

WARNINGS

Withholding periods (Minimum number of days between last application and harvest, grazing or feeding):

Apples, Apricots, Cherries, Nectarines, Pears, Plums and Peaches	14 days
Cotton (grazing), Sorghum, Soybeans (grazing) and Wheat	28 days
Dry beans, Maize and Sweetcorn	7 days
Grapes	28 days
Green beans	1 day
Lucerne	8 days
Peas and Potatoes	3 days
Tomatoes, Cruciferae and Lupins (grazing).....	2 days

- Handle with care.
- Harmful if swallowed, inhaled or absorbed through the skin.
- Irritating to skin and eyes.
- Toxic to fish and wildlife.
- **Flammable** – keep away from open flames.
- Store in a cool, dry place away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- Although **LAMDEX®5 EC** is of very low risk to bees, it should only be applied during periods when bees are not active.
- **Re-entry interval:** Do not enter treated area within 1 day after application unless wearing protective clothing.
- In case of poisoning call a doctor and show him/her this label.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.
- **Export fruit:** When the product is used according to label recommendations the local MRL will not be exceeded. ADAMA South Africa (Pty) Ltd cannot be held responsible for export fruit exceeding the import tolerances of other countries. The local export marketing bodies should be contacted for further information.

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, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest to 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, and 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

- Do not eat, drink or smoke while handling the product or before hands and face are washed.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Do not inhale fumes or spray mist. Avoid contact with eyes and skin.
- Wear rubber gloves and face shield when handling the concentrate. If it comes into contact with the eyes, rinse immediately with clean running water for at least 15 minutes. If it comes into contact with the skin, wash immediately with water and soap. If it is spilled on clothes, take it off immediately and wash.
- Prevent spray drift onto other crops, grazing, rivers, dams or any other area not under treatment.
- Clean applicator thoroughly after use. Dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- 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 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the empty container.
- Destroy empty container and do not use for any other purpose.
- Take off work clothes and wash it. Wash yourself.

Symptoms of human poisoning: Nausea, vomiting, diarrhoea, abdominal pain, disturbance of the nervous system with ataxia, weakness of limbs, convulsions, coma and death from respiratory depression. Skin contact may cause irritation. Eye contact may cause redness of eyes and tears.

First aid treatment: Inhalation: Remove patient to fresh air and keep him warm and at rest. If breathing is difficult, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention. **Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Get medical attention. **Skin contact:** Remove contaminated clothing. Wash with plenty of water and soap. Consult a doctor in the event of any complaints. **Eye contact:** Wash out with plenty of water for at least 15 minutes. Consult a medical practitioner immediately.

Note to physician: There is no specific antidote. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal.

RESISTANCE WARNING

For resistance management, **LAMDEX® 5 EC** is a group code 3 insecticide. Any insect population may contain individuals naturally resistant to **LAMDEX® 5 EC** 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 **LAMDEX® 5 EC** 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 the control methods (chemical, cultural, biological) into insect control programmes.
- For specific information on resistance management contact the registration holder of this product.
- **NOTE: Warning against resistance:** Resistance of American (African) bollworm (*Helicoverpa armigera*) to synthetic pyrethroids has been confirmed.
- **Cotton:** Synthetic pyrethroids must ONLY be applied to cotton during the period 1 January to 28 February.

- **All other crops:** DO NOT apply more than two applications per growing season on the same field. If a pyrethroid gives poor performance DO NOT re-spray with any other synthetic pyrethroid, even at a corrective dosage rate. Use a product from a different chemical group with a different mode of action.

DIRECTIONS FOR USE

Use only as indicated.

Mixing Instructions

Half fill the spray tank with clean water. Add the required volume of **LAMDEX® 5 EC** to the water while agitating. Fill the spray tank while agitation is maintained. Ensure that agitation is maintained during mixing and application. Mix only sufficient spray mixture to be used in the same day.

APPLICATION

Ground application

LAMDEX® 5 EC can be applied by means of any suitable medium or high volume spray apparatus that is calibrated correctly, is fitted with an efficient agitating system and is able to distribute the spray mixture evenly over the target area.

Aerial application

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Remedies). It is important to 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 must be met:

Equipment

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

Application parameters

- A minimum volume of 30 l spray mixture/ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aurally at a lower volume rate than recommended.
- A droplet coverage of 30-40 droplets/cm² must be recovered at the target.
- A droplet spectrum with a VMD of 250-280 micron is recommended. Ensure that the production of fine droplets, with a VMD less than 150 micron, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3-4 m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Apply before the crop growth becomes too dense, which will interfere with overall plant coverage.

Meteorological conditions

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer must not exceed 8 °C.

- Do not spray under turbulent, unstable conditions or during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
- Do not spray when the wind speed exceeds 15 km/h.

General

- Ensure that fields are accurately marked and 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.
- Prepared spray mixture must not be left in the spray tank for any length of time e.g. overnight.

