

**Manufacturer:**

Syngenta Crop Protection AG  
Basel, Switzerland

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of a Syngenta Group Company

**Registered and distributed by:**  
**Syngenta Zambia Ltd.**

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L1063600 ZAMB/06Y PPE 4122846

**KarateZeon®**  
10 CSsyngenta®**Capsule Suspension (CS)**

**A capsule suspension  
contact and stomach insecticide for the  
control of various insects as indicated.**

**Active ingredient content:**

100 g/l lambda-cyhalothrin (pyrethroid)

**KEEP LOCKED UP OUT OF REACH OF CHILDREN****HARMFUL IF SWALLOWED OR INHALED****Hazard statements**

- May cause an allergic skin reaction
- Very toxic to aquatic life with long lasting effects

**Precaution statements**

- Avoid breathing dust/ fume/ gas/  
mist/ vapours/ spray
- Collect spillage

**1 litre**

Product names marked ® or ™, the ALLIANCE FRAME  
the SYNGENTA Logo and the PURPOSE ICON  
are Trademarks of a Syngenta Group Company

**DANGER**

**Before opening the container,  
read the safety advice.**

**750ml****Shelf-Life:**

At least 2 years from date of  
formulation in its original  
unopened container.

**Warnings:**

- Avoid skin contact
- Skin contact may cause  
temporary itching, tingling,  
burning or numbness  
of exposed skin, called  
paresthesia.  
Effects are transient,  
lasting up to 24 hours

**500ml****Emergency Call Number:**

Swiss Toxicological  
Information Centre  
(24 h) +41 44 251 51 51

**250ml**

approx. measure

**S-PAC**DESCRIPTION:  
BOOKLET 4-16 PG 275 X 122 MMSCALE:  
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Por favor, eliminar antes de imprimir.

#### Product Information

- Mode of action
- Benefits of use

#### Safety precautions

- Do not smoke, drink or eat while using the product. Wash hands and face before doing so.
- Avoid contact of skin, eyes or clothing with concentrate or spray mixture.
- Keep the product in its original tightly closed container, apart from drinks, food and feed, under lock and key, out of reach of children, unauthorized persons and domestic animals.
- Store in a dry, shady and well-ventilated area. Avoid temperatures above +35°C. Do not stack containers in piles more than 2m high, in order to avoid product compaction or damage

#### Safety precautions when mixing

- Wear adequate protective clothing, such as overall with long sleeves, impermeable gloves, rubber boots, as well as eye/face protection (face shield)
- After emptying container, rinse three times adding washings to the spray tank

#### Safety precautions when spraying

- Wear adequate protective clothing, such as overall with long sleeves and rubber boots
- Don't apply against the wind, or under strong wind conditions.
- Do not unclog nozzles, orifices or valves with your mouth.
- Ensure that there is no leak or any other defect in the spraying system
- Avoid any contact with the spray solution and do not inhale the spray mist.

#### Safety precautions after use

- Dispose of unwanted spray solution by spraying off on waste ground, far away from any source of water.
- Keep unused product in its original container, tightly closed.
- Wash thoroughly all protective equipment and wash entire body and change clothing. Wash contaminated clothing before re-use.
- Do not enter the treated area within 12 hours unless recommended protective clothing is worn.

#### Empty containers disposal

- Empty carefully the container, rinse three times and add the rinse to the spray solution.
- Do not re-use empty containers for other purposes
- Follow the local regulations
- Inquire with the manufacturer or distributor about possibilities of collection or recycling.
- Puncture, cut or crush the containers so that they cannot be used again. Then bury or burn in a safe place, away from water supplies. Do not inhale fumes.

#### Unwanted product disposal

- Inquire with the manufacturer or distributor about possibilities of collection or recycling.
- Dispose the product in a special center for destruction of hazardous wastes.

#### First aid measures

- If poisoning is suspected stop work immediately, apply first aid measures and call a physician. Show this label to the physician.
- In case of **contact with skin** remove contaminated clothing and wash immediately the affected parts of the body with plenty of water and soap. If irritations persist, call a physician. Wash contaminated clothing before re-use.
- In case of **eye splashes**, hold eyelids apart and pour in a gentle stream of water for 10 - 15 minutes. Call a physician.
- In case of **inhalation**, move the patient to fresh air and call a physician.
- In case of **ingestion**, do not make the person vomit. Take immediately the person and this container to the physician. Do not administer anything to an unconscious patient.
- **Medical treatment:** if gastric lavage is performed, take care to prevent aspiration of gastric contents. Consider administration of activated charcoal and a laxative. Treat symptomatically.

**Environnement and fauna**

- Toxic to fish and aquatic organisms. Strictly avoid contamination of water bodies by drift or run-off.  
Do not contaminate water during spraying equipment cleaning or disposing washings in the water ways.
- Toxic to bees. Do not spray when bees are actively foraging.  
DO NOT spray on flowering crops.
- Keep farm animals out of the treated fields for equal to withholding period following the treatment.
- In case of spilling on a hard surfaces, cover with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite).  
In the field, remove the contaminated layer.  
Then collect and place the contaminated material in a container for disposal according to local / national regulations, or bury in a safe place away from water supplies.

