BASF

We create chemistry

Fastac®10 EC

An emulsifiable concentrate contact and stomach insecticide, for the control of the pests mentioned on the crops listed.

NET VOLUME: 1 L

GROUP	3A	INSECTICIDE

Active ingredients:
Alphacypermethrin 100g/L

HAZARD STATEMENT

Flammable liquid and vapour.
Toxic if swallowed.
Causes skin irritation.
Causes serious eye damage.
Harmful if inhaled.
Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Wear protective gloves and eye/face protection.
Wash with plenty of water and soap throughly after handling.
Do not eat, drink or smoke when using this product.
Keep away from heat, hot surfaces, sparks, open flames and ignition sources.

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Manufactured by:
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ZEMA PRODUCT NUMBER: .

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DANGER

81132899 ZM 1029

® = Registered trademark of BASF

DANGER

READ THE LABEL BEFORE USING THE PRODUCT

WARRANTY: Although this remedy has been 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, compatibility with other substances not indicated on the label and the occurrence of resistance of the disease, weed or 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 the failure of the user to follow the label instructions or the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

WARNINGS

ALLOW THE FOLLOWING MINIMUM NUMBER OF DAYS BETWEEN THE LAST APPLICATION AND HARVESTING OR GRAZING:

APPLES and PEARS	4 DAYS	PEACHES (Canning)	3 DAYS
BEANS and SOYABEANS	7 DAYS	PEAS	7 DAYS
COTTON	28 DAYS	POTATOES	21 DAYS
CRUCIFERAE	4 DAYS	SORGHUM	28 DAYS
GRAZING	14 DAYS	SUGARCANE	60 DAYS
GROUNDNUTS	7 DAYS	TOMATOES	4 DAYS
LUCERNE	14 DAYS	WHEAT (grain)	25 DAYS
MACADAMIA	30 DAYS	WHEAT (hay)	28 DAYS
MAIZE and SWEETCORN	14 DAYS	WINE and TABLE GRAPES	28 DAYS
PEACHES (Fresh)	14 DAYS		

- Flammable liquid and vapour.
- Toxic if swallowed.
- May be fatal if swallowed and enters airways.
- Causes skin irritation.
- Causes serious eye damage.
- Harmful if inhaled.
- May cause drowsiness or dizziness.
- May cause respiratory irritation.
- May cause damage to organs (Peripheral nervous system) through prolonged or repeated exposure.
- Very toxic to aquatic life with long lasting effects.

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 adjacent areas or water bodies.

PRECAUTIONS

- Wear a face shield and rubber gloves and boots when preparing the spray mixture.
- Wear a hat, nose and mouth protection, appropriate protective clothes, rubber gloves and shoes when applying the spray mixture.
- Wash contaminated clothing daily.
- Avoid eye splashes, skin contact by and inhalation of spray mist.
- Wash with soap and water after use or after accidental skin contact.
- Do not eat, drink or smoke while mixing or spraying unless having washed hands and face.
- Do not spray over or allow drift to contaminate water bodies such as dams, ponds, rivers, or fish hatcheries.
- 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 prescribed manner.
- Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and dispose of it in a safe way.
- Prevent contamination of food, animal feed, drinking water and eating utensils.

Warning against resistance: See Use Restrictions below.

FIRST AID MEASURES

If Inhaled: Keep patient calm, remove to fresh air and seek medical attention.
On skin contact: After contact with skin, wash immediately with plenty of water and soap. If irritation develops, seek medical attention.
On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
On ingestion: Rinse mouth immediately and then drink plenty of water, seek medical attention.
Note to physician: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY:

Do not add wetting or sticking agents or oils to Fastac® 10 EC when spraying deciduous fruit. Never mix with seaweed extracts. Fastac® 10 EC is physically and biologically compatible with Bravo 500 SC, Bladex Plus, Atrazine SC molasses and most acaricides commonly used in cotton and with a surfactant such as Tronic in an in-tank mixture (see **Mixing instructions** below). When Fastac® 10 EC is used in conjunction with any other agricultural remedy, full cognisance must be taken of all **WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE** mentioned on that label.

