

Qualified minor uses*			
Crops	Maximum individual dose (mL/ha)	Maximum total dose (mL/ha)	Latest time of application
Potatoes	60	120	14 days before harvest
Apples, pears, plums	262.5	525	14 days before harvest
Grapes	210	210	30 days before harvest

*There is limited evidence of crop safety/efficacy available for qualified minor uses and the commercial risk of using this product under these Qualified Minor Uses is borne entirely by the grower.

Method of application:

Tractor mounted/ trailed horizontal boom sprayer/ orchard sprayer.

Other specific restrictions:

The number of applications of products containing a Group 28 insecticide is limited to 2 per crop.

Other specific restrictions: Applications to potato must not occur in consecutive years

SAFETY PRECAUTIONS

Environmental protection

Do not contaminate water with the product or its container (Do not clean application equipment near surface water / Avoid contamination via drains from farmyards and roads)

To protect aquatic organisms respect an unsprayed buffer zone of 20m to surface water when applying to broccoli, cabbage, cauliflower, apples, pears and plums.

To protect aquatic organisms respect an unsprayed buffer zone of 10m to surface water when applying to beetroot, carrot, celeriac, horseradish, Jerusalem artichoke, maize, parsnip, radish, root parsley, salsify, swede, sweetcorn and turnip.

Storage and disposal

KEEP OUT OF REACH OF CHILDREN.

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

Dispose of contents/container to a licensed hazardous-waste disposal contactor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

LAGUNA®

A suspension concentrate formulation containing 200g/L of chlorantraniliprole



INSECTICIDE

11

(PCS No. 07139)

UFI: J8M1-YNWY-4807-6PT9

GROUP 28 INSECTICIDE

Contents eg 1 litres e

Batch number and Date of Manufacture

**FOR PROFESSIONAL USE ONLY
PROTECT FROM FROST**

SHAKE WELL BEFORE USE

Authorisation holder and marketing company:

Galenika-Fitofarmacija a.d., Batajnicki drum bb.11080 Belgrade, SERBIA.

Tel: +381 11 3072 301; Email: office@fitofarmacija.rs; Website: fitofarmacija.rs

In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital (Dublin) on 01 809 2166 (8am-10pm every day) or 01 837 9964

Safety Information

LAGUNA

A suspension concentrate formulation containing 200g/L of chlorantraniliprole

Warning

Very toxic to aquatic life with long lasting effects

Keep out of reach of children

Read the label before use.

Do not eat, drink or smoke when using this product.

Collect spillage



To avoid risks to human health and the environment, comply with the instructions for use.

PCS No. 07139



GALENIKA - FITOFARMACIJA

IMPORTANT INFORMATION

OR USE ONLY AS A PROFESSIONAL AGRICULTURAL/HORTICULTURAL INSECTICIDE

Crops	Maximum individual dose (mL product/ha)	Maximum total dose (mL product/ha)	Latest time of application
Beetroot, carrot, celeriac, horseradish, Jerusalem artichoke, parsnip, radish, root parsley, salsify, swede and turnip	175	350	21 days before harvest
Broccoli, cauliflower, head cabbage and Savoy cabbage	125	250	1 day before harvest
Maize and sweetcorn	125	250	7 days before harvest (GS 73-87)

Method of application:

Tractor mounted sprayer/ trailed sprayer/orchard sprayer

Other specific restrictions:

The number of applications of products containing a Group 28 insecticide is limited to 2 per crop.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

This leaflet/booklet is part of the authorised Product Label

DIRECTIONS FOR USE

IMPORTANT: This information is authorised as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

RESTRICTIONS

Do not use on crops suffering from stress caused by waterlogging, drought, pest or disease attack, low temperatures, nutrient or lime deficiency or other factors leading to poor growth.

In order to protect bees and other pollinators do not apply to crops when in flower or where other plants are in flower. Use LAGUNA when bees are not actively foraging such as early morning or late evening.

RESISTANCE

LAGUNA contains chlorantraniliprole which belongs to the antranile diamide chemical group and is a ryanodine receptor modulator, IRAC Group 28.

To reduce the risk of resistance to LAGUNA and all Group 28 products an insect resistance management strategy should be adopted. LAGUNA should be incorporated into Integrated Pest Management programmes which include cultural and biological control practices in association with IRAC guidelines. Consult your company representatives or local agricultural authorities for up to date guidance.

If resistance to chlorantraniliprole develops in your area, then LAGUNA, and similar products with a similar mode of action, may not provide adequate control. To reduce the risk of resistance occurring, alternate LAGUNA with products which use a different mode of action to control the same insect.

A maximum of 2 applications of LAGUNA per crop is permitted.

To prevent or delay the onset of resistance to LAGUNA and other Group 28 insecticides IRAC and CroLife recommend the following:

Do not exclusively use LAGUNA or other Group 28 insecticides to control the same pest throughout the season.

Avoid exposing consecutive generations of a pest to the same mode of action by using the "application window" approach which rotates products from different mode of action groups.

An "application window" is the period of residual activity that a single application or sequential applications of products from the same mode of action provide. It can also be defined as the duration of an insect generation or if unknown, then use an approximate 30 day period. Rotate windows with treatments of LAGUNA and other Group 28 products followed by windows of treatments with other effective products with different modes of action. Multiple applications (recommend no more than two) of the same MoA insecticide are acceptable if they are used within the same application window.

Use full recommended label rates to control the insect pests when applied alone or in tank mixes.

For further information consult the IRAC website.