**USE RECOMMENDATIONS**

This insecticide KARATE ZEON 10 CS is a group code 3A insecticide acts both by contact and ingestion on the nervous system of the insects.  
It is efficient against adults and larvae of many species, including those resistant to organo-phosphates  
**Do not exceed the stated dose.**

<b>Tomatoes and fruiting vegetables</b> (Including eggplant and Capsicums (peppers))	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )  <b>Semi-looper</b>	<b>High volume:</b> 3.75 ml/100 l water	1 Day  5 Days Fruiting vegetables	Commence spraying when plants start flowering or at first signs of an infestation. Apply as a full cover spray at 500 - 1000 l spray mixture/ha depending on plant size for tomatoes up to 1 m. For taller plants a higher spray volume should be used and the concentration should be maintained. Repeat application at 7 - 10 day intervals or as dictated by inspection of crop.
<b>Wheat</b>	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	60 ml/ha	28 Days	Spray as soon as an infestation is noticed and repeat if necessary. <b>Ground application:</b> Ensure thorough wetting. Apply in 250 - 500 l water/ha. <b>Aerial application:</b> Apply in at least 30 l water/ha.
<b>Maize</b>	<b>Stalkborer</b> ( <i>Chilo partellus</i> ) (First and second generation)	0.6 ml/ 100 m row (60 ml/ha)	7 Days	<b>Ground application:</b> Apply as soon as 10 % of the plants show damage and direct spray into funnels. If necessary apply a follow-up spray shortly before tasseling. A minimum of 2 - 4 l spray mixture must be applied/100 m row.
	<b>Stalkborer</b> ( <i>Busseola fusca</i> ) (First and second generation)	0.6 ml/ 100 m row (60 ml/ha)		Apply as soon as eggs are found on 5 % of the plants or 10 % of the plants show damage. A second application may be required 10 - 14 days later. Apply directly into plant funnel in at least 2 - 4 l Water/100 m row.  <b>Aerial application:</b> Apply as above in 30 l water/ha.

Crop	Pests	Dosage	Pre-Harvest Interval	Observations
<b>Soybeans</b>	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	60 ml/ha	28 Days	<b>Ground application:</b> Apply as soon as infestation is noticed and repeat when necessary. Apply in 200 - 300 l water/ha and ensure good coverage of the plants.  <b>Aerial application:</b> Apply in 30 l water/ha.
<b>Potatoes</b>	<b>Potato tuber moth larvae</b> ( <i>Phthorimaea operculella</i> )	60 ml/ha	3 Days	<b>Ground application:</b> Apply in 250 - 500 l water/ha depending on plant size. Commence spraying when plants are one month old or earlier if an infestation should occur. Repeat every 10 - 14 days and ridge at least twice during the growth season.
	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	66 ml/ha		<b>Aerial application:</b> Apply in at least 30 l water/ha. Commence spraying as soon as plants are one month old or earlier if an infestation should occur. Repeat application every 10 - 14 days and ridge at least twice during the growing season.
<b>Barley</b>	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	60 ml/ha	28 Days	Spray as soon as an infestation is noticed and repeat if necessary. <b>Ground application:</b> Ensure thorough wetting. Apply in 250 - 500 l water/ha.  <b>Aerial application:</b> Apply in at least 30 l water/ha.

Crop	Pests	Dosage	Pre-Harvest Interval	Observations
<b>Brassicaceae</b> (broccoli,brussel sprouts, cabbage and cauliflower)	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	<b>High volume:</b> 4 ml/100 l water	3 days	Apply at 500 - 1 000 l spray mixture/ha. Start spraying at the first signs of an infestation and repeat every 10 - 14 days. Ensure good spray coverage.
	<b>Loopers</b> ( <i>Chrysodeixis spp.</i> )	35 - 60 ml/ha		
	<b>Aphids</b> (suppression only) <b>Armyworm</b> ( <i>Spodoptera spp.</i> ) <b>Diamondback Moth</b> ( <i>Plutella spp.</i> ) <b>Thrips</b> (suppression only) <b>Whiteflies</b> (suppression only)	50 - 70 ml/ha		
<b>Onions</b>	<b>Thrips</b>	40 - 60 ml/ha	3 Days	Apply in a spray programme of 10 - 14 days at the first signs of damage on onion leaves. Use the lower dosage rate when thrips counts reach 0.6 thrips per plant and follow-up with the higher dosage rate 10 - 14 days later. Not to be used on spring onions.
<b>Groundnuts, dry Beans, green beans, Lucerne, and Sweetcorn</b>	<b>African bollworm</b> ( <i>Helicoverpa armigera</i> )	50 ml/ha	1 Days	<b>Ground application:</b> Apply in 250 - 500 l water/ha depending on plant size. Scout fields at 7 day intervals from time of flowering and commence spraying when infestation is noticed. For optimum control larvae should be sprayed when they are not bigger than 1 cm but definitely before they exceed 2 cm in length. Scout field every 7 days or 3 days after rain and repeat application if necessary. <b>Aerial application:</b> (Groundnuts, dry beans and green beans only). Apply in 30 l water/ha.

