

A suspension concentrate contact and stomach insecticide for the control of pests in and around houses, hotels, restaurants, kitchens ens.

'n Suspensie konsentraat kontak- en maaginsektdoder vir die beheer van plae in en om huise, hotelle, koshuise, restaurante, kombuise ens.

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 **MAKHRO**
HOME AND GARDEN

ALPHA-THRIN PEST KILL

Reg. No. L9441 – Act 36 of 1947 | N-AR 1484

IRAC INSECTICIDE GROUP CODE 3
IRAC INSEKODDERGROEPKODE 3

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Alpha-cypermethrin (pyrethroid)	100 g / l	Alfa-sipermetrien (piretroïed)
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Registration Holder / Registrasiehouer
VILLA CROP PROTECTION (PTY) LTD (1992/002474/07)
PO Box 10413, Aston Manor, 1630

Blue band



CAUTION
VERSIGTIG



Blou band

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Aktiewe Bestanddeel: alpha-cypermethrin (pyrethroid) 100 g/l

Registration Holder: Villa Crop Protection (Pty) Ltd (Co. Reg. No. 1992/002474/07)



Office No: 021 981 4011

21 Viben Street, Brackenfell

Technical advise: 082 562 5330

Medical Emergency: 0861 555 777

CAUTION

WARNINGS:

- Handle with care
- Harmful when swallowed, inhaled or absorbed through the skin.
- Slightly irritating to the skin, moderately irritating to the eyes.
- Toxic to fish and wildlife.
- Do not spray directly onto food.
- Store away in the original box under lock and key in a cool, dry place away from food, feeds and drinking water.
- Keep out of reach of children, uninformed persons and animals.
- Do not apply to surfaces where food is prepared or handled.
- Allow spray to dry on treated surfaces before re-entering.
- **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. The action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, 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 in the event of any uncertainty.

PRECAUTIONS:

- Avoid eye and skin contact.
- Wear protective clothing (overalls with long sleeves), gloves, mask that covers nose and mouth and face shield when applying pesticide indoors. Avoid contact with spray as much as possible.
- Wash with water in the event of accidental eye contact.
- Wash with soap and water after use or in the event of accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst handling this product or before washing hands and change of clothing.
- Avoid spray drift onto fishponds and fish tanks/bowls.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Mattresses, bedding and furniture must be completely dry before using.
- **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 a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes and fishponds.
- 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.
- Re-entry: Do not enter treated area within 1 hour after treatment unless wearing protective clothing.

RESISTANCE WARNING

ALPHA-THRIN PEST KILL is a group code 3 insecticide. Any insect population may contain individuals naturally resistant to **ALPHA-THRIN PEST KILL** 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 **ALPHA-THRIN PEST KILL** or any other group code 3 insecticides.

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.

Mixing instructions:

- **Shake the ALPHA-THRIN PEST KILL container well before use.**
- Half fill the spray tank with clean water and add the required amount of **ALPHA-THRIN PEST KILL**.
- Fill the spray tank with water to the required level while maintaining agitation.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

Product information:

- **ALPHA-THRIN PEST KILL** is a suspension concentrate contact and stomach insecticide that can be used for general public health (e.g. mosquitoes, flies, cockroaches, bedbugs, fleas, fish moths, ants, hide and skin beetles and larvae and litter beetle and larvae.
- **ALPHA-THRIN PEST KILL** may be used as a spot or crack and crevice treatment for the control of above pests around buildings and houses, commercial, public and industrial premises.
- Apply to walls, floors and other areas frequented by pests.
- Application rate is dependent on level of infestation and species to be controlled.

Application:

- Apply immediately after mixing and ensure that non-target areas are not contaminated.
- Avoid fine droplets or spray mist, especially when applied indoors.

APPLICATION RATES:

PESTS	DOSAGE RATE	REMARKS AND PESTS CONTROLLED
General public health Ants Bedbugs Cockroaches (American & German) Fish moths Fleas House flies (adults) Stable flies (adults)	2.5 to 5.0 ml / 1 l water OR (25 to 50 ml / 10 l water)	<ul style="list-style-type: none">• Apply to cracks, crevices and other frequented areas where these insects may hide and on surfaces over which they may crawl or settle.• Apply to point of run-off as a coarse spray or with a paintbrush to cracks.• Use higher dose rate for longer lasting control or under high infestation pressure. Reapply if required.
Hide and skin beetles Larvae & adult beetles	20 ml / 10 l water	Hides and skins: Wet all parts completely. Reapply every 3 months or as required. Warehouse floors, walls and other surfaces: Apply spray mixture to the point of run-off. Reapply every 3 months or as required.
Mosquitoes and Malaria vector control	IMPORTANT Refer to " SPECIFIC NOTES " below regarding period of control. The highest dosage rates (100 ml per 10 litres water) will provide control for several months indoors, but only 4 to 6 weeks at the lower dosage rate. Refer to SPECIFIC NOTES below to regarding period of control.	
	25 to 50 ml / 10 l water (12 to 25.5 mg a.i. / m ²)	Apply as a coarse spray to point of run-off to surfaces where insects settle in areas where re-sprays can be done every 4 to 6 weeks. Use the higher dosage rate for longer lasting control or where infestation is severe. Repeat if necessary.
	100 ml / 10 l water (50 mg a.i. / m ²)	Malaria vector - surface treatments Apply this dosage rate where treatments can only be done once or twice during the October to May malaria infection period. Apply as a coarse surface spray on coarse surfaces (clay and brick internal and external walls, roofs and ceilings, e.g. thatched). Spray to the point of runoff by using 50 ml spray mixture per m ² . Where applications are done on smooth surfaces (e.g. glass and wood indoors or outdoors), apply as a coarse spray to the point of run-off by using 25 ml spray mixture per m ² by mixing 200 ml of ALPHA-THRIN PEST KILL with 10 litres water. This will also result in applying 50 mg a.i. per m ² .
	20 mg a.i. / m ² OR 40 mg / a.i./ m ²	Bed-net treatment Mix the required volume ALPHA-THRIN PEST KILL with enough water to wet a bed-net. Soak the net in the mixture until it is thoroughly wet. Use the higher rate for longer period of control. For dosage rate of ALPHA-THRIN PEST KILL refer to " SPECIFIC NOTES " below.
Poultry sheds Lesser Mealworm / Litter beetle (<i>Alphitobius diaperinus</i>)	25 to 50 ml / 10 l water	IMPORTANT Refer to " SPECIFIC NOTES " below. Apply as a coarse spray to the interior surfaces of the sheds. Ensure thorough wetting of the floors, walls and other surfaces. Repeat if necessary. Use the higher dose rate for longer lasting control or where infestation is severe.