MIXING INSTRUCTIONS:

Half fill the spray tank with clean water. Shake the container of Fastac® 10 EC well and measure the required volume of Fastac® 10 EC and pre-mix this with at least 10L water. If any other product is to be mixed with Fastac® 10 EC, the required volume of the product must be pre-mixed in similar fashion. The efficacy of Fastac® 10 EC can be harmed by very hard water (> 1000 p.p.m. solutes), and a high pH value of the spray water as Fastac® 10 EC is more stable at a pH of around 4. Where a pH reducing agent is used to lower the pH of the water, the agent must be mixed with the total volume of water required for that particular tank mixture before adding the Fastac® 10 EC.

Molasses has a pH reducing effect and it also reduces evaporation of the spray mist. For ground application add 10 % molasses by volume and 20 % for aerial application. Agitate the water in the spray tank and add the product(s) to the tank in the following sequence (as applicable): Acidifying agent or adjuvant, suspension concentrate, water soluble concentrate, emulsifiable concentrate. Fill the spray tank with water to the required level while maintaining agitation to ensure thorough mixing of the spray mixture before spraying commences. Maintain agitation while spraying. Prepared spray mixture must not be left in the spray tank for long period of time, e.g. overnight.

GENERAL DIRECTIONS:

Treated cane may be harvested within one day after burning.

AERIAL APPLICATION:

Aerial application of Fastac® 10 EC may only be done by a registered aerial application operator using a correctly calibrated. 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 aerially at a lower volume rate than recommended above.
- **Droplet coverage:** 25 to 35 droplets per cm^2 must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 280 to 300 micron is recommended. Limit the production of fine droplets less than 150 micron (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.

The efficacy of the spray mixture may be adversely affected when applied to dense row crops. Ensure that thorough penetration and coverage is obtained when spraying and monitor efficacy within 3 days after application. A further application may be necessary if acceptable levels of control have not been obtained.

USE RESTRICTIONS:

Resistance of American bollworm (Helicoverpa armigera) to synthetic pyrethroids has been confirmed. As part of a strategy to prevent development of widespread resistance, the following guidelines must be adhered to for the control of Helicoverpa armigera.
All other crops: Do not apply more than two applications per growing season. Do not re-spray a suspected pyrethroid control failure with any synthetic pyrethroid even at a corrective dosage rate. Use a product from a different chemical group.
When the soil surface is dry, cutworms tend to feed sub-surface and damage to seedlings is usually not visible until the plants start to wither. When planting in dry soil, or in the event of rapid desiccation of the soil surface after planting, poor control of cutworms can be expected since the pest does not come into contact with the product applied to the soil surface. Repeat application will not rectify the problem unless the soil surface is moist.

All spray applications must be made with suitable equipment that is in good working order and correctly calibrated to give the desired coverage for that particular method of application.

