



KangroShield 100™

**ANTS | APHIDS | ASTYLUS BEETLE | CMR BEETLE | RED SPIDER MITE | THRIPS
WHITE FLY | AMERICAN BOLLWORM | WOOD EATING TERMITES**

Reg. No L 7630 Act / Wet No. 36 of/van 1947

An organic BROAD SPECTRUM insecticide concentrate with contact and repelling action used as a full cover spray for the control of insects as listed on fruit trees, vegetables, ornamentals and roses. Minor Crops: berries, cherries, nuts, pomegranates and figs.

INSECTICIDE GROUP CODES 26/26/3

Canola oil / Garlic extract from *Allium sativa* / Pyrethrins

ACTIVE INGREDIENTS:

Canola oil/Kanola olie	250.0 g/l
Garlic extract from <i>Allium sativa</i> /Knoffel ekstrak van <i>Allium sativa</i>	642.0 g/l
Pyrethrins extract from flowers of <i>Chrysanthemum cinerariaefolium</i>	14.0 g/l
Piretriene ekstrak van <i>Chrysanthemum cinerariaefolium</i> blomme	
<i>Piperonyl butoxide</i> (synergist)/ <i>Piperonielbutosied</i> (sinergis)	50.0 g/l

HARMFUL/SKADELIK

REGISTRATION HOLDER

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ALLOW 48 HOURS BETWEEN LAST APPLICATION AND HARVEST OF EDIBLE CROPS

WARNINGS

Handle with care. Can cause skin or eye irritation. Keep out of reach of children, uninformed persons and animals. Store away from food and feedstuffs in a cool dry place. Not suitable for cooking. Toxic to fish. Re-entry: Do not enter treated field until spray deposit has dried. In case of poisoning call a doctor and make this label available to him/her.

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; compatibility with other substances not indicated on the label and the appearance of resistance of the insect 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 spray mist. Avoid contact with eyes. Wear rubber gloves and face shield when handling the concentrate. Wear rubber gloves during application. If skin or eye contact occurs, flush with copious amounts of clean water. Do not eat, drink or smoke while mixing or before washing hands. Keep container tightly closed when not in use. Avoid excessive inhalation of spray drift. Wash with soap and water after use. Prevent spray drift onto other crops, water sources, dams and rivers and areas not under treatment. Rinse empty container three times with a volume of water equal to at least 10% of that of the content of the container. Add the rinsing to the contents of the spray tank. Destroy empty container and do not use for any other purpose. Prevent contamination of food, feeds, drinking water and eating utensils.

SYMPTOMS AND SIGNS OF POISONING

A stuffy, runny nose and scratchy throat from inhalation of partly purified pyrethrum extract is the most common adverse effect of these agents. Asthmatic wheezing may be precipitated by exposure of predisposed individuals. Sudden bronchospasm, swelling of oral and laryngeal mucous membranes and shock (anaphylaxis) have been reported after pyrethrin inhalation. Delayed appearance of dyspnoea, cough and fever, with patchy lung infiltrates on X-ray, suggest hypersensitivity pneumonitis. Nervous irritability, tremors, and ataxia have occurred rarely in persons who have had massive inhalation exposure to pyrethrins.

FIRST AID TREATMENT

General: Take off all contaminated clothing immediately. Eye contact: Rinse eyes immediately with copious amounts of water. Skin contact: Wash contaminated skin with soap and water. Inhalation: Move person to fresh air in case of accidental inhalation of vapours. Obtain medical attention.

