CARTAP

Reg. No.: L 8497 Act /Wet No. 36 of/van 1947

A soluble powder contact and systemic action insecticide for the control of various pests on beans, cabbage, onions, peas, potatoes and tomatoes. ‘n Oplosbare poeier kontak en sistemiese insekdoder vir die beheer van verskeie plae op aartappels, bone, ertjies, kool, tamaties en uie.

IRAC INSECTICIDE GROUP CODE: 4C

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:
cartap hydrochloride / kartap hidrochloried

Registration holder / Registrasiehouer:
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

Batch No. / Lot Nr.:

Date of manufacture: / Datum van vervaardiging:

U.N. No. 2811

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.
A soluble powder contact and systemic action insecticide for the control of various pests on beans, cabbage, onions, peas, potatoes and tomatoes.

**IRAC INSECTICIDE GROUP CODE / IRAC INSEKDOERGROEP KODE:** 4C

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:**
cartap hydrochloride / kartap hidrochloried .......................... 500 g/kg

**Registration holder / Registrasiehouer:**
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Off Douglas Saunders Drive, La Lucia Ridge, South Africa, 4019
Tel: 031 514 5600

**WARNINGS:**
- **Withholding periods:** Minimum number of days between last application and harvest:
  
<table>
<thead>
<tr>
<th>Crop Type</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans</td>
<td>4</td>
</tr>
<tr>
<td>Cabbage &amp; Tomatoes</td>
<td>7</td>
</tr>
<tr>
<td>Onions</td>
<td>14</td>
</tr>
<tr>
<td>Peas &amp; Potatoes</td>
<td>3</td>
</tr>
</tbody>
</table>

- Do not graze treated bean and pea fields.
- Do not exceed three (3) successive applications.
- Handle with care.
- Harmful if swallowed.
- Toxic to fish, harmful to wildlife and moderately toxic to bees.
- Keep container tightly sealed and store in a cool place.
- Store away from food and feeds.
- Keep out of reach of children, uninformed persons and animals.
- Alternate the use on crops as listed with other registered products with different mode of action and chemistry to prevent the build-up of resistance against CARTAP.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.

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, incompatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the remedy concerned 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 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 or registration holder in the event of any uncertainty.

**PRECAUTIONS:**
- Do not inhale dust or spray mist.
- Wear suitable protective clothing when handling the powder: overalls, rubber boots and gloves, as well as nose, mouth and eye protection.
- Do not eat, drink or smoke whilst mixing, applying or before washing hands and face.
• Wash contaminated clothing daily.
• Wash with soap and water after accidental skin contact and after use.
• Prevent contamination of food, feed, drinking water and eating utensils.
• Avoid spray drift onto other edible crops, grazing, rivers, dams and areas not under treatment.
• Clean applicator thoroughly after use. Dispose of wash water where it will not contaminate other crops, grazing, rivers or dams.
• Invert the empty container over the spray or mixing tank and empty thoroughly. Destroy the empty container. Do not re-use the container for any other purpose.

SYMPTOMS OF POISONING:
Nausea, trembling, salivation, dyspnea and mydriasis.

FIRST AID TREATMENT:
Wash contaminated body area well with soap and water.
Flush contamination out of eyes with clean water for 15 minutes.
If ingested, induce vomiting by tickling the back of the throat.

NOTE TO PHYSICIAN:
CARTAP is not a cholinesterase inhibitor. Administer intravenous injection of 100 to 200 mg per litre Cysteine or intramuscular injection of 20 to 60 mg of BAL (Dimercaprol).

RESISTANCE WARNING:
For resistance management, CARTAP is a group code 4C insecticide. Any insect population may contain individuals naturally resistant to CARTAP and other group code 4C insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by CARTAP or any other group code 4C insecticide.
To prevent insecticide resistance:
• Avoid excessive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with registered products from different insecticide group codes.
• Integrate other control methods (chemical, cultural, biological) into insect programmes.

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

DIRECTIONS FOR USE: Use only as indicated.
• Because CARTAP is susceptible to alkaline hydrolysis, the addition of ALLBUFF (Reg. no.: L 6154, Act 36 of 1947) is recommended.
• The use of PERFORMER (Reg. no.: L 8069, Act 36 of 1947), an adjuvant with penetrating and spreading properties, is recommended.
• Due to resistance of diamondback moth to pyrethroids, carbamates and organophosphates, alternate the use of CARTAP on crops as listed with other registered products with different mode of action and chemistry to prevent the build-up of resistance against CARTAP.
<table>
<thead>
<tr>
<th>CROP/PEST:</th>
<th>DOSAGE RATE:</th>
<th>REMARKS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEANS &amp; PEAS</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>Apply at first sign of infestation and repeat at 7 to 10 day intervals in a programme as a full cover spray. Do not exceed the recommended dose rate as higher rater may damage plants.</td>
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<tr>
<td>Potato Leafminer (Liriomyza huidobrensis)</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>Apply every 6 to 8 days as a full cover spray, at 500 litres spray mixture per hectare. Alternate CARTAP with other registered diamond backed moth larvae pesticides on cabbage. Will also control Cabbage webworm if present at application and at low numbers.</td>
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<tr>
<td>CABBAGE</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>Apply as soon as pest is noticed and repeat every 6 to 8 days.</td>
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<tr>
<td>ONIONS</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>Start spraying when first moths are noticed, and repeat every 6 to 8 days until infestation decreases. Apply 500 litres spray mixture per hectare.</td>
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<tr>
<td>POTATOES</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>CARTAP applications are not effective against existing tuber infestations. Application must start as soon as the first moths are noticed. Repeat every 10 to 14 days until the infestation decreases. Alternate with other insecticides from a different IRAC grouping. Apply 500 litres spray mixture per hectare. Good agricultural practices are advised, such as proper ridging of beds to prevent soil cracks.</td>
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<tr>
<td>POTATOES</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td>Apply to field tomatoes at first sign of infestation as a full cover spray. Repeat every 7 days in a programme. Do not exceed the recommended dosage rate as phytotoxicity may occur.</td>
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<tr>
<td>Tomato Tubermoth (Phthorimaea operculella)</td>
<td>400 g/100 ℓ water to a maximum of 2 kg/ha</td>
<td></td>
</tr>
<tr>
<td>TOMATOES</td>
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