Orthene 75 SP
Reg. No.: L0190 Act / Wet No. 36 of/van 1947

A systemic and contact water soluble insecticide for the control of pests as mentioned on the crops listed.

'\nSisteimiese- en kontak- wateroplosbare insekdoder vir die beheer van plae soos aangedui op die genoemde gewasse.

IRAC INSECTICIDE GROUP CODE: 1B
IRAC INSEKDODERGROEP KODE:

ACTIVE INGREDIENT/ AKTIEWE BESTANDDEEL:
Acephate/Asefaat ................................................................................................................................... 750 g/kg [organophosphate/ organofosfaat]

Registration holder / Registrasiehouer:
Volcano AgroScience (Pty) Ltd trading as ARYSTA LifeScience South Africa (Pty) Ltd
7 Sunbury Office Park,
off Douglas Saunders Drive,
La Lucia Ridge, South Africa, 4019
Tel: 031 514 5600

Contents/Inhoud kg

Batch No./Lot Nr.: 

Date of manufacture: / Datum van vervaardiging:

U.N. No. 2783

READ THE LABEL IN DETAIL BEFORE OPENING THE CONTAINER. / LEES DIE ETIKET VOLLEDIG VOORDAT DIE HOUER OOPGEMAAK WORD.
For full particulars, see enclosed leaflet. / Vir volledige besonderhede, sien ingeslote pamflet.
Orthene 75 SP
Reg. No.: L0190 Act/Wet No. 36 of/van 1947

A systemic and contact water soluble insecticide for the control of pests as mentioned on the crops listed.

’n Sisteimiese- en kontak- wateroplosbare insekdoder vir die beheer van plae soos aangedui op die genoemde gewasse.

IRAC INSECTICIDE GROUP CODE / IRAC INSEKDODERGROEP KODE: 1B

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:
Acephate/Asefaat...................................................................................................................................750 g/kg
[organophosphate/ organofosfaat]

Registration holder / Registrasiehouer:
Volcano AgroScience (Pty) Ltd trading as
ARYSTA LifeScience South Africa (Pty) Ltd
7 Sunbury Office Park,
off Douglas Saunders Drive,
La Lucia Ridge, South Africa, 4019
Tel: 031 514 5600

CAUTION / VERSIGTIG

WARNINGS:
• Withholding periods: Allow 3 days between application and harvest of cruciferae and tomatoes and 14 days for potatoes; 28 days for peaches and plums, 30 days for apples and pears and 14 days for tobacco.
• Handle with care.
• May irritate skin and eyes
• Toxic to fish, bees and wildlife.
• Store in a cool, dry place away from food, feeds fertilizer and other agricultural chemicals.
• Keep out of reach of children, animals and uninformed persons.
• Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.
• Aerial application: Notify all inhabitants of the immediate area 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 may be effective under all conditions. The activity 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 against the remedy, 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 environment or harm to man or animals, or for lack of performance of the remedy concerned due to failure by 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 the event of any uncertainty.

PRECAUTIONS
• Do not inhale the powder dust or spray mist.
• Avoid contact with eyes and prolonged or repeated skin contact.
• Wash contaminated clothing after use.
• Wash with soap and water after use or accidental skin contact.
• Do not eat, drink or smoke whilst mixing or applying the remedy or before washing hands and face.
• Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment.
• Clean applicator before using with other remedies and dispose of wash water where it will not contaminate crops, grazing and dams.
• Prevent contamination of food, feed, eating utensils and drinking water.
• Invert the empty container over the spray or mixing tank to make sure that the container is empty before destroying the container.
• Destroy empty container by perforation and flattening and do not re-use for any other purpose.
SYMPTOMS OF POISONING
Nausea, headache, tiredness, giddiness, blurred vision and papillary constriction. Depending on severity of poisoning these symptoms become worse with the onset of vomiting, abdominal pain, diarrhea, sweating and salivation. Severe poisoning is manifested by extreme salivation, involuntary defecation and urination, sweating, lacrimation, bradycardia and hypotension.