INGESTION

Ingestion of a small amount of pyrethrins is not likely to cause poisoning. If large amounts of a pyrethrin formulation have been ingested the stomach and intestine must be evacuated. Call a physician immediately. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN

For life-threatening allergic reaction to pyrethrins (severe asthma or anaphylaxis), give 0.1 to 0.5 ml of 1:1000 adrenalin intramuscularly, or slowly intravenously. If large amounts of a pyrethrin formulation is ingested and victim is alert and respiration is not depressed, give Syrup of Ipecac, followed by 1–2 glasses of water, to induce vomiting (adults and children 12 years and older: 30ml ; children under 12 years: 15ml). Caution: Observe victim closely after administering Ipecac. If consciousness level declines or vomiting has not occurred in 15 minutes, intubate the stomach immediately. Following emesis, have victim drink a suspension of 30–50 g activated charcoal in 90–120 ml water to limit absorption of toxicant remaining in the gut.

RESISTANCE WARNING

For resistance management, KangroShield 100™ is a group code 3 insecticide. Any insect population may contain individuals naturally resistant to KangroShield 100™ and other group code 3 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by KangroShield 100™ or any other group code 3. To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group codes. Alternate with products from different insecticide group codes.
- Integrate the control methods into insect control programmes. For specific information on resistance management contact the registration holder of this product.

USE RESTRICTIONS

Not suitable for spraying over surfaces like carpets, tiles etc. Cover surfaces with newspaper if spraying of plants in containers is necessary. Indoor use not recommended. Garlic becomes odourless on plants, but takes a while for the odour to disappear from other surfaces. Do not apply just prior to or during pollination, garlic might repel bees and other pollinating insects and, therefore, adversely affects pollination.

DO NOT APPLY DURING THE HEAT OF THE DAY, OR WHEN TEMPERATURES EXCEED 28°C. APPLY PREFERABLY EARLY MORNING BEFORE 9 AM OR EARLY EVENING AFTER 5 PM DURING THE HOT MONTHS. DO NOT USE HIGHER DOSAGE RATES THAN INDICATED AS PHYTOTOXICITY AT HIGHER RATES ARE UNKNOWN.

DIRECTIONS FOR USE

Use only as indicated

COMPATIBILITY

Before using in combination with any pesticide, first test on a small scale. In case of any uncertainties, contact the registration holder or supplier.

CERTIFIED ORGANIC FARMING KangroShield 100™ is authorised for use in organic agriculture (gardening) by ECOCERT SA F-32600 and should only be used in combination with other pesticides approved for organic farming. KangroShield 100™ is suitable for use in organic farming according to (EU) no 834/2007 & 889/2008 Regulations

MIXING INSTRUCTIONS

SHAKE OR STIR CONTAINER WELL BEFORE USE. Mix measured quantity of KangroShield 100™ concentrate first with half the amount of water. Stir for ± 30 seconds and add the stirred pre-mix KangroShield 100™ to the spray tank while it is filled with water to the desired quantity. After mixing concentrate, agitate again before and during spraying to prevent settling. Use the spray mixture without delay and do not allow to stand for prolonged periods, e.g. overnight. If rain occurs within 12 hours after application, treatment has to be repeated for best results.

TREE VOLUME SPRAY

The volume of water to be applied per hectare in deciduous fruit orchards is calculated according to the Tree Volume Formula as described by Unrath (refer Ras M C D 1986, Effective application of chemical agents by the correct use of spraying machinery in orchards and vineyards. Deciduous Fruit Grower, Vol 36, November 1986).

• **The formula is as follows: tree height x tree diameter x 937 = Volume water to be applied/ha row width.**

The measurements used in the formula are those of the tree in full leaf cover. Because deciduous fruit trees are not always in full leaf the water volume to be applied per hectare at the earlier growth stages is as follows: From green-tip to 30% blossom - 60% of HV to be applied, From ca. full blossom to ca. November - 80% of HV to be applied, From ca. beginning of December - 100% of HV to be applied