APPLICATION RATES

CROP TARGET	AND	DOSAGE	REMARKS
All crops Cutworm (<i>Agrotis</i> spp.)		0,23 ml/100 m row 70 ml/ha 70 ml/ha	Apply LAMDEX® 5 EC as a pre-emergence or early post-emergence application. The soil must be well prepared and free of clods and excessive plant debris. In situations where reduced tillage is practised, cutworm populations are usually high. Therefore, the cutworm population must be monitored after the first application and if necessary, a second application should be applied. Apply as an overall, corrective spray at the recommended rate. Note: It is of the utmost importance that the top 3 cm of soil is moist at the time of application. Row treatment: Apply in 3 l water/100 m row length as a 30 cm band over the row. Overall treatment: Apply in at least 200 l water/ha. Aerial application: Apply in at least 30 l water/ha.
Apples and pears Codling moth (<i>Cydia pomonella</i>) American (African) bollworm (<i>Helicoverpa armigera</i>) Banded fruit weevil (<i>Phlyctinus callosus</i>)		10 ml/100 l water (250–350 ml/ha) 10 ml/100 l water (250–350 ml/ha) <u>Foliar application:</u> 20 ml/100 l water (500-700 ml/ha)	Apply as a high volume application at 75 % petal fall and repeat every 14–18 days. Do not apply during periods when bees are active. Refer to WARNINGS regarding EXPORT FRUIT. Apply at the first sign of infestation but not before 75 % petal fall. Repeat if necessary. Refer to WARNINGS regarding resistance and EXPORT FRUIT. Apply two high volume sprays. The first at 75 % petal drop and the second 4 weeks later. If necessary, a third spray can be applied 4 weeks after the second spray to prevent late season damage. A single spray or a programme of sprays for weevils at this dosage rate will also suppress or even control low populations of red spider mite.

Cotton: Synthetic pyrethroids should be sprayed in cotton only during the period 1 January to 28 February for the control of American (African) bollworm. No sprays should be necessary for American (African) bollworm control during the first eight weeks after plant emergence. Should Red bollworm be present a remedy which does not promote Red spider mite should be sprayed. Thereafter (10-12 weeks later) recommendations as below can be followed.

LAMDEX® 5 EC should only be applied 12 weeks after plant emergence and after regular scouting. Application should commence when five American (African) bollworm, two Spiny bollworm or Red bollworm larvae are found on 24 plants in an area of 15 ha or if 12 American (African) bollworm, 6 Red bollworm or 4 Spiny bollworm eggs are found on 24 plants in an area of 15 ha. Ensure thorough wetting of all plant parts. Larvae that are already inside bolls might not be controlled effectively. Repeat application after scouting indicates the necessity of another application.

CROP TARGET	AND	DOSAGE	REMARKS
<p>Cotton</p> <p>American (African) bollworm (<i>H. armigera</i>)</p> <p>Red bollworm (<i>Diparopsis castanea</i>)</p> <p>Spiny bollworms (<i>Erias</i> spp.)</p> <p>Cotton strainers (<i>Dysdercus</i> spp.)</p>	<p><u>Ground application:</u></p> <p>Plants smaller than 60 cm: 60 ml/ha</p> <p>Plants taller than 60 cm: 120 ml/ha</p> <p><u>Tramline application:</u></p> <p>Plants smaller than 60 cm: 0,6 ml/100 m row.</p> <p>Plants taller than 60 cm: 1,2 ml/100 m row.</p> <p><u>Aerial application:</u></p> <p>66–132 ml/ha</p>	<p>Ensure thorough wetting of all plant parts. Use at least 100 l water/ha for plants smaller than 60 cm and at least 200 l water/ha for plants taller than 60 cm.</p> <p>Apply in 50 l water/ha on plants less than 60 cm and 100 l water/ha on plants taller than 60 cm. See “Tramlines” below.</p> <p>Apply in at least 30 l water/ha. Use the lower dosage rate for plants smaller than 60 cm and the higher dosage rate for plants taller than 60 cm. Refer to WARNINGS regarding resistance.</p>	

CROP AND TARGET	DOSAGE	REMARKS
<p><i>Cotton continues</i></p> <p>American (African) bollworm (<i>H. armigera</i>) and Red bollworm (<i>D. castanea</i>)</p>	<p><u>ULV-appliaction:</u></p> <p>Plants smaller than 60 cm: 88 ml/ha in sunflower oil.</p> <p>Plants taller than 60 cm: 120 ml/ha in sunflower oil.</p>	<p>Use only acknowledged ULV applicators. Apply a total spray mixture volume of 3,0 l/ha. Make the LAMDEX® 5 EC dosage as indicated up with sunflower oil to a spray volume of 3,0 l. Refer to WARNINGS regarding resistance.</p>
<p>Tramlines – Cotton: Dosage recommendation is per single row. Therefore 1 tramline = 2 rows. Mount 5 suitable hollow cone nozzles over tramlines so that one nozzle sprays directly over the top of each row, one in between and two spray on the outside of each of the two rows. For the best results the two outside nozzles should be mounted on drop arms and should be set 45 ° upwards. 1 m row spacing = 10,000 running m/ha.</p>		
<p>Cruciferae</p> <p>American (African) bollworm (<i>H. armigera</i>) Diamond back moth larva (<i>Plutella xylostella</i>)</p>	<p>8 ml/100 l water</p>	<p>Commence application as soon as pest is noticed and repeat every 10–14 days. Apply as a high volume application at 500–1,000 l spray mixture per ha. Add a suitable wetter to the spray mixture at the registered rate to ensure good coverage. Refer to WARNINGS regarding resistance.</p>
<p>Dry beans, Green beans, Groundnuts and Peas</p> <p>American (African) bollworm (<i>H. armigera</i>)</p>	<p>100 ml/ha</p> <p>100 ml/ha</p>	<p>Commence application as soon as pest is noticed. Larvae should ideally be not bigger than 1 cm in length but definitely not bigger than 2 cm. Apply in 250–500 l water/ha depending on plant size. Repeat application if necessary.</p> <p>Aerial application: (All crops excluding peas). Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.</p>