CROP	PEST	DOSAGE	DIRECTIONS FOR APPLICATION
AFFORESTATION: Eucalyptus, Pine Forestry, Proteas	Pine emperor moth (*Imbrasia cytherea*)	35ml/ha	Aerial application: Apply in 30L water/ha when most eggs have hatched.
AFFORESTATION: Acacia, Oaks, Poplars Wattle, Willows	Wattle bagworm (*Kotochalia junodi*) Willow emperor moth (*Gonimbrasia tyrrhea*)	70ml/ha	Aerial application: Apply in 30L water/ha when the bagworms are most active, usually in November/December.
ALL ROW CROPS	Cutworm (*Agrotis spp.*)		Can be applied as a preventive or corrective treatment (pre- emergent or post-emergent treatment). Apply to a well prepared seedbed free of clods and excessive trash (see below for directions in respect of reduced tillage practices). For satisfactory control the soil should be moist to the surface at the time of application. Repeat the application if re-infestation should occur. **A. PREVENTIVE** (pre-emergent treatment): Recommended on fields where cutworms usually occur or are expected.
		0.20ml/ 100 meter row	**Ground application:** Row treatment: Apply in at least 3L water/100 meter row length. Apply in a band at least 300mm wide over the row. Increase the dosage proportionately if the application is made in a wider band.
		65ml/ha	**Overall ground treatment:** Apply in at least 300L water/ha.
			B. CORRECTIVE (post-emergent treatment): Recommended when five percent (or more) seedlings show signs of attack.
		0.15ml/100 meter row	**Ground application**: **Row treatment:** Apply as for pre- emergent treatment.
		50ml/ha	**Overall ground treatment:** As for pre-emergent treatment.
		65ml/ha	**Aerial application:** Apply in 30L water/ha according to the instructions under **General directions** above. **NOTE:** In production systems using reduced tillage practices (as used by some maize farmers) the cutworm population should be carefully monitored after the initial application as the probability of excessive cutworm populations is high which may call for a second treatment. In this case it is recommended to apply an overall treatment at the appropriate corrective dosage rate. See also **Use Restrictions** for a description of conditions during which poor control of cutworms can be expected.
APPLES and PEARS	American bollworm (*Helicoverpa armigera*)	5ml/100L water (0.0005% a.i.)	Apply as a corrective spray when necessary. Do not apply before 75% petal drop. Will also control codling moth and suppress weevil (snout beetle). **Warning against American bollworm resistance: See Use Restrictions above.** **High volume application:** Apply 125 to 175ml Fastac® 10 EC/ha.
	Banded fruit weevil (snoutbeetle) (*Phlyctinus callosus*)	10ml/100Lwater (0.001 % a.i.)	Apply two sprays: the first at 75% petal drop and the second 4 weeks later. A third spray can be applied to prevent late season damage. **High volume application:** Apply 250 to 350ml Fastac® 10 EC/ha.
	Codling moth (*Cydia pomonella*) Leafroller (*Tortrix capnenana*)	5ml/100L water (0.0005% a.i.)	Initially this treatment will also control American bollworm and codling moth. Apply the first spray at 75% petal drop. Repeat every 14 days in orchards where high infestations warrant intensive control or where pheromone traps dictate applications. Repeat every 21 days in orchards where low infestations are experienced. Will also suppress weevil (snout beetle) and control American bollworm. **High volume application:** Apply 125 to 175ml Fastac® 10 EC /ha.
BEANS and SOYABEANS	American bollworm (*Helicoverpa armigera*) Cutworm (*Agrotis spp.*)		Commence application as soon as eggs or larvae appear on the plants. Repeat the application at 14 day intervals or as dictated by inspection of the crop. **Warning against American bollworm resistance:** See Use Restrictions above.
		100ml/ha	**Ground application:** Apply in not less than 300L water /ha.
		100ml/ha	**Aerial application:** Apply in 30L water/ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.
CITRUS	Ants (*Anoplolepis custodiens;Pheidole spp.*)	250ml/1.0L water(2.5 % a.i.)	**FASTAC EC** spray mixture must be applied with a suitable applicator, e.g. an adapted knapsack sprayer. Apply to the point of run-off. Repeat the Fastac® 10 EC treatment when necessary. Suitable for use in biologically controlled orchards.