FIRST AID:
Always obtain treatment by a doctor immediately.

- Remove patient from source of poisoning to fresh air and keep him quiet and reassured.
- In case of accidental contact carefully remove contaminated clothing and rinse contaminated body area thoroughly with soap and plenty of water. Avoid abrasion of the skin.
- Flush contamination out of eyes with clean water for at least 15 minutes.
- If swallowed, wash out mouth with water and obtain medical assistance. If necessary, first aid should include mouth-to-nose respiration, cardiac massage and avoidance of injury in patient with trauma.
- Take the patient to a doctor immediately and show him this label.

INFORMATION FOR DOCTOR
Atropine must be administered as early as possible. Therapeutic objective is to achieve atropinisation. In less severe cases begin with 2 mg atropine intravenously for adults or 0,05 mg atropine / kg body mass intravenously for children under 12 years of age. Repeat at 15 to 30 minute intervals. In severe cases a total atropine dose of 20 to 80 mg in the first hour may be necessary with repeated drug administrations at 3 to 10 minute intervals. Call the nearest poison centre for more details.

RESISTANCE WARNING
For resistance management, ORTHENE 75SP is a Group Code 1B insecticide. Any insect population may contain individuals naturally resistant to ORTHENE 75SP 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 ORTHENE 75SP or any other Group Code 1B insecticides.

Since the presence of resistant insects is difficult to detect prior to insecticide application, it is of utmost importance that treated areas be inspected at regular intervals to identify the occurrence of insecticide-resistant insects timely. VOLCANO AGROSCIENCE (PTY) LTD will not accept liability for performance failures in the event of a build-up of resistant insects resulting from inadequate resistance management practices as indicated on the label.

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 or biological) into insect control programmes.

For specific information on resistance management contact your local VOLCANO AGROSCIENCE representative.

DIRECTIONS FOR USE
Use only as indicated

It is a violation of Government Notices R.1716 of 26 July 1991 and R.181 of 7 February 2003 issued in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No.36 of 1947), to use this product in a manner inconsistent with its labelling, or to decant this product into another container.

Compatibility:
ORTHENE 75SP is compatible with MANCOZEB 800WP but should be tested on a small scale when mixed with other pesticides to ensure that it is safe to the crop.

Mixing instructions:
- Half fill the spray tank with water and add the required amount of ORTHENE 75SP to the water whilst agitating.
- Ensure that all the lumps have dissolved before adding the rest of the water.
- Maintain agitation during mixing and application.
METHOD OF APPLICATION
Use only correctly calibrated equipment that is suitable for the task and in good working order to ensure thorough wetting of all parts of the plant.

AERIAL APPLICATION:
Do not commence or arrange for aerial application before consulting your ORTHENE 75SP representative.
Aerial application may only be done by a registered aerial application operator, using a registered and correctly calibrated aircraft and applying the spray mixture in accordance with the STANSA Code 0118 (Aerial Application of Agricultural Pesticides). It is important to 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 shall be met.

EQUIPMENT:
• Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.
• The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
• All nozzles / atomisers should be positioned within the inner 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

APPLICATION PARAMETERS:
• A minimum volume of 30 ℓ spray mixture 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 at a lower volume rate than recommended above.
• A droplet coverage of 30 – 40 droplets per cm² must be recovered at the target.
• A droplet spectrum with a VMD of 250 – 280 microns is recommended. Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.
• The height of the spray boom should be maintained at 3 – 4 metres above the target.
• Do not spray when the aircraft is in a climb, at the top of a turn or during a dive, or when banking.
• Apply before the crop becomes too dense, thus preventing proper coverage of the plants.

METEOROLOGICAL CONDITIONS:
• The difference between the wet and dry bulb thermometer readings as determined by a whirling hygrometer must not exceed 8 °C.
• Do not spray under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.
• Do not spray under temperature inversion conditions, i.e., spraying in or above the inversion layer.
• Do not spray when the wind speed exceeds 15 km / h.