CROP TARGET	AND	DOSAGE	REMARKS
Grapes (Table & Wine) Weevils (<i>Eremnus setulosus</i> , <i>E. cerealis</i> and <i>P. callosus</i>)		<u>Stem treatment:</u> 20 ml/100 l water (200 ml/ha) <u>Foliar application:</u> 20 ml/100 l water (200 ml/ha)	Start scouting for weevils activity from beginning of October and throughout the growing season. Commence application as soon as activity is noticed on the stem. Apply at 1,000 l spray mixture/ha (0,5 l/stem) up to a height of 1,0 m. Wet the stem thoroughly and allow excess spray mixture to run down to the soil surrounding the stem. In the case of low growing vines, spray up to the first lateral branches. Repeat application every 3–4 weeks if necessary. If a dense canopy has formed, weevils tend to hide in there and do not migrate back to the stem. Commence application as soon as the first damage is noticed. Apply as a high volume spray at 1,000 l spray mixture/ha. Repeat application if necessary. Refer to WARNINGS regarding EXPORT FRUIT.
Lucerne Lucerne caterpillar (<i>Colias electo</i>) American (African) bollworm (<i>H. armigera</i>)		80–100 ml/ha 100 ml/ha	Commence application as soon as pest is noticed. Apply in 250–500 l water/ha and ensure good coverage of plants. Use the lower rate in stands which is not very dense and the higher rate in dense stands. The larvae should not be bigger than 1 cm but definitely less than 2 cm in length at time of application. Follow-up applications may be necessary based on scouting to determine re-infestations. Apply as above. Refer to WARNINGS regarding resistance.
Lupins American (African) bollworm (<i>H. armigera</i>)		110–120 ml/ha 120 ml/ha	Application should be done at a count of 1-2 larvae/m ² before pods are penetrated by the larvae. Apply in 300 l water/ha. Use the lower rate for smaller plants and the higher rate for bigger plants. Aerial application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.

CROP TARGET	AND	DOSAGE	REMARKS
Maize Stalkborer (<i>Busseola fusca</i>)		1,2 ml/100 m row (120 ml/ha)	Commence application as soon as eggs are found on 5 % of the plants or 10 % of the plants show typical shot hole damage. Apply directly into the funnels of plants before larvae migrate to the stem in 3 l water/100 m row. A second application might be necessary 10–14 days later.
		120 ml/ha	Aerial application: Apply in at least 30 l water/ha.
	Chilo stalkborer (<i>Chilo partellus</i>)	1,2 ml/100 m row	Commence application as soon as 10 % of the plants are damaged. Apply directly into the funnels in 3 l water/100 m row before the larvae migrate to the stalk. A second spray might be necessary before tasseling.
		120 ml/ha	Aerial application: Apply in at least 30 l water/ha.
American (African) bollworm (<i>H. armigera</i>)		100 ml/ha	Commence application as soon as pest is noticed from flowering onwards. Scout fields weekly for presence of pest. Ensure thorough coverage of plants and apply in 250–500 l water/ha depending on plant size. Ideally larvae should be less than 2 cm in length at application. Repeat application if necessary. Refer to WARNINGS regarding resistance.
Apricots, cherries, Nectarines, Peaches and plums American (African) bollworm (<i>H. armigera</i>) Banded fruit weevil (<i>P. callosus</i>)		10 ml/100 l water (250–350 ml/ha)	Commence application only after 75 % petal drop if pest is noticed. Repeat if necessary. Refer to WARNINGS regarding resistance and EXPORT FRUIT.
		Stem treatment 20 ml/100 l water (200 ml / ha)	Refer to remarks under “Grapes” for recommendations.
		Foliar application 20 ml/100 l water (500–700 ml/ha)	Commence application as soon as the first signs of feeding are noticed. Repeat application 3–4 weeks later. Refer to WARNINGS regarding EXPORT FRUIT. Do not apply more than 2 applications of lamda-cyhalothrin/season to cherries.