PESTS CONTROLLED

LAGUNA is an insecticide for use on various brassicas for the control of various Lepidoptera species including Diamond back moth, Cabbage moth, Cabbage white, Large white, Garden pebble moth and the Cydamen tortrix; on various root vegetables against Carrot root fly and on maize and sweetcorn against the European corn borer.

Activity is by ingestion of, or contact with, LAGUNA, paralysis occurs within a few hours of exposure. Full control can take 2-4 days after application.

The active ingredient in LAGUNA, chlorantraniliprole, is an IRAC group 28, antranile amide insecticide which modifies muscle ryanodine receptors. The receptors mediate calcium release into the cytoplasm from intracellular store, with modification leading to muscular contraction, paralysis and death.

LAGUNA can be used in and Integrated Pest Management (IPM) program, to include cultural, biological and genetic practices aimed at preventing economic damage to the crops. Consult your local crop advisor to determine the appropriate action and treatment threshold levels for treating specific crop/pest or site systems relevant to your area.

CROP SPECIFIC INFORMATION

Do not apply LAGUNA to any crop more than twice.

Apply LAGUNA in 300-800 litres of water per hectare.

LAGUNA can be applied to the crops shown in the table below:

Crops	Pest controlled	Application rate mL product /ha	Timing of application
Beetroot, carrot, celeriac, horse-radish, Jerusalem artichoke, parsnip, radish, root parsley, salsify, swede and turnip	Carrot root fly (<i>Psila rosa</i>) [Moderate control on carrots]	175 in 300-800 L water/ha	Apply during egg laying (before the flight peak of adult flies) , preferably against the second or third generation. Make no more than 2 applications per year with a minimum of 14 days between applications using normal volume sprayers.
Broccoli, cauliflower, Head cabbage and Savoy cabbage	Lepidoptera species including: Diamond back moth (<i>Plutella xylostella</i>), Cabbage moth (<i>Mamestra brassicae</i>), Cabbage white (<i>Pieris rapae</i>), Large white (<i>Pieris brassicae</i>), Garden pebble moth (<i>Evergestis forticalis</i>), Cydamen tortrix moth (<i>Clepis spectrana</i>)	125 in 300-800 L water/ha	Apply during egg laying until first eggs hatch, using timing recommendations for ovi-larvicide materials, where locally available. No more than 2 applications per year.
Maize and sweetcorn	European corn borer (<i>Ostrinia nubilalis</i>)	125 in 300-800 L water/ha	Apply during egg laying until first eggs hatch, using timing recommendations for ovi-larvicide materials, where locally available. Apply using boom sprayers, no more than 2 applications per year.

MINOR USE QUALIFICATION*

There is limited evidence of crop safety and/or efficacy available for qualified minor uses and the commercial risk of using this product under these Qualified Minor Uses is borne entirely by the grower.

Crops	Pest controlled	Application rate L product /ha	Timing of application
Potato	Colorado beetle (<i>Leptinotarsa decemlineata</i>)	50-60 mL/ha applied in 200-600Lof water/ha using a boom sprayer	Treat at egg-hatch or as soon as the first signs of crop damage occur. A follow up treatment may be necessary in severe infestations. Allow a minimum of 14 days between applications of LAGUNA. Apply the higher rate when severe infestations are present. No more than 2 applications/crop can be made.
Apple, pear plum	Codling moth (<i>Cydia pomonella</i>)	Apply at 175 mL/ha for trees of 3.75m high in a single row system, 3.25m high in a 2 or 3 row system and 2.25m in a 5 row system. Where the tree canopy density or tree height is reduced then the application rate and application volume should be adjusted accordingly using a dose adjustment scheme such as PACE. However if reducing the dose according to tree height or canopy density do not use less than 150mL/ha. Consult your specialist advisor for further information. Water volume 500 - 1200 water / ha.	Apply during egg laying before egg hatch and fruit penetrations occur, using timing recommendations for ovi-larvicide materials where available. LAGUNA should be applied in alternation with other insecticides with a different mode of action. Apply no more than two applications of LAGUNA per year. Where sequential applications are applied allow a minimum of 14 days between applications of LAGUNA.
Grapes	European vine moth (<i>Lobesia botrana</i>) Vine moth (<i>Eurpoeilia</i> formerly <i>Gysia</i>) <i>ambigua</i>) Grape tortrix moth (<i>Argyrotaenia pulchellana</i>)	150-210 mL/ha in 600-1200L water/ha	Apply during egg laying before egg hatch and fruit penetrations occur for best bunch protection. Use timing recommendations for ovicide materials, where available, preferably against the second generation of insects. Make no more than ONE application of LAGUNA per season and where further applications are required apply an effective insecticide with a different mode of action.

MIXING AND SPRAYING

Before use ensure that all application equipment is clean. Add a quarter of the required volume of water and start agitation, add the required quantity of LAGUNA directly to the tank. Wash out all empty containers and add the washings to the tank and then fill the tank to the required volume whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete.

All application equipment must be thoroughly cleaned with water prior to storage or use on another crop. Immediately after application completely drain the spray equipment. Thoroughly rinse the sprayer and flush hoses, boom and nozzles with clean water. Loosen and physically remove visible deposits. Clean nozzles, screens and strainers and flush the entire system with clean water ensuring all necessary safety precautions are followed and wells and water sources are protected. If used in tank mix ensure the most rigorous clean out procedure is followed.

COMPATIBILITY

Do not use any product in a tank-mix if the mixture cannot be applied within the recommendations for all the separate products. When using a tank mix, always add LAGUNA to the spray tank first. Consult your adviser before tank mixing with any other product.