GENERAL:
• Ensure that fields are accurately marked and 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.

**DOSAGE RATES FOR APPLICATION**

<table>
<thead>
<tr>
<th>CROP AND PEST</th>
<th>DOSAGE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRUCIFERAE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diamond back moth</td>
<td>350 – 500g/ha</td>
<td>Ensure complete coverage of plants. The addition of a wetting agent is recommended. Repeat every 7 – 10 days. Lower rate should be repeated every 7 days and the higher rate is recommended if infestation is present at time of application.</td>
</tr>
<tr>
<td>larvae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CROP AND PEST</td>
<td>DOSAGE</td>
<td>REMARKS</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TOMATOES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American bollworm</td>
<td>75 – 100g / 100 ℓ water</td>
<td>Apply a minimum of 1000ℓ water /ha and increase this spray volume to a maximum of 2000ℓ/ha according to plant size. Ensure thorough coverage of plants. Repeat application every 7 – 10 days once pest is noticed. Use higher rate as a first treatment when infestation is present. Repeat application after rain.</td>
</tr>
<tr>
<td>Thrips</td>
<td>100g / 100ℓ water</td>
<td>Apply as a full cover spray and ensure thorough coverage of plants. Where a heavy infestation occurs a second application is recommended 7 – 10 days after first application to obtain good initial control. If necessary, repeat application every 7 – 10 days.</td>
</tr>
<tr>
<td>POTATOES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuber moth</td>
<td>500g / ha</td>
<td>Start application when plants are one month old and repeat every 7 – 14 days. Apply as a full cover spray in 200 to 500ℓ water / ha depending on plant size.</td>
</tr>
<tr>
<td>Aphids</td>
<td>500 – 750g / ha</td>
<td>Apply at first sign of infestation and repeat every 7 days. When the aphid infestation is high, use the higher rate to ensure initial control. Apply as a full cover spray in 200 to 500ℓ water / ha depending on plant size.</td>
</tr>
<tr>
<td>PEACHES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Dessert and Canning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>25g / 100ℓ water</td>
<td><strong>Western and Eastern Cape only:</strong> Apply as a full cover spray when pest is noticed and repeat as necessary. Do not apply more than two ORTHENE 75SP sprays per season. (Do not apply during blossom as toxic to bees). Do NOT spray after petal fall. If application coincides with the Oriental fruit moth day degree model, Oriental fruit moth may be suppressed but not controlled.</td>
</tr>
<tr>
<td></td>
<td>High volume: 0,38 to 0,63 kg/ha</td>
<td></td>
</tr>
<tr>
<td>Antestia, American Bollworm, Codling moth, Fruit nibbler, Banded fruit weevil (Snout beetle)</td>
<td>50g / 100ℓ water High volume: 1,25 to 1,75 kg/ha Low volume: 1,0 to 1,4 kg/ha</td>
<td></td>
</tr>
<tr>
<td>PLUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American bollworm, Antestia bug, Codling moth, Fruit nibbler, Banded fruit weevil (snout beetle), Leafroller</td>
<td>50g / 100ℓ water</td>
<td><strong>Western Cape only:</strong> Apply as a full cover spray to ensure thorough wetting and repeat as necessary. Do not apply more than two ORTHENE 75SP sprays per season. Do not apply during blossom as toxic to bees. Do NOT spray after petal fall.</td>
</tr>
</tbody>
</table>