CROP TARGET	AND	DOSAGE	REMARKS
Potatoes Tuber moth larva (<i>Phthorimaea operculella</i>) and American (African) bollworm (<i>H. armigera</i>)		120 ml/ha 132 ml/ha	Apply in 250-500 l water/ha depending on plant size. Commence application as soon as pest is noticed. Repeat every 10–14 days and ridge at least twice during the growing season. Aerial application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.
Sorghum American (African) bollworm (<i>H. armigera</i>) Maize stalkborer (<i>B. fusca</i>)		100 ml/ha 100 ml/ha 1,0 ml/100 m row 100 ml/ha	Commence application as soon as pest is noticed. Apply in at least 250–500 l water/ha. Repeat if necessary. Aerial application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance. Commence application as soon as 5 % of the plants show shothole damage and before the larvae migrate into the stalk. Direct the spray over the funnels and apply in 3 l water/100 m row. Will also control <i>Chilo</i> stalkborer if present. Aerial application: Apply in at least 30 l water/ha.
Soybeans American (African) bollworm (<i>H. armigera</i>)		120 ml/ha 120 ml/ha	Commence application as soon as pest is noticed and before pods are penetrated. Apply in 200-300 l water/ha. Ensure good coverage of plants. Repeat when necessary. Aerial Application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.
Sweetcorn American (African) bollworm (<i>H. armigera</i>)		100 ml/ha 100 ml/ha	Commence application as soon as pest is noticed from flowering onwards. Scout fields weekly for presence of pest. Ensure thorough coverage of plants and apply in 250–500 l water/ha depending on plant size. Ideally larvae should be less than 2 cm in length at application. Repeat application if necessary. Aerial application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.

CROP TARGET	AND	DOSAGE	REMARKS
Sweetcorn continues Pink stalkborer (<i>Sesamia calamistis</i>)		1,0 ml/100 m row	Ground application: Apply directly into the funnel of the plants 14 days after plant emergence. A follow-up application must be applied 10-14 days later and if necessary up to flowering to control re-infestations. Apply in a minimum of 3,0 l water/100 m row.
Tomatoes American (African) bollworm (<i>H. armigera</i>) Semi-looper (<i>Chrysodeixes acuta</i>)		7,5 ml/100 l water	Commence application when plants start to flower or when pest is noticed. Apply as a full cover spray at 500–1,000 l spray mixture/ha depending on plant size up to 1 m tall. For plants taller than 1 m the water volume should be increased while maintaining the concentration. Repeat application every 7–10 days if necessary. Refer to WARNINGS regarding resistance.
Wheat American (African) bollworm (<i>H. armigera</i>)		100 ml/ha 100 ml/ha	Commence application as soon as pest is noticed. Apply in 250–500 l water/ha. Repeat if necessary. Aerial application: Apply in at least 30 l water/ha. Refer to WARNINGS regarding resistance.

WAARSKUWINGS

Onthoudingsperiodes (Minimum aantal dae tussen laaste toediening en oes, beweiding of vervoer):

Appels, Appelkose, Kersies, Nektariens, Pere, Perskes en Pruime	14 dae
Droëbone, Mielies en Suikermielies	7 dae
Groenbone	1 dag
Katoen (beweiding), Sorghum, Sojabone (beweiding) en Koring	28 dae
Lusern	8 dae
Tamaties, Koolgewasse en Lupiene (beweiding)	2 dae
Ertjies en Aartappels	3 dae
Druive	28 dae

- Hanteer versigtig.
- Skadelik indien ingesluk, ingeasem of deur die vel geabsorbeer word.
- Irriterend vir vel en oë.
- Giftig vir visse en wildlewe.
- **Vlambaar:** Hou weg van oop vlamme.
- Berg in 'n koel, droë plek weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Alhoewel **LAMDEX® 5 EC** 'n lae risiko vir bye inhou, moet dit slegs gedurende tye toegedien word wanneer bye nie aktief is nie.
- **Herbetredingsinterval:** Moet nie behandelde area binne 1 dag na toediening binnegaan nie tensy beskermende klere gedra word.
- In geval van vergiftiging ontbied 'n geneesheer en toon hierdie etiket aan hom/haar.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie spuit of toelaat dat spuitnewel aanliggende gebiede en water besoedel nie.
- **Uitvoervrugte:** Wanneer die produk volgens etiketaanbevelings toegedien word, sal die lokale MRL's nie oorskry word nie. ADAMA South Africa (Pty) Ltd. kan nie verantwoordelik gehou word vir uitvoergewasse wat die invoertoleransies van ander lande oorskry nie. Die lokale uitvoerbemarkingsorganisasies moet geraadpleeg word vir meer inligting.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die plaag teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die registrasiehouer in geval van enige onsekerheid.