CROP	PEST	DOSAGE	DIRECTIONS FOR APPLICATION
COTTON	All bollworms, i.e. American (*Helicoverpa*), red and spiny bollworm larvae; Stainers		**FASTAC EC** is primarily intended for use as a preventive control measure against all bollworm larvae based on regular weekly scouting, or a regular spray programme applied at 7 day intervals. In order to comply with the principles of pest management and integrated control measures, Fastac® 10 EC is intended to be used during the period from 1st January to 1st March. Normally such a bollworm control programme will commence at the beginning of flowering, i.e. bout 6 weeks after emergence. Cotton older than 12 weeks after plant emergence is considered mature.
	leaf eaters, i.e. Plusia (semi-looper), Spodoptera Cutworm (*Agrotis spp.*)		Fastac® 10 EC exhibits some repellent properties against bollworm moths resulting in fewer eggs being laid on Fastac® 10 EC treated plants. Fastac® 10 EC resists rain wash-off provided the spray mixture is given sufficient time to dry completely on the crop. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**).
			A. PREVENTIVE: Apply as determined by the results of scouting for eggs, i.e. for Helicoverpa bollworm: an average of 0.5 eggs per plant; red bollworm: 0.25 eggs per plant; spiny bollworm: when two or more larvae are found during scouting, after having scouted 24 plants at random in fields up to 15 ha in extent. Scouting must be done at weekly intervals from flowering until boll split. Stainers will be controlled by Fastac® 10 EC during regular applications for control of bollworm larvae. **Warning against American bollworm resistance: See Use Restrictions above.**
		50ml/100L water (0.005 % a.i.)	**Ground application: With boom and hydraulic nozzles:** Ensure thorough coverage of the plants. For plants smaller than 600mm apply 100L spray mixture/ha. For taller plants increase the volume of spray mixture gradually to 200L/ ha for mature cotton. Do not use less than 100ml Fastac® 10 EC /ha on mature cotton.
		50ml/100L water 0.5 to 1ml /100 meter row)	**"Tramline" treatment:** Apply 50 to 100L spray mixture/ha depending on plant size. Mount at least five suitable hollow-cone nozzles over the "tramlines" so that one nozzle sprays directly over the top of each row, one sprays between the two rows and the other two nozzles should be mounted pointing 45 ° upwards on drop arms on the outside of each of the two rows.
		50ml or 100ml/ha	**Mist blower:** Use the lower dosage on cotton less than 600mm high and the higher dosage rate on cotton taller than 600mm. Do not use less than 100 ml Fastac® 10 EC /ha on mature cotton.
		62.5ml or 125ml/ha	**Aerial application:** As for mist blower application by applying in 30L water/ha.
COTTON			**B. CORRECTIVE EMERGENCY CONTROL MEASURE:** In the event of an emergency situation arising, e.g. as a result of weather conditions preventing applications, Fastac® 10 EC can be applied as a true corrective treatment. This recommendation must be regarded as an emergency measure when an exceptionally high bollworm or leaf eater population in different instars has become established in the crop. Later instar red bollworm larvae established inside bolls may not be controlled successfully. Success of the treatment can be related to application, density of crop foliage, plant population, and instars of larvae. Allow up to 4 days for Fastac® 10 EC to achieve its full effect. After such a corrective application the regular programme must be resumed irrespective of the crop stage. **Warning against American bollworm resistance: See Use Restrictions above.**
		150ml/100L water (0.015% a.i.)	**Ground application:** With boom and hydraulic nozzles: Ensure thorough coverage of the plants. For plants smaller than 600mm apply 100L spray mixture /ha. For taller plants increase the volume of spray mixture gradually to 200L/ha for mature cotton. Do not use less than 300ml Fastac® 10 EC /ha on mature cotton.
		150ml or 300ml/ha	**Mist blower:** Use the lower dosage on cotton less than 600mm high and the higher dosage rate on cotton taller than 600mm. Do not use less than 300ml Fastac® 10 EC / ha on mature cotton.
		175ml or 350ml/ha	**Aerial application:** As for mist blower application apply in 30L water/ha. See ALL ROW CROPS above.