CROP & INSECT	DOSAGE PER 100 LITRE WATER	DETAILS OF SPRAY PROGRAMME
FRUIT TREES Aphids	500 mℓ	Apply as a high pressure, full cover spray when first sign of pests are detected. Do not apply before 80% petal drop. Ensure thorough coverage of plants to be protected. Repeat application at 5 day intervals if necessary with a maximum of 3 within a period of 10 days.
VEGETABLES American bollworm Aphids Astylus beetle Whitefly	500 mℓ	Apply as a high pressure, full cover spray when first sign of pests are detected. Ensure thorough coverage of plants to be protected. Use 300 to 1000 litre spray mixture per hectare depending on density and size of crop. Commence spraying for American bollworm when eggs and young larvae are noticed. Repeat applications at 5 day intervals with a maximum of 3 within a period of 10 days. In the case of whitefly, apply early morning after sunrise when adult whiteflies are still resting under leaves. Three applications within 10 days are necessary to obtain positive results in the control of whitefly. Ensure thorough coverage of the underside of leaves in the case of whitefly control.
ORNAMENTALS Aphids Whitefly Thrips	300 mℓ	Apply as a high pressure, full cover spray when first sign of pests are detected. Use 300 to 1000 litre spray mixture per hectare depending on density and size of crop. Ensure thorough coverage of plants to be protected. Repeat applications at 5 day intervals with a maximum of 3 within a period of 10 days. In the case of whitefly, apply early morning after sunrise when adult whiteflies are still resting under leaves. Three applications within 10 days are necessary to obtain positive results in the control of whitefly. Ensure thorough coverage of the underside of leaves in the case of whitefly control.

CROP & INSECT	DOSAGE PER 100 LITRE WATER	DETAILS OF SPRAY PROGRAMME
ROSES Ants	500 mℓ	Drench ant nests by pouring diluted spray mixture down nest entrances. Depending on the size of the nest, up to 5 litres of mixture can be poured down the nest. Treat all nest entrances round the main stem of plant. Repeat when ant activity re-occur.
American bollworm Aphids Thrips Red spider mite	500 mℓ 3.0 ℓ	Apply as a high pressure, full cover spray when first sign of pests are detected. Use 300 to 1000 litre spray mixture per hectare depending on density and size of crop. Ensure thorough coverage of plants to be protected. Commence spraying for American bollworm when eggs and young larvae are noticed. Repeat applications at 5 day intervals with a maximum of 3 within a period of 10 days. Ensure thorough coverage of the underside of leaves in the case of red spider mite control.
Astylus beetle CMR beetle	500 mℓ 1.0 ℓ	Apply as a high pressure, full cover spray when adult beetles are actively feeding. Use 300 to 1000 litre spray mixture per hectare depending on density and size of crop. Ensure thorough coverage of plants and direct contact with adult beetles for best results. Repeat when necessary. Chafer and flower beetle will be controlled at the same dosage rate as for CMR beetle if present at application.
SOIL PEST Ants	500 mℓ	Drench ant nests by pouring diluted spray mixture down nest entrances until flooded. Depending on the size of the nest, up to 5 litres of mixture can be poured down the nest. Repeat when ant activity re-occur.
Wood-eating termites	500 mℓ	Remove crust formed on surface of soil where nest activity is with a fork or spade to expose entrances of termite nests in soil. Pour diluted spray mixture down nest entrances until flooded. Repeat when termite activity re-occur.
MINOR CROPS Berries Cherries Nuts Pomegranates Figs American bollworm Ants Aphids Astylus beetle CMR beetle Thrips Red spider mite Whitefly	500 mℓ	Apply as a high pressure, full cover spray when first signs of pests are detected. Ensure thorough coverage of plants to be protected. Use 300 to 1000 litre spray mixture per hectare depending on density and size of crop. Commence spraying for American bollworm when eggs and young larvae are noticed. Repeat applications at 5 day intervals with a maximum of 3 within a period of 10 days. In the case of whitefly, apply early morning after sunrise when adult whiteflies are still resting under leaves. Three applications within 10 days are necessary to obtain positive results in the control of whitefly. Ensure thorough coverage of the underside of leaves in the case of whitefly control.