VOORSORGMATREËLS

- Moet nie eet, drink of rook tydens hantering van die produk of voordat hande en gesig gewas is nie.
- Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.
- Vermy inaseming van die spuitmis. Vermy kontak met vel en oë.
- Dra rubberhandskoene en gesigskerm wanneer die konsentraat hanteer word. Indien dit in kontak met die oë kom, spoel onmiddellik uit met skoon lopende water vir ten minste 15 minute. Indien dit in aanraking kom met die vel, was onmiddellik met seep en water. Indien op die klere gemors is trek dit dadelik uit en was dit.
- Voorkom dat die spuitnewel oorwaai na ander gewasse, weiding, riviere, damme of enige ander gebiede wat nie behandel moet word nie.
- Maak die toediener deeglik skoon na gebruik. Gooi waswater waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.
- Keer die leë houër om oor die spuit- of mengtenk en laat dit dreineer vir ten minste 30 sekondes nadat die vloei tot 'n gedrup verminder het. Spoel daarna die leë houër drie keer uit met 'n volume water gelykstaande aan minstens 10 % van die volume van die houër. Gooi die spoelwater in die spuittenk voor die leë houër vernietig word.
- Vernietig die leë houër en moet dit nie vir enige ander doel gebruik nie.
- Trek werksklere uit en was dit. Was jouself.

Simptome van menslike vergiftiging: Naarheid, braking, diaree, abdominale pyn, versteuring die senuweestelsel met ataksie, swakheid van die ledemate, stuiptrekkings, koma en dood a.g.v. asemhalingsnood. Kontak met die vel mag irritasie veroorsaak. Indien dit in die oë kom mag dit die oë rooi maak en tranes veroorsaak.

Noodhulpbehandeling: Inaseming: Neem pasiënt na vars lug en hou hom warm en rustig. Indien moeilik asemhaal gee suurstof. Indien asemhaling staak, gee kunsmatige respirasie. Raadpleeg 'n geneesheer. **Inname:** Moet nie braking veroorsaak nie. Moet nooit iets per mond aan 'n bewustelose persoon gee nie. Was mond uit met water. Raadpleeg 'n geneesheer. **Velkontak:** Verwyder besoedelde klere. Was af met groot hoeveelhede water en seep. Raadpleeg 'n geneesheer indien nodig. **Oogkontak:** Was uit met baie lopende water vir ten minste 15 minute. Raadpleeg 'n geneesheer onmiddellik.

Nota aan geneesheer: Daar is geen spesifieke teenmiddel nie. Behandel simptome en gee ondersteunende terapie. Indien ingeneem doen 'n maagspoeling en dien geaktiveerde houtskool toe.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur, **LAMDEX® 5 EC** is 'n groepkode 3 insekdoder. Enige populasie van 'n spesifieke insek mag individue insluit wat 'n natuurlike weerstand teen **LAMDEX® 5 EC** of enige ander groepkode 3 insekdoders het. Indien hierdie insekdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die insekpopulasie oorheers. Hierdie weerstandbiedende insekte sal waarskynlik nie deur **LAMDEX® 5 EC** of enige ander groepkode 3 insekdoder beheer word nie.

Om weerstand teen insekdoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van insekdoders met dieselfde groepkode. Wissel af met, of gebruik tenkingsels van produkte in verskillende insekdodergroepcodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in insekdoderprogramme.

- Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

LET WEL

- **Weerstandswaarskuwing:** Weerstand van Afrikaanse bolwurm (*Helicoverpa armigera*) teen die sintetiese piretroïede is bevestig.
- **Katoen:** Sintetiese piretroïede moet SLEGS gedurende die periode 1 Januarie tot 28 Februarie toegedien word.
- **Alle ander gewasse:** MOET NIE meer as twee bespuitings per groeiseisoen op dieselfde land toedien nie. Indien piretroïede swak beheer gee MOET NIE met enige ander sintetiese piretroïed herbespuit nie, nie eers teen 'n korrektiewe toedieningshoeveelheid nie. Gebruik 'n produk van 'n ander chemiese groep met 'n ander metode van werking.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

Meng instruksies

Maak die spuitnek halfvol met skoon water. Voeg die benodigde hoeveelheid **LAMDEX® 5 EC** by terwyl geroer word. Vul die spuitnek met water terwyl geroer word. Verseker dat roering gedurigdeur plaasvind tydens vermenging en toediening. Maak net genoeg spuitmengsel aan wat op dieselfde dag gebruik sal word.

TOEDIENING

Grondtoediening

LAMDEX® 5 EC kan deur middel van enige geskikte medium- of hoëvolume spuitapparaat toegedien word wat korrek gekalibreer is, voorsien is van 'n doeltreffende roermeganisme en in staat is om die spuitmengsel eweredig oor die teikenoppervlak te versprei.

Lugtoediening

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n geregistreerde en korrek gekalibreerde vliegtuig volgens instruksies van SANS Kode 10118 ("Aerial Application of Agricultural Remedies") gedoen word. Dit is belangrik om te verseker dat die spuitmengsel eweredig oor die teikenarea versprei word en dat die verlies aan spuitmengsel tydens toediening tot die minimum beperk word. Die volgende kriteria moet nagekom word:

Toerusting

- Gebruik geskikte atomiseringsapparaat (hidroliese of roterende spuitkoppe) wat die vereiste druppelgrootte en bedekking van die teikenarea sal produseer, en wat die minimum verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n spuitstelsel gebruik wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitkoppe en atomiseerders moet in die binneste 75 % van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks in te beperk.

