

Product	Label Contents	Dimensions (WxH)
LIFE SCIENTIFIC LAMBDA (IR)	0,25 L - Booklet	167 x 60 mm

life scientific
FIRST TO MARKET

LIFE SCIENTIFIC LAMBDA

PCS No. 04868



CONTAINS 100G/L LAMBDA-CYHALOTHRIN AND 1,2-BENZISOTHAZOLIN-3-ONE AS A CAPSULE SUSPENSION FORMULATION
LIFE SCIENTIFIC LAMBDA IS A CONTACT AND INGESTED PYRETHROID INSECTICIDE FOR CONTROL OF A WIDE RANGE OF PESTS IN WHEAT, BARLEY, RYE, TRITICALE, OATS, OILSEED RAPE, COMBINE, VINING AND EDIBLE-PODDED PEAS, FIELD BEANS, POTATOES (SEED AND WARE), SUGAR BEET AND FODDER BEET, CARROTS, PARSNIP, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, BROCCOLI, CALABRESE AND PEAR CROPS.

APPROVAL HOLDER: Life Scientific Limited, Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland Tel: +353 1 2832024

IN CASE OF EMERGENCY: TEL. NPIC +353 1 809 2166 (8.00 A.M. TO 10.00 P.M. - PUBLIC)
TEL. NPIC +353 1 809 2566 (HEALTHCARE PROFESSIONALS)

PROTECT FROM FROST MADE IN EU
SHAKE WELL BEFORE USE
BATCH NO. SEE PACKAGING

LABEL VERSION LAMBDA/IRE/V5

NET CONTENTS: **0.25 LITRES**



WARNING

FOR PROFESSIONAL USE ONLY

**HARMFUL IF SWALLOWED
HARMFUL IF INHALED
VERY TOXIC TO AQUATIC LIFE WITH LONG
LASTING EFFECTS**

Keep out of reach of children
Avoid breathing spray
Wash hands thoroughly after handling
Call a POISON CENTRE/ doctor/ physician if you feel unwell
Collect spillage
Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste

**TO AVOID RISKS TO HUMAN HEALTH AND
THE ENVIRONMENT, COMPLY WITH THE
INSTRUCTIONS FOR USE.**

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IMPORTANT INFORMATION

For use as an insecticide in agricultural and horticultural crops

CROP	MAXIMUM INDIVIDUAL DOSE (PRODUCT/HA)	MAXIMUM NO. OF APPLICATIONS	MAXIMUM TOTAL DOSE (PRODUCT/HA)	LATEST TIME OF APPLICATION
Winter wheat, spring wheat, winter barley, spring barley, rye, triticale	50 ml/ha	4	200 ml/ha	Before late milk stage (GS 77)
Oats	50 ml/ha	4	200 ml/ha	Before watery ripe stage (GS 71)
Oilseed rape (winter)	75 ml/ha	4	225 ml/ha	Before end of flowering
Oilseed rape (spring)	75 ml/ha	4	225 ml/ha	6 weeks before harvest
Combining pea, field bean	75 ml/ha	4	150 ml/ha	25 days before harvest
Edible podded pea, vining pea	75 ml/ha	4	150 ml/ha	-
Potato (seed and ware)	75 ml/ha	4	300 ml/ha	-

CROP	MAXIMUM INDIVIDUAL DOSE (PRODUCT/HA)	MAXIMUM NO. OF APPLICATIONS	MAXIMUM TOTAL DOSE (PRODUCT/HA)	LATEST TIME OF APPLICATION
Sugar beet and fodder beet	75 ml/ha	4	150 ml/ha	8 weeks pre-harvest
Broccoli/ calabrese, Brussels sprout, cabbage, cauliflower	100 ml/ha	4	200 ml/ha	-
Pear	90 ml/ha	4	270 ml/ha/ annum	7 days pre-harvest
Carrot, parsnip	75 ml/ha	4	150 ml/ha	14 days pre-harvest

Other specific restrictions

- (1) A minimum interval of 7 days between applications must be maintained on the following crops: oilseed rape, peas (vining, combining and edible-podded), field beans, sugar beet and fodder beet, potatoes (seed and ware), carrots and parsnips.
- (2) A minimum interval of 10 days must be maintained between applications on the following crops: Brussels sprouts, cabbage, cauliflower, broccoli and calabrese.
- (3) A minimum interval of 14 days between applications must be maintained in wheat, barley, oats, rye, triticale and pears.
- (4) The maximum number of applications per crop is 4. The maximum number of 4 applications per crop must not be exceeded.