CROP	PEST	DOSAGE	DIRECTIONS FOR APPLICATION
CRUCIFERAE	American bollworm (*Helicoverpa armigera*); Diamond back moth larvae (*Plutella maculipennis*); Thrips Cutworm (*Agrotis spp.*)	7ml/100L water (0.0007% a.i.)	Ensure thorough wetting of the plant. Commence spraying as soon as the first signs of the pest occur and repeat sprays every 10 to 14 days. This treatment will suppress aphids in a programme spray. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE). Warning against American bollworm resistance: See Use Restrictions above.** See ALL ROW CROPS above.
GRAPE VINES	Banded fruit weevils (snoutbeetles) (*Phlyctinus callosus, Eremnus setulosus*)	10ml/100L water (0.001% a.i.)	Apply as a full cover application ensuring thorough coverage of all parts of the plant. Apply the first spray when the first signs of movement or feeding of weevils (snout beetles) occur. Repeat after 21 to 28 days if necessary. The first occurrence of weevils (snout beetles) varies from area to area.
	Argentine ants (*Linepithema humile*)	100ml/10L water	For use in trellised vineyards only. Apply at the beginning of the season as soon as ants start foraging in the vineyard canopy. Apply to point of run-off as a coarse spray directly to the bottom 30 cm of vine stems, using a ring-spray attachment fitted to the lance of a knapsack sprayer. One application should normally be sufficient for the entire season, but where severe ant infestations occur, it may be necessary to repeat the application. The trellis poles and all other structures that ants may climb to reach the vines, must also be treated. Weed control is also important. Monitor vineyards regularly for the presence of ants.
	Pugnacious ants (*Anoplolepis custodiens and A. steingroeveri*)	200ml/10L water	
GRAZING	Army worm (*Spodoptera exempta*)	100ml/ha	Apply as soon as pest occurs. **Ground application:** Apply in at least 300L water/ha to ensure good coverage.
		100ml/ha	**Aerial application:** Apply in 30L water/ha.
GROUNDNUTS	American bollworm (*Helicoverpa armigera*) Cutworm (*Agrotis spp.*)		Commence application as soon as eggs or larvae occur on the plants. Repeat the application at 14 day intervals or as dictated by inspection of the crop. **Warning against American bollworm resistance: See Use Restrictions above.**
		100ml/ha	**Ground application:** Apply in not less that 300L water/ha.
		100ml/ha	**Aerial application:** Apply in 30L water/ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.
LUCERNE	Lucerne caterpillar (*Colias electo*)	50ml/ha	Apply as soon as pest occurs. **Ground application:** Apply in 300Lwater/ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**
MACADAMIA	Stink bug (*Nezara viridula*)	10ml/100L water	Apply as a high volume full cover spray when the nuts are marble size (October/November) and repeat four weeks later. A third application may be necessary four weeks after the second application.