Toedieningsvereistes

- 'n Minimum volume van 30 l spuitmengsel/ha word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde spuitvolume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg of verantwoordelik gehou word vir enige nadelige effek indien hierdie produk teen 'n laer volume as aanbeveel, uit die lug toegedien word nie.

- 'n Druppelbedekking van 30-40 druppels/cm² moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 250-280 mikron word aanbeveel. Verseker dat die produksie van fyn druppels, die wat kleiner as 150 mikron is, tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet tussen 3 en 4 m bo die teiken gehandhaaf word.
- Moet nie spuit wanneer die vliegtuig aan die bopunt van 'n draai is of tydens 'n duik of terwyl dit uitklim of draai nie.
- Dien toe voordat die gewas te ruig word aangesien die druppelbedekking op die plante verminder sal word.

Meteorologiese toestande

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8 °C oorskry nie.
- Moenie toedien tydens turbulente, onstabiele weerstoestande of gedurende die hitte van die dag wanneer stygende en dalende konveksie windbeweging plaasvind nie.
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversielaag te spuit) nie.
- Moenie spuit indien die windspoed 15 km/h oorskry nie.

Algemeen

- Verseker dat die lande akkuraat gemerk is en dat die spuitoperator presies weet watter lande gespuit moet word.
- Verkry versekering van die spuitoperator dat aan bogenoemde vereistes voldoen sal word.
- Aangemaakte spuitoplossing moenie onnodig oorstaan nie, veral nie oornag nie.

TOEDIENINGSHOEVEELHEDE

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
Aartappels Aartappelmotlarwes (<i>Phthorimaea operculella</i>)	120 ml/ha	Dien in 250-500 l water/ha toe afhangende van plantgrootte. Begin met toediening sodra plaag opgemerk word. Herhaal elke 10–14 dae en erd ten minste tweekeer op gedurende die groeiseisoen.
Amerikaanse bolwurm (Afrika bolwurm) (<i>Helicoverpa armigera</i>)	132 ml/ha	Lugtoediening: Dien in minstens 30 l water/ha toe. Verwys na WAARSKUWINGS betreffende weerstand.

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
<p>Alle gewasse Snywurm (<i>Agrotis</i> spp.)</p>	<p>0,23 ml/100 m ry</p> <p>70 ml/ha</p> <p>70 ml/ha</p>	<p>Dien LAMDEX® 5 EC vooropkom of vroeg na-opkom toe. Die grond wat bespuit gaan word moet goed voorberei wees en vry van kluite en oortollige plantreste. In situasies waar minimum bewerkingspraktyke beoefen word, is snywurmgetalle gewoonlik hoog. In sulke situasies moet die snywurmpopulasie na die eerste bespuiting gemonitor word en indien nodig, met 'n tweede bespuiting opgevolg word. Dien toe as 'n algehele korrektiewe toediening teen die aanbevole dosis.</p> <p>NOTA: Dit is van die uiterste belang dat die boonste 3 cm van die grond klam is tydens toediening.</p> <p>Rybehandeling: Dien toe in 3 l water/100 m ry lengte as 'n 30 cm baan oor die ry.</p> <p>Algehele behandeling: Dien toe in ten minste 200 l water/ha.</p> <p>Lugtoediening: Dien toe in ten minste 30 l water/ha.</p>
<p>Appels en pere Kodlingmot (<i>Cydia pomonella</i>)</p> <p>Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p> <p>Gebande vrugte kalander (<i>Phlyctinus callosus</i>)</p>	<p>10 ml/100 l water (250–350 ml/ha)</p> <p>10 ml/100 l water (250–350 ml/ha)</p> <p>20 ml/100 l water (500-700 ml/ha)</p>	<p>Dien as 'n hoëvolume toediening toe by 75 % blomblaarval. Moet nie toedien tydens periodes wanneer bye aktief is nie. Herhaal elke 14–18 dae. Verwys na WAARSKUWINGS rakende UITVOERGEWASSE.</p> <p>Dien toe as die eerste tekens van 'n infestasië waargeneem word maar nie voor 75 % blomblaarval nie. Herhaal indien nodig.</p> <p>Verwys na WAARSKUWINGS rakende weerstand en UITVOERVRUGTE.</p> <p>Dien twee hoëvolume bespuitings toe. Die eerste by 75 % blomblaarval en die tweede vier weke later. Indien nodig kan 'n derde bespuiting toegedien word vier weke na die tweede bespuiting om laatseisoenskade te voorkom. 'n Enkel bespuiting of 'n program van bespuitings vir kalander teen hierdie dosis sal rooispinmyt onderdruk en selfs lae populasies beheer.</p>