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

SAFETY PRECAUTIONS:**1. Operator protection:**

WEAR SUITABLE PROTECTIVE GLOVES AND PROTECTIVE CLOTHING (COVERALLS) when handling the concentrate and when applying by hand-held equipment.

2. 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 5 metres to surface water bodies from horizontal boom sprayers.

To protect aquatic organisms respect an unsprayed buffer zone of 25 metres from broadcast air-assisted sprayers.

3. Storage and disposal:

Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste
DO NOT RE-USE CONTAINER for any purpose.

DIRECTIONS FOR USE

NOTE: These Directions for Use form part of the Approved Product label and must be read carefully before use to obtain safe and effective use of this product.

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LIFE SCIENTIFIC LAMBDA is a contact and stomach-acting pyrethroid insecticide for control of a wide range of pests in wheat, barley, oats, rye, triticale, oilseed rape, combine, vining and edible-podded peas, field beans, potatoes (seed and ware), sugar beet, fodder beet, carrots, parsnip, Brussels sprouts, cabbage, cauliflower, broccoli, calabrese and pear crops. To maximise the contact activity, ensure good spray coverage of the target during application.

RESISTANCE:

Some strains of aphid species have developed resistance to many aphicides. Where aphids resistant to lambda-cyhalothrin occur, LIFE SCIENTIFIC LAMBDA will not give satisfactory control and repeated applications will not improve activity. The LIFE SCIENTIFIC LAMBDA mode of action is classified by the IRAC mode of action code: '3'. To reduce the risk of the development of resistance to LIFE SCIENTIFIC LAMBDA, it is important to ensure that a nonpyrethroid insecticide classified with another mode of action code is incorporated into the pest control programme each year.

CROP SPECIFIC INFORMATION

RATE OF APPLICATION, TIMING AND PESTS CONTROLLED

1. CEREALS:

1.1 Aphid vectors of barley yellow dwarf virus (winter and spring wheat, winter and spring barley, winter and spring oats, rye and triticale):

Apply a routine spray of 50 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water during late October to cereals sown in September in areas where BYDV is known to be present. If aphids are seen to be present in the crop before this date, spray immediately and note that further treatments may be required particularly in mild winters. In later sown (from October

onwards) cereals apply 50 ml/ha in 200 L/ha water when a BYDV risk is present. Application is worthwhile up to GS32 of the cereal crop to reduce the risk of BYDV. Routine sprays are advised when the cereal crop follows a weedy stubble or grass leys due to the risk of direct aphid transfer to the crop.

1.2 Grain aphid or rose grain aphid on the ear (winter & spring wheat, winter and spring barley, winter and spring oats, rye and triticale):

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 200-300 L/ha water to achieve thorough crop penetration of the spray. Optimum timing is after ear emergence (GS59) but applications can be made up to before late milk stage (GS77) on wheat and barley and before GS71 on oats. HGCA threshold for treatment is when aphids are present on two-thirds of tillers. Where aphid numbers are lower than this, check for natural enemies of aphids and spray if none are found.

1.3 Yellow cereal fly (winter and spring wheat):

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water at egg hatch which usually starts in late January, depending on the season. Crops which have emerged early are most susceptible but an application of LIFE SCIENTIFIC LAMBDA against BYDV vectors will also give some control of this pest.

2. WINTER & SPRING OILSEED RAPE:

2.1 Flea beetle:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water at the first sign of pest attack and repeat 10-14 days later if necessary.

2.2 Cabbage stem flea beetle:

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water with non-

organo-silicone non-ionic wetter at the manufacturers recommended rate when feeding damage is first seen in the autumn or when economic thresholds of larvae are present. If further active larvae are found, a second application may be required and, in high risk areas, a routine application may be justified late October – early November.

2.3 Aphid vectors of beet western yellow virus:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water with non-organo-silicone non-ionic wetter at the manufacturers recommended rate when the aphids are seen in the crop. After 3-4 weeks apply a second spray if aphids continue to appear in the crop. Any delay in treatment can result in poorer control of the virus. Note that this treatment can also give control of cabbage stem flea beetle infestations since the timings often coincide in the autumn.

2.4 Pollen beetles:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 – 300 L/ha water to achieve good canopy penetration at the green/yellow bud stage of the oilseed rape in accordance with either specialist advice or when the threshold is reached (15 beetles per plant in well-established crops, 5 beetles per plant in backward or pigeon-damaged crops and 3 beetles per plant in spring oilseed rape).