**ORTHENE 75SP**

**Jul09/Jun2011.1**

Orthene 75 SP
<table>
<thead>
<tr>
<th>CROP AND PEST</th>
<th>DOSAGE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APPLIES AND PEARS</strong>&lt;br&gt;Codling moth</td>
<td>50g / 100ℓ water</td>
<td>Apply as a full cover spray at 75% petal fall and repeat at an interval of 14 days. Do not apply more than two sprays. The last spray must be applied before the end of November.</td>
</tr>
<tr>
<td>American bollworm</td>
<td>50g / 100ℓ water</td>
<td>Apply as a full cover spray and repeat if necessary. Do not apply more than two sprays per season. The last spray must be applied before the end of November.</td>
</tr>
<tr>
<td>Banded fruit weevil (Snoutbeetle)</td>
<td>50g / 100ℓ water</td>
<td>Apply as a full cover spray between 75% petal fall and the end of November. Sprays should be repeated after 14 days. Do not apply more than two sprays per season.</td>
</tr>
<tr>
<td>Leafroller, Antestia, Fruit nibbler</td>
<td>50g / 100ℓ water</td>
<td>Applications for the control of Codling moth, snoutbeetles, and bollworm will also control these pests if present at time of spraying. Do not apply more than two sprays. The last spray must be applied before the end of November.</td>
</tr>
<tr>
<td><strong>TABLE AND WINE GRAPES</strong>&lt;br&gt;Weevil (snout beetle)</td>
<td>50 - 75g / 100ℓ water</td>
<td>Apply as a full cover spray at 250 – 1500ℓ spray mixture per ha as soon as the pest is noticed. Use higher dosage rate in cases of severe infestation. Repeat after 7 – 14 days if necessary</td>
</tr>
<tr>
<td><strong>TOBACCO</strong>&lt;br&gt;American bollworm</td>
<td>200g / 100ℓ water</td>
<td>Ground Application Apply as a full cover spray. Where a heavy infestation occurs a second application is recommended 7 days later. Repeat if necessary. Ensure thorough coverage of all leaves.</td>
</tr>
<tr>
<td>Leaf miner</td>
<td>200g / 100ℓ water</td>
<td>Apply as a full cover spray. Ensure thorough coverage of all leaves. Where a heavy infestation occurs a second application is recommended 7 days later. Repeat if necessary.</td>
</tr>
<tr>
<td>Slug</td>
<td>200g / 100ℓ water</td>
<td>Apply as a full cover spray and repeat application every 7 days up to 14 days before harvest. When a heavy infestation occurs, apply 400g ORTHENE 75SP / 100ℓ water as a full cover spray and re-apply 200g ORTHENE 75SP / 100ℓ water 7 days later.</td>
</tr>
<tr>
<td>Cutworms</td>
<td>165g / 100ℓ water</td>
<td>Pour 30 ml of the solution over each young plant. Repeat if necessary.</td>
</tr>
<tr>
<td>Green aphid (Myzus persicae)</td>
<td>200g / 100ℓ water</td>
<td>Apply as a full cover spray and ensure thorough coverage of all leaves. Where a heavy infestation occurs a second application is recommended 7 days after the first application to obtain good initial control. If necessary repeat application every 7 days</td>
</tr>
<tr>
<td>CROP AND PEST</td>
<td>DOSAGE</td>
<td>REMARKS</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>TOBACCO Seed beds (Cutworm and leaf-eating insects)</td>
<td>1g/m²</td>
<td><strong>Spray</strong>&lt;br&gt;Mix 200g ORTHENE 75SP / 100ℓ water and use a coarse spray at the rate of 500 ml solution/m² every 7 days to get good run-off onto the soil&lt;br&gt;<strong>OR</strong>&lt;br&gt;<strong>Drench</strong>&lt;br&gt;Mix 65g ORTHENE 75SP / 100ℓ water and use a watering can to apply 1.5ℓ solution solution/m² every 7 days.</td>
</tr>
<tr>
<td>Aerial application: American bollworm</td>
<td>1000g/ha</td>
<td>Aerial application (see also instructions under DIRECTIONS FOR USE):&lt;br&gt;1. Apply only when larvae are smaller than 12.5mm&lt;br&gt;2. Repeat application 7 days later – thereafter when necessary.&lt;br&gt;3. Applications must preferably be made in the morning before the larvae migrate to the lower leaves.&lt;br&gt;4. Spray volume: Minimum 30 – 50ℓ /ha – according to plant size and plant population.&lt;br&gt;Application to high density tobacco is not recommended.</td>
</tr>
</tbody>
</table>