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
Droëbone, Ertjies, Groenbone en Grondbone Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)	100 ml/ ha 100 ml / ha	Begin met toediening sodra plaag opgemerk word. Larwes moet verkieslik nie langer as 1 cm maar beslis nie meer as 2 cm lank wees tydens toediening nie. Dien toe in 250–500 l water/ha afhange van plantgrootte. Herhaal toediening indien nodig. Lugtoediening: (Alle gewasse behalwe ertjies). Dien in ten minste 30 l water/ha toe. Verwys na WAARSKUWINGS rakende weerstand.
Druive (Tafel en wyn) Kalanders (<i>Eremnus setulosus</i> , <i>E. cerealis</i> en <i>P. callosus</i>)	<u>Stambehandeling:</u> 20 ml/100 l water (200 ml/ha) <u>Blaartoeediening:</u> 20 ml/100 l water (200 ml/ha)	Begin met verkenning van kalenderaktiwiteit aan die begin van Oktober en gedurende die groeiseisoen. Dien toe sodra kalenderaktiwiteit op die stam opgemerk word. Dien teen 1,000 l spuitmengsel/ha toe (0,5 l/stam) op die stamme tot 1,0 m hoog. Benat die stam deeglik en laat toe dat die oortollige spuitmengsel afloop op die omringende grond. In die geval van laaggroeiende stokke moet tot by die eerste laterale takke behandel word. Herhaal behandeling elke 3–4 weke indien nodig. In 'n digte blaarbedekking is die kalanders geneig om daarin te skuil en nie na die stam te migreer nie. Dien as 'n blaarbespuiting toe sodra die eerste tekens van skade opgemerk word. Dien as 'n hoëvolume bespuiting teen 1000 l spuitmengsel/ha toe. Herhaal toediening indien nodig. Verwys na WAARSKUWINGS rakende UITVOERVRUGTE.

Katoen

Sintetiese piretroïede moet slegs in die periode van 1 Januarie tot 28 Februarie in katoen toegedien word vir die beheer van Afrikaanse bolwurm. Geen toedienings behoort nodig te wees vir die beheer van Amerikaanse (Afrika) bolwurm gedurende die eerste agt weke na plantopkoms nie. Indien rooibolwurm voorkom behoort 'n middel wat nie rooispinmytopulasies bevorder nie, gebruik te word. Daarna (10-12 weke later) kan aanbevelings soos hieronder gevolg word.

LAMDEX® 5 EC moet slegs 12 weke na opkoms van katoen en na gereelde verkenningsoperasies toegedien word. Toediening moet 'n aanvang neem as vyf Afrikaanse bolwurm of twee stekelbolwurm of Rooibolwurm larwes gevind word op 24 plante in 'n gebied van 15 ha of alternatiewelik as 12 Amerikaanse (Afrika)bolwurm, 6 Rooibolwurm of 4 Stekelbolwurm eiers op 24 plante in 'n gebied van 15 ha gevind word. Verseker deeglike bedekking van alle plantdele. Larwes wat alreeds die bolle binnegedring het, sal nie doeltreffend beheer word nie. Herhaal toediening indien verkenningresultate die nodigheid daarvan bevestig.

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
Koring Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)	100 mℓ/ha 100 mℓ/ha	Dien toe sodra die plaag opgemerk word. Dien toe in 250-500 ℓ water/ha. Herhaal indien nodig. Lugtoediening: Dien toe in ten minste 30 ℓ water/ha. Verwys na WAARSKUWINGS rakende weerstand.
Lupiene Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)	110–120 mℓ/ha 120 mℓ/ha	Toediening moet begin wanneer die larwetelling 1-2 larwes/m ² bereik en voordat die larwes die peule binnedring. Dien toe in 300 ℓ water/ha. Gebruik die laer dosis vir kleiner plante en die hoër dosis vir groter plante. Lugtoediening: Dien toe in minstens 30 ℓ water/ha. Verwys na WAARSKUWINGS rakende weerstand.
Lusern Lusernruspe (<i>Colias electo</i>) Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)	80–100 mℓ / ha 100 mℓ/ha	Dien toe sodra plaag opgemerk word. Dien toe in 250–500 ℓ water/ha en verseker deeglike bedekking van die plante. Gebruik die laer dosis op minder digte plante en die hoër dosis op digter plante. Vir die beste beheer moet larwes kleiner as 1 cm bespuit word maar definitief voordat hulle 2 cm in lengte bereik het. 'n Opvolgbespuiting mag nodig wees gegrond op verkenning om herinfestasië te bepaal. Dien toe soos hierbo aangedui. Verwys na WAARSKUWINGS rakende weerstand.
Mielies Stronkboorder (<i>Busseola fusca</i>) Chilo stronkboorder (<i>Chilo partellus</i>)	1,2 mℓ/100 m ry (120 mℓ/ha) 120 mℓ/ha 1,2 mℓ/100 m ry 120 mℓ/ha	Dien toe sodra eiers op 5 % van die plante gevind word of as 10 % van die plante haelskootletsels toon. Dien direk in die kelke van plante toe voor larwes na die stronk migreer in 3,0 ℓ water/100 m rylengte. 'n Tweede toediening 10–14 dae later mag nodig wees. Lugtoediening: Dien in ten minste 30 ℓ water/ha toe. Dien toe as 10 % van die plante skadesimptome toon. Dien direk in die kelke van plante toe voor larwes na die stronke migreer in 3 ℓ water/100 m rylengte. 'n Tweede bespuiting mag nodig wees voor pluimstoot. Lugtoediening: Dien in ten minste 30 ℓ water/ha toe.