CROP	PEST	DOSAGE	DIRECTIONS FOR APPLICATION
MAIZE	American bollworm (*Helicoverpa armigera*)		Apply when pest occurs but not later than 80% beard emergence. **Warning against American bollworm resistance: See Use Restrictions above.**
		1.0ml/100 meter row	**Ground application**: If row width permits ground application use not less than 3Lwater/100 meter row length. Direct nozzles towards the heads.
		100ml/ha	**Aerial application:** Apply in 30L water/ha according to the directions above. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.
	Cutworm (*Agrotis spp.*) Stalk borer (*Busseola fusca*)		Apply as a preventive treatment against young larvae based on scouting for eggs on plants. Apply 7 to 10 days, after 5% or more plants are found to be infested with eggs. Do weekly scouting from 2 to 7 weeks after crop emergence by inspecting at least 100 plants at random per field. If eggs have hatched, spray at the first signs of an infestation. Larvae longer than 10mm or larvae that have already tunnelled into the stalk will not be controlled effectively. To control the second generation stalk borer larvae it is advisable that the moth flights are monitored with the MAIZE STALK BORER BIOTRAP* Refer to the BIOTRAP label for full particulars.
		1.25ml/100 meter row	**Ground application:** Direct spray into the funnel. Apply in sufficient water, i.e. 3L water/100 meter row length. This will result in the use of 125ml and 62.5ml Fastac® 10 EC /ha on one and two metre row widths respectively.
		125ml/ha	**Aerial application:** Apply in 30L water/ha according to the directions for ground application. Ensure thorough penetration and coverage. (Also see General directions under DIRECTIONS FOR USE).
PEACHES	American bollworm (*Helicoverpa armigera*)	5ml/100L water (0.0005% a.i.)	Apply as a full cover corrective spray when necessary. Do not apply before 75% petal drop. Will also control codling moth. **Warning against American bollworm resistance: See Use Restrictions above.** **High volume application:** 125 to 175ml Fastac® 10 EC/ha.
	Banded fruit weevil (snoutbeetle) (*Phlyctinus callosus*)	10ml/100L water (0.001% a.i.)	Apply at the first signs of feeding damage. Repeat the application 3 to 4 weeks later if necessary. **High volume application:** 250 to 350ml Fastac® 10 EC/ha.
	Codling moth (*Cydia pomonella*)	5ml/100L water (0.0005% a.i.)	Apply the first full cover application at 75% petal drop. Repeat every 14 days in orchards where high infestations warrant intensive control or where pheromone traps dictate application. Repeat every 21 days in orchards where low infestations are experienced. Will also control American bollworm and suppress weevil (snout beetle). **High volume application:** 125 to 175ml Fastac® 10 EC/ha.
	False codling moth (*Cryptophlebia leucotreta*)	5ml/100L water (0.0005% a.i.)	**Early cultivars:** Apply as a full cover application 6 weeks before the picking date and repeat application every 14 days. **Late cultivars:** Apply as a full cover application 8 weeks before the picking date and repeat application every 14 days. In the summer rainfall regions the first application must be made not later than the third week of December. **Canning peaches:** As above, but applications can be made up to 3 days before picking. **High volume application:** 125 to 175ml Fastac® 10 EC/ha.
	Fruit flies (*Ceratitis capitata; Pterandrus rosa*)	10ml/100L water (0.001% a.i.)	**All cultivars:** Apply as a full cover application 8 weeks before picking or as directed by pheromone traps, and repeat application every 2 weeks. In the summer rainfall regions the first application must be made not later than the third week of December. Peaches destined for canning can be sprayed up to 3 days before picking. This treatment will also control false codling moth larvae. **High volume application:** 250 to 350ml Fastac® 10 EC/ha.
PEAS	American bollworm (*Helicoverpa armigera*); Lesser army worm (*Spodoptera exiqua*) Cutworm (*Agrotis spp.*)		Commence application as soon as eggs or larvae occur on the plants. Repeat the application at 14 day intervals or as dictated by inspection of the crop. **Warning against American bollworm resistance: See Use Restrictions above.**
		100ml/ha	**Ground application:** Apply in not less than 300L water/ha.
		100ml/ha	**Aerial application:** Apply in 30L water/ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.

