

Read the label before opening the container.

For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

ATTACKE™

South Africa Reg. No: L7669 Act No. 36 of 1947

IRAC INSECTICIDE GROUP CODE: 3A

An emulsifiable concentrate, contact and stomach insecticide for the control of various insects as listed.

ACTIVE INGREDIENT:

Lambda-cyhalothrin (pyrethroid).....50g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Harmful if swallowed.
- Harmful in contact with skin.
- Harmful if inhaled.
- Causes serious eye damage.
- Combustible liquid.
- Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

- Do not eat, drink, or smoke when using this product.
- Wash hands, forearms, and face thoroughly after handling.



DANGER

enviro™
bio-chem

Registration holder: Erintrade cc t/a RT Chemicals

Co. Reg. No: CK2001/036403/23

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Expiry Date:

Batch No:

Date of Manufacture:

UN No. 3082

WARNINGS:

Withholding period: Allow the following minimum number of days from the last spray to harvest or grazing:

Potatoes	3 days	Sorghum	28 days
Cotton	28 days (grazing)	Tomatoes	2 days
Dry beans	7 days (28 days - grazing)	Wine & Table grapes	28 days
Green beans	1 day	Macadamia	82 days
Maize	7 days (28 days - grazing)	Almonds, Pistachios, Pecans	14 days
Wheat	28 days	Soybeans (grazing)	28 days
Cucurbits, Lettuce	1 day	Canola	7 days

- Harmful if swallowed.
- Harmful in contact with skin.
- Harmful if inhaled.
- Causes serious eye damage.
- Combustible liquid.
- Toxic to aquatic life with long lasting effects.
- Keep out of reach of children, uninformed persons and animals.
- Store under lock and key away from food and feedstuffs in a cool place (below 20°C).
- **Note:** At a rate of 300mℓ/ha or less, **ATTACK™** is of low risk to bees. When higher rates are used, apply when bees are not active.
- **Cutworm control:** Do not apply when soil is dry. Apply before crop emerges or in the seedling stage.
- **Re-entry period:** Do not enter the treated field within 2 days after application unless wearing protective clothing.
- In the case of poisoning, call a doctor and make this label available to him/her.

Aerial Application: Notify all inhabitants in the immediate vicinity and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

Although this insecticide 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 effected by factors such as abnormal soil, climactic and storage conditions; quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the insecticide concerned as well as by the method, time and accuracy of the 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 insecticide 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:

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Keep container tightly closed.
- Wash hands, forearms, and face thoroughly after handling
- Do not eat, drink, or smoke when using this product.
- Wear impervious rubber gloves and boots, protective clothing, and chemical safety goggles.
- Use only outdoors or in a well-ventilated area.
- Do not breathe dust/fumes/gas/mist/vapours/spray.
- Immediately call a POISON CENTRE.
- Take off contaminated clothing and wash it before reuse.
- Avoid release to the environment.
- Triple rinse empty container 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 empty container three times with a volume of water

- equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank.
- Empty containers should be taken for local recycling or waste disposal.
- Do not re-use empty containers.
- Collect spillage.
- Dispose of contents/container in accordance with local/regional/national regulations.

RELEVANT SUBSTANCES:

Lambda cyhalothrin 6%

Emulgent <10%

Xylene <90%

SYMPTOMS OF HUMAN POISONING

Nausea, vomiting, diarrhoea, and abdominal pain.

Severe doses will cause ataxia, weakness of limbs, convulsions, coma and death from respiratory failure.

FIRST AID TREATMENT:

Remove patient from source of poisoning and keep him quiet and reassured.

INGESTION: Immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting.

SKIN CONTACT: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

INHALATION: Remove person to fresh air and keep comfortable for breathing.

NOTE TO DOCTOR:

Do not allow aspiration of gastric contents if gastric lavage performed. Consider use of laxative. Treat symptomatically.

RESISTANCE WARNING:

American Bollworm: Resistance to synthetic pyrethroids (Code 3A) has been confirmed.

Cotton: Synthetic pyrethroids must only be applied between 1 January and 28 February.

All other crops: Do not apply more than 2 applications per growing season.

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

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same group code.
- Alternate or tank mix with products from different insecticide group codes.
- Integrate other control methods (chemical, cultural, biological) into the insect control programmes.
- For specific information on resistance management contact the registration holder of this product.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

ATTACKE is not compatible with seaweed extract.

Mixing instructions:

Make up the mixture as indicated below by half filling the spray tank with clean water then start agitation and add the required amount of ATTACKE. Fill with water to the required volume.

Ground application:

Apply using a conventional high volume sprayer with hollow cone nozzles, giving a medium to fine droplet for adequate and even distribution. Do not spray wet plants.