2.5 Seed weevil & pod midge:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 – 300 L/ha water to achieve good canopy penetration during crop flowering provided that seed weevil numbers have reached the threshold (1 seed weevil per 5 plants of spring or winter oilseed rape. Note that this also takes into account the pod midge risk since these lay eggs in the feeding holes of the seed weevil).

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The best timing of the spray is from 20% pod set up to 75% petal fall. Note that spraying must stop at the end of flowering in winter rape and six weeks before harvest in spring rape. A repeat application may be required where pest attack is prolonged. DO NOT spray in the heat of the day when bees are most active in the crop.

3. WINTER & SPRING FIELD BEANS:

3.1 Pea & bean weevil:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 – 300 L/ha water when feeding damage (notching of the leaves) is first seen in the crop if there is a risk to the growing points of the crop. Where the number of weevils is high, a second application can improve control if applied 2 – 3 weeks after the first treatment.

4. PEAS:

4.1 Pea & bean weevil:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water when feeding damage (notching of the leaves) is first seen in the crop if there is a risk to the growing points of the crop. Where the number of weevils is high, a second application can improve control if applied 2 – 3 weeks after the first treatment.

4.2 Pea moth:

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 300 – 600 L/ha water to achieve good canopy penetration. The timing of the spray is when the crop is in full flower or as advised by the results of pheromone traps (10 moths in a pair of traps on consecutive occasions) or official advice. Combining peas may require a second treatment 10 – 14 days after the first spray but vining peas should only receive a single spray on the advised date.

4.3 Pea aphid:

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 300 – 600 L/ha water to achieve good canopy penetration. The timing of the spray is when the threshold is reached (20 – 30% of shoots infested between first flower and pod set on 4th truss in combining peas). Inspect the crop carefully during flowering and repeat the application if necessary.

Where aphid infestations are well established and sheltered within the crop canopy, use a tankmixture with 140 g/ha 50% w/w pirimicarb. If aphids are the only pest attacking the crop and are hidden within the crop canopy, applying 280 g/ha of the pirimicarb product alone will be a better treatment choice.

4.4 Pea midge:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 300 – 600 L/ha water to achieve good canopy penetration within 3 – 5 days of the finding of the first adult midges in the crop. Where necessary, sprays can be repeated 7-10 days later if midge activity continues and the crop is at a susceptible stage.

5. POTATOES (SEED AND WARE):

5.1 Aphids:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in at least 400 L/ha water to achieve good crop canopy penetration. Treat seed and ware crops to minimise the spread of potato viruses when aphids are first seen in the crop and use in mixture with 50% w/w pirimicarb product to improve activity provided that aphids resistant to pirimicarb are not present. An application of LIFE SCIENTIFIC LAMBDA can also give some control of cutworms since the timing coincides with that for aphids. Where resistant forms of *Myzus persicae* are present or suspected, LIFE SCIENTIFIC LAMBDA should not be used.

6. SUGAR BEET AND FODDER BEET:

6.1 Flea beetle:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water as soon as adult feeding damage is seen in the crop and repeat if necessary.

6.2 Beet leaf miner (Mangold fly):

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 200 L/ha water at egg hatch and repeat as necessary.

6.3 Cutworm:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 400 – 1000 L/ha water at egg hatch and repeat 10 – 14 days later, noting the eight week harvest interval.

7. HORTICULTURAL BRASSICAE (Brussels sprouts, cabbage, cauliflower, broccoli & calabrese):

7.1 Caterpillars:

Apply 50 ml/ha LIFE SCIENTIFIC LAMBDA in 300 – 600 L/ha water with a non-organo-silicone non-ionic wetter at the manufacturers recommended rate to achieve good crop penetration. Brussels sprouts can benefit from application via a drop leg sprayer. Treat at the first sign of attack and repeat as necessary.

7.2 Whitefly:

Apply 100 ml/ha LIFE SCIENTIFIC LAMBDA in 300 – 600 L/ha water with a non-organo-silicone non-ionic wetter at the manufacturers recommended rate to achieve good crop penetration. Brussels sprouts can benefit from application via a drop leg sprayer. Treat at the first sign of attack and repeat as necessary.

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8. PEARS:

8.1 Pear sucker:

Apply 90 ml/ha LIFE SCIENTIFIC LAMBDA in 200 – 2000 L/ha water to achieve good crop penetration when the first sucker eggs are being laid in spring (late February – early March). In the absence of effective predators, sucker numbers can build up in summer and where this occurs, make another application of the same dose and repeat 2-3 weeks later if necessary.

