
<td>Refer application directions on apricots.</td>
</tr>
<tr>
<td><strong>Apples &amp; Pears</strong></td>
<td>100 ml/100 l water</td>
<td>Refer application directions on peaches.</td>
</tr>
<tr>
<td>Aphids</td>
<td>100 ml/100 l water</td>
<td>Refer application directions on apricots.</td>
</tr>
<tr>
<td><strong>Apricots, Peaches &amp; Plums</strong></td>
<td>100 ml/100 l water</td>
<td>Cover spray when pest appears. Repeat when necessary. Essentially a pest of early spring causing curling of young leaves.</td>
</tr>
<tr>
<td><strong>Citrus</strong></td>
<td>80 ml/100 l water</td>
<td>For aerial spraying use in not less than 30 litres water.</td>
</tr>
<tr>
<td>Aphids</td>
<td>80 ml/100 l water</td>
<td>Apply to nursery stock <strong>only</strong>. Apply when trees are flushing and heavy Aphid populations are developing.</td>
</tr>
<tr>
<td><strong>Cotton</strong></td>
<td>500 ml/ha</td>
<td><strong>Western Cape only:</strong> Aerial application. Apply at first signs of infestation, only while crop grows actively. Summer rainfall areas: Aerial application or tractor spraying in not less than 200 litres water per hectare. Spray at first signs of infestation.</td>
</tr>
<tr>
<td><strong>Barley</strong></td>
<td>500 ml/ha</td>
<td><strong>Western Cape only:</strong> Aerial application. Apply at first signs of infestation, only while crop grows actively. Summer rainfall areas: Aerial application or tractor spraying in not less than 200 litres water per hectare. Spray at first signs of infestation.</td>
</tr>
<tr>
<td>Russian aphid</td>
<td>500 ml/ha</td>
<td></td>
</tr>
<tr>
<td><strong>Groundnuts</strong></td>
<td>500 ml/ha</td>
<td>Cover spray at first sign of infestation and repeat as necessary. Aerial or Low Volume application.</td>
</tr>
<tr>
<td><strong>Cruciferae</strong></td>
<td>80 ml/100 l water</td>
<td>Apply only to cabbage, cauliflower and brussels sprouts.</td>
</tr>
<tr>
<td><strong>Ornamentals, Flowers &amp; Roses</strong></td>
<td>80 ml/100 l water</td>
<td>Apply when noticing that the pest is multiplying and if very few Ladybird beetles or other predators are present. The barley must be growing actively. Aerial application or tractor spraying.</td>
</tr>
<tr>
<td><strong>Ornamentals, Flowers &amp; Roses</strong></td>
<td>80 ml/100 l water</td>
<td>Apply when pest is noticed. Repeat when necessary. Cover spray.</td>
</tr>
<tr>
<td><strong>Ornamentals, Flowers &amp; Roses</strong></td>
<td>100 ml/100 l water</td>
<td>Apply as a soil drench to established plants at 10 litres per m².</td>
</tr>
<tr>
<td><strong>Peas</strong></td>
<td>500 ml/ha</td>
<td>Do not apply later than the flowering stage.</td>
</tr>
<tr>
<td><strong>Potatoes</strong></td>
<td>1 l/ha</td>
<td>First application at germination. Followed by 2 sprays at weekly intervals and thereafter 4 further sprays at fortnightly intervals. Use 400 litres water per hectare.</td>
</tr>
<tr>
<td><strong>Rooibos tea</strong></td>
<td>100 ml/100 l water</td>
<td>Apply directly after cropping.</td>
</tr>
<tr>
<td>Jassids (leafhoppers)</td>
<td>100 ml/100 l water</td>
<td>Apply when pest is increasing. Low volume or Ultra Low Volume or aerial application.</td>
</tr>
<tr>
<td><strong>Sorghum &amp; Maize</strong></td>
<td>500 ml/ha</td>
<td></td>
</tr>
<tr>
<td>Crop / Pest</td>
<td>Dosage Rate</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
</tbody>
</table>
| **Wheat**                   | **Aphids (Green & Brown)** | 500 ml / ha  
Apply when the pest is noticed and on the increase and very few Ladybird predators or parasites are present. For good results with systemic insecticides, wheat should be actively growing. Low volume or Ultra Low Volume or Aerial application. |
| Russian aphid              | **500 ml**  
**PLUS**  
650 ml Parathion 500 EC / ha | 500 ml / ha  
Aerial application:  
Apply as a cover spray when necessary.  
Winter rainfall area only, and only if wheat is growing actively.  
**Aerial application:**  
Use the higher concentration for the first application. If necessary, re-apply 2 to 3 weeks later using the low concentration.  
Cover spray when pest is noticed. Repeat when necessary. |
| Mites                      | **200 to 250 ml / ha** | 400 ml / ha  
Aerial application:  
Apply as a cover spray when necessary.  
Winter rainfall area only, and only if wheat is growing actively.  
**Aerial application:**  
Use the higher concentration for the first application. If necessary, re-apply 2 to 3 weeks later using the low concentration.  
Cover spray when pest is noticed. Repeat when necessary. |