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
<p>Mielies vervolg</p> <p>Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p>	100 ml/ha	Dien toe sodra plaag tydens blom of daarna opgemerk word. Verken lande weekliks vir teenwoordigheid van plaag. Verseker deeglike benatting van plante en dien toe in 250-500 ℓ water/ha afhangende van plantgrootte. Dit is ideaal dat larwes kleiner as 2 cm in lengte moet wees tydens toediening. Herhaal toediening indien nodig. Verwys na WAARSKUWINGS rakende weerstand.
<p>Appelkose, Kersies, Perskes, Pruime en Nektariens</p> <p>Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p> <p>Gebande Vrugte-Kalander (<i>P. callosus</i>)</p>	<p>10 ml/100 ℓ water (250–350 ml/ha)</p> <p>20 ml/100 ℓ water (200 ml/ha)</p> <p>20 ml/100 ℓ water (500–700 ml/ha)</p>	<p>Dien slegs toe na 75 % blomblaarval as plaag opgemerk word. Herhaal indien nodig. Verwys na WAARSKUWINGS rakende weerstand en UITVOERVRUGTE.</p> <p>Stambehandeling: Verwys na opmerkings onder “DRUIWE” vir aanbevelings.</p> <p>Blaartoeediening: Dien toe sodra die eerste vreeskade opgemerk word. Herhaal toediening 3–4 weke later.</p> <p>Verwys na WAARSKUWINGS rakende UITVOERVRUGTE. Moet nie meer as 2 lamda-cyhalothrin toedienings per seisoen toedien op kersies nie.</p>
<p>Sojabone</p> <p>Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p>	<p>120 ml/ha</p> <p>120 ml/ha</p>	<p>Dien toe in 200-300 ℓ water/ha sodra plaag opgemerk word en voor peule binnegedring word. Verseker 'n deeglike bedekking. Herhaal indien nodig.</p> <p>Lugtoediening: Dien in minstens 30 ℓ water/ha toe. Verwys na WAARSKUWINGS rakende weerstand.</p>
<p>Sorghum</p> <p>Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p> <p>Mieliestronkboorder (<i>B. fusca</i>)</p>	<p>100 ml/ha</p> <p>100 ml/ha</p> <p>1,0 ml/100 m ry</p> <p>100 ml/ha</p>	<p>Dien toe sodra die plaag opgemerk word. Dien toe in ten minste 250–500 ℓ water/ha. Herhaal indien nodig.</p> <p>Lugtoediening: Dien toe in minstens 30 ℓ water/ha. Verwys na WAARSKUWINGS rakende weerstand.</p> <p>Dien toe sodra 5 % van die plante haelskootletsels toon en voor die larwes na die stam migreer. Rig die spuitmengsel sodat dit direk in die plante se kelke gespuit word in 3,0 ℓ water/100 m rylengte. Sal ook <i>Chilo</i> stronkboorder beheer indien teenwoordig.</p> <p>Lugtoediening: Dien toe in minstens 30 ℓ water/ha.</p>

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
<p>Suikermielies Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>)</p>	100 ml/ha	<p>Dien toe sodra plaag tydens blom of daarna opgemerk word. Verken lande weekliks vir teenwoordigheid van plaag. Verseker deeglike benatting van plante en dien toe in 250-500 ℓ water/ha afhangende van plantgrootte. Dit is ideaal dat larwes kleiner as 2 cm in lengte moet wees tydens toediening. Herhaal toediening indien nodig.</p> <p>Lugtoediening: Dien toe in minstens 30 ℓ water/ha. Verwys na WAARSKUWINGS rakende weerstand.</p> <p>Grondtoediening: Dien toe direk in die kelk van die plante 14 dae na-opkoms. Dien 'n opvolgbespuiting 10 - 14 dae later toe en indien nodig tot by blomvorming om herinfestasië te beheer. Dien toe in 'n minimum van 3,0 ℓ water/100 m ry.</p>
	100 ml/ha	
<p>Pienkstronkboorder (<i>Sesamia calamistis</i>)</p>	1,0 ml/100 m ry	
<p>Tamaties Amerikaanse (Afrika) bolwurm (<i>H. armigera</i>) Valslandmeter (<i>Chrysodeixes acuta</i>)</p>	7,5 ml/100 ℓ water	<p>Dien toe sodra plante begin blom of as plaag opgemerk word. Dien toe as 'n volle dektodiening teen 500–1,000 ℓ spuitmengsel/ha afhangende van plangrootte vir tamaties tot 1,0 m hoog. Verhoog die watervolume as plante hoër as 1,0 m is, maar hou die konsentrasie konstant. Herhaal toediening elke 7–10 dae indien nodig.</p> <p>Verwys na WAARSKUWINGS rakende weerstand.</p>