Some pear sucker populations have developed resistance to pyrethroid insecticides and where these occur, LIFE SCIENTIFIC LAMBDA may not give satisfactory control. Use ingredients with a different mode of action group where repeat treatment is necessary.

9. CARROTS & PARSNIPS:

9.1 Cutworm:

Apply 75 ml/ha LIFE SCIENTIFIC LAMBDA in 400 – 1000 L/ha water to achieve thorough crop canopy penetration at egg hatch or when advised and repeat 10 – 14 days later.

MIXING INSTRUCTIONS

Shake the container before use. Place half the required amount of clean water in the spray tank and commence agitation. Add the required amount of LIFE SCIENTIFIC LAMBDA either directly into the tank or via a filling device such as an induction bowl etc. The use of sprayer mounted pressure rinsing equipment is advised. If not available, containers should be manually rinsed three times. Add the remaining water requirement and continue agitation during spraying. Do not allow the spray mixture to stand. Immediately after use wash sprayer and other equipment thoroughly with water and detergent.

Water Volume

Apply LIFE SCIENTIFIC LAMBDA in 200-300 litres of water per hectare to cereals, oilseed rape and field beans. Potatoes (seed and ware) require at least 400 L/ha and horticultural brassica crops require 300-600 L/ha water plus a non-organo-silicone non-ionic wetter at the manufacturers recommended rate. Sugar beet and fodder beet requires 200-1000 L/ha water according to the target. Carrots should be treated with 400 – 1000 L/ha water. Peas need to be treated in 200 – 600 L/ha water while pears require 200 – 2000 L/ha. See crop specific information for details of which target pests require which water volume. LIFE SCIENTIFIC LAMBDA can be used in orchard sprayers, tractor sprayers and knapsacks.

Spray Quality

All applications to be as a 'MEDIUM' quality spray. Calibrate equipment before an actual application.

Knapsack Rate Estimator:

A full 20 litre knapsack sprayer applying spray at 200 l/ha will treat 1,000 m²

Life Scientific Lambda recommendation	Life Scientific Lambda ml per 20 litres spray mixture
50 ml/ha in 200 l/ha water	5 ml
75 ml/ha in 200 l/ha water	7.5 ml
150 ml/ha in 200 l/ha water	15 ml

A full 20 litre knapsack sprayer applying spray at 300 l/ha will treat 666 m²

Life Scientific Lambda recommendation	Life Scientific Lambda ml per 20 litres spray mixture
50 ml/ha in 300 l/ha water	3.33 ml
75 ml/ha in 300 l/ha water	5 ml
100 ml/ha in 300 l/ha water	6.66 ml
150 ml/ha in 300 l/ha water	10 ml

A full 20 litre knapsack sprayer applying spray at 400 l/ha will treat 500 m²

Life Scientific Lambda recommendation	Life Scientific Lambda ml per 20 litres spray mixture
75 ml/ha in 400 l/ha water	3.75 ml

A full 20 litre knapsack sprayer applying spray at 600 l/ha will treat 333 m²

Life Scientific Lambda Life recommendation	Scientific Lambda ml per 20 litres spray mixture
50 ml/ha in 600 l/ha water	1.66 ml
75 ml/ha in 600 l/ha water	2.5 ml
100 ml/ha in 600 l/ha water	3.33 ml

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A full 20 litre knapsack sprayer applying spray at 1000 l/ha will treat 200 m²

Life Scientific Lambda recommendation	Life Scientific Lambda ml per 20 litres spray mixture
75 ml/ha in 1000 l/ha water	1.5 ml

Tank Mixes

LIFE SCIENTIFIC LAMBDA is physically compatible with a range of other products but the efficacy of the mixtures have not been confirmed in trials so use is at the grower's risk. If using tank mixes, unless directed otherwise, the preferred order of addition of products to the tank is: water dispersible granules, wettable powders, suspension concentrates (flowables), emulsifiable concentrates, soluble concentrates. Each product must be added to a half-full sprayer and be fully dispersed before the addition of the next product. Tank mixes must only be applied within the label recommendations of every product in the mix. Contact your supplier for compatibility information on specific tank mixes. Manufacturer's instructions must be followed for each tank-mix component.

CONDITIONS OF SUPPLY

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded, and no responsibility will be accepted by us or re-sellers

for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.