

DIMETHOATE EC

Reg. No.: L 5367 Act /Wet No. 36 of/van 1947

A systemic and contact insecticide and miticide for the control of aphids, psylla, red scale, fruit fly, Bryobia mite, woolly aphid, mealy bug and black moth on crops as listed.

'n Sistemiese en kontak insek- en mytdoder vir die beheer van plantluise, silla, rooidopluise, vrugtevlieg, Bryobiamyt, bloedluis, witluis en swartmot op gewasse soos aangedui.

IRAC INSECTICIDE GROUP CODE:	1B	IRAC INSEKDODERGROEP KODE:
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ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:

dimethoate (organophosphate) / dimetoat (organofosfaat)..... 400 g/l

Registration holder / Registrasiehouer:

ARYSTA LifeScience South Africa (Pty) Ltd
Co. Reg. No./Mpy. Reg. Nr.: 2009/019713/07
7 Sunbury Office Park,
Off Douglas Saunders Drive, La Lucia Ridge,
South Africa, 4019
Tel: 031 514 5600

Contents/Inhoud
(ℓ)

Batch No. / Lot Nr.:	
Date of manufacture: / Datum van vervaardiging:	

U.N. No. 3017









TOXIC
GIFTIG










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.

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WARNINGS:

Withholding Periods:

Allow the following number of days between the last application and harvesting or feeding and grazing:	
Apples & Pears:	14 days
Bait treatment on Apples, Pears, Peaches & Plums:	10 days
Citrus:	14 days
Peaches, Plums & Grapes:	28 days
Wheat:	21 days
Tobacco:	7 days
Sorghum, Groundnuts, Cotton, Cauliflower, Cabbage, Beans, Strawberries, Potatoes & Cucurbits:	14 days
Barley:	50 days

Do not use on Apricots, Rough Lemon, Seville Orange and certain Ornamentals as indicated.

- Handle with extreme care.
- Toxic if swallowed, inhaled and by skin contact.
- Mild irritant to eyes and skin.
- Very toxic to fish, bees and wildlife.
- **FLAMMABLE** - do not store near open flame.
- Store under lock and key in a cool, dry place, away from food, feeds and seed.
- 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 the label available to him/her.**

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 and 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, incompatibility with other substances not indicated on the label and the occurrence of resistance of the pest 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 fumes or spray mist.
- Avoid skin and eye contact.
- Wear protective clothing, overall, suitable mask, rubber gloves and rubber boots when handling and mixing the product and whilst applying the spray mixture.
- Wash with soap and water after use and accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean application equipment after use or before using with other remedies. Dispose of wash water where it will not contaminate crops, grazing, rivers, dams and boreholes.
- 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 rinsings to the contents of the spray tank before destroying the container in the described manner.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

SYMPTOMS OF HUMAN POISONING:

If swallowed and aspirated into the lungs, chemical pneumonia can occur.

Symptoms of exposure to the product include: headache, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, diarrhoea, tightness of the chest, anxiety, blurred vision, muscle twitching beginning in the eyelids and tongue, small pupils, respiratory distress, convulsions and coma.

FIRST AID TREATMENT:

The airway should be kept clear to maintain respiration. First aid treatment should be performed by qualified medical personnel and should include, if necessary, mouth-to-nose respiration and cardiac massage.

Inhalation: Immediately remove source of contamination or move the patient to fresh air. Keep the patient warm and at rest. If necessary, perform mouth-to-nose respiration and administer oxygen. **Obtain medical advice immediately.**

Skin contact: Remove contaminated clothing, shoes and leather goods immediately. Wash skin gently and thoroughly with clean water and non-abrasive soap until no evidence of chemical remains. **Obtain medical advice immediately.**

Eye contact: Flush eyes immediately with large amounts of gently flowing cold water, occasionally lifting upper and lower lids, for at least 15 to 20 minutes until no evidence of chemical remains. Obtain medical advice.

Ingestion: Do not induce vomiting, due to aromatic solvent present in product. **Obtain medical advice immediately** and make the container, or label or Data Sheet available.

Never give anything by mouth to a semi-conscious or unconscious person. If vomiting occurs, take care to prevent vomit from being inhaled. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen.

ADVICE TO PHYSICIAN:

This product contains a cholinesterase inhibitor and an aromatic solvent.

If product is aspirated into the lungs during ingestion or vomiting, mild to severe chemical pneumonia may be caused. The stomach should be emptied as soon as possible by careful gastric lavage.

An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant. As early as possible, administer atropine sulfate intravenously and pralidoxime chloride or obidoxime chloride. The dose and frequency of atropine varies with each patient, administer until atropinization is achieved. Signs of atropinization are dry, flushed skin, tachycardia and pulse rate of over 120 per minute.