SPECIFIC NOTES

1. Period of control:

Depending on dosage rate, months of control can be expected indoors and on bed-nets, and several weeks outdoors under favourable conditions. However, the following factors generally determine the period of control obtained:

- the insect species being treated,
- infestation pressure,
- the type of surface or fabric,
- whether the treatment is applied indoors or outdoors and
- exposure to sunlight and weather conditions.

2. Mosquito / malaria vector control:

Surface sprays:

- Apply with a sprayer equipped with a nozzle that will deliver coarse droplets at a low pressure. Avoid spraying at high pressures that will produce a spray mist.
- Ensure complete coverage of all surfaces. All cracks, crevices and potential hiding places where mosquitoes may seek shelter must receive special attention.

Bed-nets:

- Bed-nets treated with **ALPHA-THRIN PEST KILL** will not be stained or have an odour after treatment and will not be more flammable.
- Wash and dry nets before treatment (new nets may be starched and need be washed first to remove the starch). All traces of soap must be rinsed out after washing and before treatment with **ALPHA-THRIN PEST KILL** (alkaline soap residues affect the persistence of the active ingredient adversely).
- The quantity of **ALPHA-THRIN PEST KILL** required per bed-net depends the period of control required, as well as the surface area of the net.

Period of control required (dosage active ingredient)	Single bed-net (±12 m ²)	Double bed-net (±16 m ²)	Queen size bed-net (±20 m ²)	King size bed-net (±24 m ²)
4 to 6 months (20 mg a.i. / m ²)	2.5 ml	3.5 ml	4.0 ml	5.0 ml
> 9 months (40 mg a.i. / m ²)	5.0 ml	7.0 ml	8.0 ml	10.0 ml

Various factors such as type of net fabric, mesh size, etc. affect the volume of water required to treat and wet a net completely. Generally 30 ml mixture is needed per square metre (30 ml / m²) for synthetic nets (e.g. polyester) and 130 to 150 ml / m² for cotton nets.

Below are general guidelines regarding the volume of water required to wet different size bed. However, the exact absorption volume for each type and size of net must be confirmed before treatment.

Fabric	Single bed-net (±12 m ²)	Double bed-net (±16 m ²)	Queen size bed-net (±20 m ²)	King size bed-net (±24 m ²)
Cotton	1020 ml	1350 ml	1680 ml	2040 ml
Synthetic (e.g. polyester)	220 ml	290 ml	360 ml	430 ml

Instructions for treatment of bed-nets.

- Always use gloves.
- Treat nets outside or in a well-ventilated area.
- Use a suitable container (e.g. bucket) with a large enough volume that will accommodate both the bed-net and the required amount of water.
- Fill the container with the predetermined volume of water to fully wet the bed-net to be treated.
- Add the required volume of **ALPHA-THRIN PEST KILL** listed above to the water and ensure that it is mixed through completely.
- Allow the net to soak in the mixture until it is thoroughly wet.
- Remove the net and allow excess to drip back into the container first.
- Allow the net to dry. It can be done by laying it evenly over a bed or bedding (this will also assist in killing bedbugs) or outside in the shade on a plastic sheet.
- Once the net has dried, it can be hung up over the bed.
- Wash hands, arms, and container after treatment of the nets and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
- Washing of treated nets after treatment will result in reduced efficacy, necessitating a repeated treatment.
- Treatment of several nets (of identical type), can be done by preparing a larger volume of mixture by multiplying the volume of **ALPHA-THRIN PEST KILL**, as well as the volume water required per net, by the total number of nets to be treated.

3. Poultry sheds:

- All cracks, crevices and potential hiding places where litter beetles may hide must receive special attention.
- **ALPHA-THRIN PEST KILL** will control, but not eliminate, existing populations of litter beetles that have infested and colonised the insulation of cavity walls or other protected places.
- Complete wetting of all surfaces, including vertical surfaces up to at least one metre above the ground, is essential.
- Broiler sheds must be treated after clearing, cleaning and disinfecting operations are completed before restocking with a new batch of chicks.
- Laying sheds must be treated regularly. The frequency will depend on the type of surface to be treated.
- Dropping and litter heaps must be treated more often.
- Treat new and empty cages before stocking with hens. **Do not spray directly over the birds, or allow the spray mist to drift over them!**