Aerial application:

Aerial application of ATTACKE™ 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 30ℓ 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 aurally at a lower volume rate than recommended above.
- Droplet coverage: 30 to 40 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 250 to 280 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 15km/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.

CROP/PEST	DOSAGE	REMARKS
ALL CROPS Cutworm	Apply as a preventative (pre-emergence) or corrective (post emergence) application at the recommended rate. Apply only if the top 3cm of soil is moist. Apply only to well prepared soil that is free of clods and excessive plant debris. Minimum tillage – cutworm populations are usually high; therefore monitor after the first application and apply a second time if necessary.	
	0.23mℓ/100m row	Ground application: Row treatment: Apply in 3ℓ water in a 30cm wide band over the row.
	70mℓ/ha	Overall application: Apply in 300ℓ water/ha.
	70mℓ/ha	Aerial application: 30ℓ water/ha.

CROP/PEST	DOSAGE	REMARKS
DRY BEANS, GREEN BEANS & SWEET CORN American bollworm	100mℓ/ha	<u>Ground application:</u> Apply in 250 to 500ℓ water/ha depending on plant size. Check fields every 7 days from time of flowering and commence spray when larvae are noticed. Ensure larvae are sprayed before they reach 2cm in length. Repeat as necessary.
POTATOES Tuber Moth Larva & American Bollworm	120mℓ/ha	<u>Ground application:</u> Apply in 250 to 500ℓ water/ha depending on plant size. Commence spraying when plants are one month old or earlier if required. Repeat every 10 to 14 days and ridge twice during growth season.
	132ℓ/ha	<u>Aerial application:</u> Apply in at least 30ℓ water/ha. Commence spraying when plants are 1 month old or earlier if required. Repeat every 10 to 14 days and ridge twice during growth season.

Cotton:

Apply synthetic pyrethroids in cotton only during 1 January to 28 February for the control of American bollworm. No sprays should be necessary for American bollworm during the first 8 weeks after plants emerge.

ATTACKETM should be applied on the basis of weekly scouting of the fields and the correct interpretation of counts. When more than 5 American bollworms are counted per 24 plants per 15ha during scouting, a spray must be applied. The success of a treatment depends on good spray coverage and penetration of the plants. Larvae that have already penetrated the bolls may not be controlled successfully. Allow 4 days to achieve the maximum effect of the application. Scout and repeat the treatment if necessary.

COTTON American bollworm	60mℓ/ha for plants under 60cm 120mℓ/ha for plants over 60cm	<u>Ground application:</u> Use 100ℓ spray mixture/ha for plants under 60cm and 200ℓ spray mixture/ha for plants over 60cm. Use sufficient spray mix to give an even droplet cover.
	0.6mℓ/100m row for plants under 60cm 1.2mℓ/100m row for plants over 60cm	<u>Tramline treatment:</u> Use 50ℓ spray mixture/ha for plants under 60cm and 100ℓ/ha spray mixture for plants over 60cm. Use 5 hollow cone nozzles with 2 outside nozzles mounted on drop-arms.
	66mℓ - 132mℓ/ha	<u>Aerial application:</u> Use lower dosage in 30ℓ water/ha for plants under 60cm and the higher dosage in 30ℓ water/ha for taller plants.
	88mℓ/ha in sunflower oil for plants under 60cm 120mℓ/ha in sunflower oil for plants over 60cm	<u>ULV application:</u> Using only acknowledged ULV applicators, apply a total spray mixture volume of 3ℓ/ha.

Tramline treatment in cotton: NB. The dosage indicated is per single row (a tramline = 2 single rows). Mount at least 5 suitable hollow cone nozzles over the tramlines with one nozzle directed over the top of each row, one between the two tramline rows and a nozzle directed to the outside of each tramline row. For good coverage the two outside nozzles should be mounted on drop-arms pointing 45° upwards.