Important Note: Morphine, phenothiazines, reserpine and theophylline are contraindicated in organophosphorous poisoning. Avoid aminoglycosides and succinylcholine.

RESISTANCE WARNING:

For resistance management, **DIMETHOATE EC** is a group code **1B** insecticide. Any insect population may contain individuals naturally resistant to **DIMETHOATE 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 **DIMETHOATE 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.

Aerial application:

Aerial application of **DIMETHOATE 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 litre 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 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:

- reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
- 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.

COMPATIBILITY:

- **DIMETHOATE EC** is compatible with most neutral pesticides. However, since it is not possible for Arysta LifeScience South Africa (Pty) Ltd to test all possible combinations, the onus lies with the user to carry out a compatibility test, if tank mixtures are considered.
- Do not mix with alkali spray products, such as lime, lime sulphur and Bordeaux mixture.
- To avoid foliage damage, do not mix with captab.
- Do not use in conjunction with maneb or copper containing products on peaches and nectarines.

MIXING AND APPLICATION INSTRUCTIONS:

- Add the required quantity of **DIMETHOATE EC** to water and stir well. No further agitation is needed.
- Only mix as much as required and use immediately.
- Do not use if an emulsion is not formed, or if free oil appears on the surface of the emulsion.
- Spray plants when growing vigorously, not when they are wilted caused by drought, diseased or showing signs of any physiological abnormalities.
- When spraying plants or pests which are difficult to wet (e.g. cabbage or woolly aphid) add a suitable wetting agent (e.g. WET-ALL).
- Where aerial application is prescribed, apply in 30 litre water per hectare.
- For low volume tractor spraying, apply in not less than 100 litre water per hectare. However, on potatoes use in 200 litre water per hectare.

APPLICATION RATES:

CROP	PEST	DOSAGE	REMARKS
Citrus (do not use on Rough Lemons or Seville Oranges)	Aphids	40 ml/100 l water	Apply as a full cover spray when trees are flushing.
	Psylla	40 ml/100 l water	Apply when eggs start to hatch on new growth. If possible apply as a spot spray.
	Soft brown scale	100 ml/100 l water	Corrective treatment: Apply if possible on a spot spraying basis as soon as pest is noticed.
	Red scale	100 ml + 1 – 1,4 l narrow range mineral oil OR 100 ml + 50 ml methidathion/100 l water	Corrective treatment: Apply when 25 to 40% of fruit is infested with one or more live nymphs or adults. Use higher oil dosage in hot, low lying areas. Will also control soft brown and circular purple scale.
Apples & Pears	Mealy bug	120 ml/100 l water	Apply as a high volume, full cover spray, 2 to 3 times from end of November to early January.

CROP	PEST	DOSAGE	REMARKS
Apples, Pears, Plums & Peaches	Aphids, Bryobia mite & Woolly aphid	75 ml/100 l water	Apply as a high volume, cover spray when pest appears. Use high pressure to control woolly aphid.
	Fruit Fly	150 ml + 250 ml protein hydrolysate/100 l water	Bait treatment: Apply weekly as a coarse droplet spray when fruit becomes susceptible to attack. Repeat after rain. Winter applications on sunny days to ever green fruit trees will reduce the over-wintering population.
Barley	Russian aphid	750 ml/ha	Aerial application and low volume ground application. Will also control brown and green aphids.
	Brown & Green aphids only	500 - 750 ml/ha	Aerial application and low volume application. Use higher dosage under dry conditions. Best results are obtained when barley is growing actively.
Wheat	Aphids	500 - 750 ml/ha	Aerial application and low volume application. Use higher dosage under dry conditions and on dryland wheat after early piping stage. Best results are obtained if wheat is growing actively.
Sorghum	Aphids	560 - 660 ml/ha	Aerial application and low volume (mistblower) application. Dosage depends on plant density and size.
Groundnuts & Tobacco	Aphids	800 ml/ha	Low volume, cover application. Apply at first sign of infestation and repeat as necessary.
Cotton	Aphids	600 ml/ha	Ground application: Apply in 250 to 300 litre water per hectare.
		800 ml/ha	Aerial application: Apply in a minimum of 30 litre per hectare.
Potatoes	Aphids	800 ml/ha	Low volume and aerial application. Apply at first sign of infestation and repeat regularly.
Beans, Cabbage, Cauliflower, Cucurbits & Strawberries	Aphids	75 ml/100 l water	High volume and full cover spray.
Ornamentals & Flowers	Aphids	75 ml/100 l water	Full cover spray. Do not use on Begonia, Chrysanthemums, Zinnia, Ficus, Jacobinia or Pride-of-India.
Grapes	Mealy bug	125 ml/100 l water	Commence spraying when pest is noticed, usually at the base of shoots. Repeat at 14 to 21 day intervals.
Proteas	Black moth	120 ml/100 l water	Full cover application of growth points and flower buds.