Crop	Pests	Dosage	Pre-Harvest Interval	Observations
<b>Cotton:</b> Synthetic pyrethroids must ONLY be applied to cotton during the period 1 January to 28 February for the control of African bollworm. No sprays should be necessary for African bollworm control during the first eight weeks after plant emergence. Should Red bollworm be present a compound which does not promote Red spider mite should be sprayed. Thereafter (10 - 12 weeks later) recommendations as below can be followed. <b>KARATE ZEON 10 CS</b> must be applied on the basis of regular weekly scouting and the correct interpretation of the results. When more than five African and two red or two spiny bollworm larvae are found /24 plants / 15 ha during scouting, a spray has to be applied. The success of the treatment depends on coverage and penetration achieved by the spray application. Larvae already inside the bolls may not be controlled successfully. Allow 4 days to achieve the maximum effect of the spray, scout and repeat application if necessary.				
Cotton	African bollworm, Red bollworm, Spiny bollworm, Cotton stainer	Plants smaller than 60 cm: 30 ml/ha Plants taller than 60 cm: 60 ml/ha	28 Days	<b>Ground application:</b> With boom and nozzle. Cotton should be treated with sufficient spray mixture for good coverage. Use 100 l spray mixture/ha for plants smaller than 60 cm and 200 l spray mixture/ha for plants taller than 60 cm. <b>Tramline treatment:</b> Use 50 l spray mixture/ha on cotton less than 60 cm and 100 l spray mixture/ha on plants taller than 60 cm. <b>Aerial application:</b> Apply in 30 l water/ha. Use lower dosage for plants smaller than 60 cm and the higher dosage for plants taller than 60 cm.
Sorghum	Maize stalk borer ( <i>Busseola fusca</i> )	0.5 ml/ 100 m row	28 Days	<b>Ground application:</b> Apply in 3 l water in the funnel stage when 5 % of the plants show shothole damage and borers have not yet migrated into the stalks. Direct application into funnel. <b>Will also control Chilo partellus if present at time of application.</b>  <b>Aerial application:</b> Apply in 30 l water/ha.
	African bollworm ( <i>Helicoverpa armigera</i> )	50 ml/ha	28 Days	Spray as soon as an infestation is noticed and repeat if necessary. <b>Ground application:</b> Ensure thorough wetting. Apply in 250 - 500 l water/ ha. <b>Aerial application:</b> Apply in at least 30 l water/ha

Crop	Pests	Dosage	Pre-Harvest Interval	Observations
Almonds, Pistachios, Walnuts and Pecan Nuts	Stinkbug ( <i>Nezara viridula</i> )	50 – 100 ml/ha (5 - 10 ml/ 100 l water)	7 Days	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. <b>Ground application:</b> Ensure thorough wetting. Apply in 250 - 500 l water/ha. <b>Aerial application:</b> Apply in at least 30 l water/ha.
Macadamias	Stinkbug ( <i>Nezara viridula</i> )	5 ml/ 100 l water	7 Days	<b>High volume:</b> Time of application is based on stinkbug numbers. This is determined by means of the tree shake method. Start monitoring stinkbug numbers two weeks after flowering. Apply as soon as an average of 1.8 stinkbugs per tree are counted. Two to three applications per season might be needed.
Cucurbits (Including cucumber, gherkin, melon, pumpkin, squash, baby marrow and watermelon)	Loopers ( <i>Chrysodeixis spp.</i> ) Aphids Armyworm ( <i>Spodoptera spp.</i> )	50 - 70 ml/ha	7 Days	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. <b>Ground application:</b> Ensure thorough wetting. Apply in 250 - 500 l water/ha. <b>Aerial application:</b> Apply in at least 30 l water/ha.
	Leafminers Thrips exclud- ing Western flower thrips ( <i>Frankliniella occidentalis</i> ) (suppression only) <b>Whiteflies</b> (suppression only)	70 ml/ha		

Do not exceed the stated dose.

**Spray solution preparation**

Ensure that the sprayer is in good conditions and correctly calibrated. Half fill the spray tank with clean water. Measure the required quantity of the product and mix it thoroughly with water in a separate can. Pour the content in the sprayer, mix well and then complete filling of the tank with water. Do not leave the spray solution without agitation.

**Compatibility**

The product is compatible with most fungicides and insecticides. However, a preliminary test on small scale is recommended

**Resistance Management**

For resistance management, KARATE ZEON 10 CS is a group code 3A insecticide. Any insect population may contain individuals naturally resistant to KARATE ZEON 10 CS and other group code 3A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used Repeatedly and exclusively in programs. These resistant insects may not be controlled by KARATE ZEON 10 CS or any other group code 3A insecticides.

**User's Risk**

The user bears the risk for damage resulting from factors beyond the manufacturer's control. All recommendations for use of the product are based on the current state of the manufacturer's knowledge. Since the manufacturer cannot control the application, use, storage and transport of the product, the manufacturer cannot assume responsibility therefor.

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GLUE PAGE

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