CROP/PEST	DOSAGE	REMARKS
SORGHUM Maize Stalkborer	1.0mℓ/100m row	<u>Ground application:</u> Apply in 3ℓ water at funnel stage directly into funnel when 5% of the plants show shothole damage and borers have not moved into stalks.
	100mℓ/ha	<u>Aerial application:</u> Apply in at least 30ℓ water/ha.
American bolworm	100mℓ/ha	<u>Ground application:</u> Apply when infestation is not noticed and repeat if necessary. Ensure thorough wetting by applying in 250 to 500ℓ water/ha
	100mℓ/ha	<u>Aerial application:</u> Apply in 30ℓ water/ha.
MAIZE Stalkborer	1.2mℓ/100m row	<u>Ground application:</u> Apply in 3ℓ water/100 metres row directly into funnel. Apply as soon as 10% of plants show damage. Repeat 10 to 14 days later if necessary.
	120mℓ/ha	<u>Aerial application:</u> Apply in 30ℓ water/ha.
PEAS & MANGE TOUS American bolworm	100mℓ/ha	<u>Ground application:</u> Apply in 200ℓ water/ha at flowering of peas or at infestation level of 2 bollworms per 20 plants. Repeat if necessary.
	120mℓ/ha	<u>Centre Pivot application:</u> Apply using correctly calibrated injector on pivot line at speed of 100% at infestation level of 2 bollworms or 6 eggs per 24 plants.
WINE & TABLE GRAPES Weevils ONLY FOR USE IN THE WESTERN CAPE	20mℓ/100ℓ water (200mℓ/ha)	<u>Stem treatment:</u> Scout for weevils throughout the growing season starting in October. Apply to the stem as a preventative treatment as soon as weevil activity is observed. Apply 1 000ℓ spray mixture per hectare using at least 0.5ℓ spray mixture per vine stem from the soil surface to 1 metre high. Spray the stem up to the first lateral branches of low growing vines. The stem must be thoroughly wet with the spray mixture and the soil around the stem should also be treated. Repeat the stem application 3 to 4 weeks later if necessary. If a weevil infestation is present in the foliage, apply a foliar application as indicated below.
	20mℓ/100ℓ water (200mℓ/ha)	<u>Foliar application:</u> Immediately apply a preventative spray at 1 000ℓ spray mixture per hectare when weevil damage is noticed. Repeat the spray 3 to 4 weeks later if necessary.
MACADAMIAS Stinkbug	10mℓ/100ℓ water	<u>Scouting:</u> Use the 'tree shake' method from two weeks after flowering. When 18 stink bugs per 10 trees (average of 1.8 stinkbugs per tree) are recorded, a high volume spray for complete tree coverage must be applied. Two of three sprays per season may be necessary.

CROP/PEST	DOSAGE	REMARKS
TOMATOES American bolworm	7.5mℓ/100ℓ water	<u>Ground application:</u> Apply at 500 to 1 000ℓ spray mixture/ha depending on plant size when infestation is noticed. Repeat as necessary.
TURF / LAWNS Mole crickets & Northern harvester termites	250mℓ/ha	Apply at 300 - 400ℓ spray mixture per hectare. Apply at first signs of infestation. repeat as necessary, not more than 7 times per year. For best results, water the treated area with additional 6 - 13mℓ water after application. Apply late in the afternoon, when pests will be more active near surface.
Lawn Caterpillar		Wet grass completely a few hours prior to application. Apply at first sight of infestation. Repeat as necessary, not more than 14 times per year.
ALMONDS, PISTACHIOS, WALNUTS & PECAN NUTS Stinkbugs (<i>Nezara viridula</i>)	100 - 200mℓ/ha (10 - 20mℓ/100ℓ water)	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. <u>Ground applications:</u> Ensure thorough wetting. Apply in 250 - 500ℓ water/ha. <u>Aerial application:</u> Apply in at least 30ℓ water/ha
WHEAT African bollworm (<i>Helicoverpa armigera</i>)	120mℓ/ha	Spray as soon as an infestation is noticed and repeat if necessary <u>Ground application:</u> Ensure thorough wetting. Apply in 250 - 500ℓ water/ha <u>Aerial application:</u> Apply in at least 30ℓ water/ha
SOYBEANS African bollworm (<i>Helicoverpa armigera</i>)	120mℓ/ha	<u>Ground application:</u> Apply as soon as infestation is noticed and repeat when necessary. Apply in 200 - 300ℓ water/ha and ensure good coverage of the plants. <u>Aerial application:</u> Apply in at least 30ℓ water/ha
CANOLA Diamond back moth (<i>Plutella spp.</i>) Loopers (<i>Chrysodeixis spp.</i>)	70 - 140mℓ/ha	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold.

CROP/PEST	DOSAGE	REMARKS
CUCURBITS (Including cucumber, gherkin, melon, pumpkin, squash, baby marrow and watermelon) Aphids	100 - 140mℓ/ha	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. <u>Ground application:</u> Ensure thorough wetting. Apply in 250 - 500ℓ water/ha. <u>Aerial application:</u> Apply in at least 30ℓ water/ha.
LETTUCE Loopers (<i>Chrysodeixis spp.</i>) Diamond back moth (<i>Plutella spp.</i>)	70 - 120mℓ/ha 100 - 140mℓ/ha	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. <u>Ground application:</u> Ensure thorough wetting. Apply in 250 - 500ℓ water/ha. <u>Aerial application:</u> Apply in at least 30ℓ water/ha.