CROP	PEST	DOSAGE	DIRECTIONS FOR APPLICATION
POTATOES	Potato tuber moth (*Phthorimaea operculella*); Lesser army worm (*Spodoptera exiqua*)	5ml/100L water (0.0005% a.i.)	Apply preventively as a full cover spray from when the plants are 1 month old. Repeat at 8 to 14 day intervals. Ridge at least twice during the growing season to ensure that no tubers are exposed at any time. In cases where the crop is to be left in the ground for any period of time, ensure that there are no cracks in the soil covering the rows through which moths could gain direct access to the tubers.
		100ml/ha	**Ground application:** Depending on plant size apply in 300 to 500L water/ha. Ensure thorough penetration and coverage. (See **General directions** under **DIRECTIONS FOR USE** above).
SORGHUM	Americal bollworm (*Helicoverpa armigera*)		Apply when the pest occurs. If bollworm larvae are concealed in the ear, control may be less effective. **Warning against American bollworm resistance: See Use Restrictions above.**
		1.0ml/100 meter row	**Ground application:** Direct application onto ears. Apply in not less than 2L water/100 meter row.
		100ml/ha	**Aerial application:** Apply in 30L water/ha Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE** above). See ALL ROW CROPS above.
	Cutworm (*Agrotis spp.*) Stalk borer (*Busseola fusca*)	1.25ml/100 meter row	**Ground application:** As for maize.
		125ml/ha	**Aerial application:** As for maize. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE** above).
MAIZE AND SWEETCORN	American bollworm (*Helicoverpa armigera*); Stalk borers (*Busseola fusca; Sesamia calamistis*) Cutworm (*Agrotis spp*)		Follow a spray programme by applying the first application 3 weeks after planting. Follow up with 2 further spray at 10 to 14 days intervals and a fourth and last application at about 10 weeks after planting, i.e. a beard emergence. This spray programme will also suppress maize streak virus transmission by leafhoppers. **Warning against American bollworm resistance: See Use Restrictions above.**
		1.0ml/100 meter row	**Ground application:** Apply in not less than 3L water/100 meter row length.
		100ml/ha	**Aerial application:** Apply in 30L water/ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.
SUGARCANE	*Eldana saccharina*	200ml/ha	**Ground application:** Follow a preventive spray programme, by applying the first application, starting in August. Follow up at two week intervals up to a maximum of 8 applications. Apply as a full cover spray with a mist blower in 350L water/ha
		200ml/ha	**Aerial application**: Apply in 30L water/ha.
TOMATOES	American bollworm (*Helicoverpa armigera*) Cutworm (*Agrotis spp.*)		**Ground application:** Apply as a full cover spray at the first signs of an infestation. Repeat the application at 7 to 10 day intervals or as directed by inspection of the crop. **Warning against American bollworm resistance: See Use Restrictions above.**
		10ml/100L water (0.001% a.i.)	**High volume:** Apply up to 500L spray mixture / ha to plants up to 600mm high, and 1000L / ha or more to plants higher than 600mm, e.g. trellised tomatoes. Do not use more than 100ml Fastac® 10 EC /ha.
		50 or 100ml/ ha	**Mist blower:** Apply in 150 to 500L water/ha. Use the lower rate and volume for plants up to 600 mm high, and the higher rate and volume for plants taller than 600mm, e.g. trellised tomatoes. Do not use more than 100mL Fastac® 10 EC /ha. Ensure thorough penetration and coverage. (Also see **General directions** under **DIRECTIONS FOR USE**). See ALL ROW CROPS above.
WHEAT	American bollworm (*Helicoverpa armigera*)		Apply as soon as the economic threshold has been reached in sufficient water to ensure thorough penetration and coverage. **Warning against American bollworm resistance: See Use Restrictions above.**
		100ml/ha	**Ground application:** Apply in not less than 200L water /ha.
		100ml/ha	**Aerial application:** Apply in not less than 30L water /ha

BASF

We create chemistry

ml
800
700
600
500
400
300
200
ml

Fastac®10 EC

An emulsifiable concentrate contact and stomach insecticide, for the control of the pests mentioned on the crops listed.

NET VOLUME: 1 L

GROUP	3A	INSECTICIDE

Active ingredients:
Alphacypermethrin 100g/L

HAZARD STATEMENT

Flammable liquid and vapour.
Toxic if swallowed.
Causes skin irritation.
Causes serious eye damage.
Harmful if inhaled.
Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Wear protective gloves and eye/face protection.
Wash with plenty of water and soap throughly after handling.
Do not eat, drink or smoke when using this product.
Keep away from heat, hot surfaces, sparks, open flames and ignition sources.

Imported by:
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ZEMA PRODUCT NUMBER: .

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DANGER