GROUP 3A INSECTICIDE



Contains 100g/L lambda-cyhalothrin as a capsule suspension formulation. BALLIOL is a quick-acting contact and ingested pyrethroid insecticide for control of a wide range of pests in wheat, barley, oats, oilseed rape, combining, vining and edible-podded peas, field beans, potatoes, sugar beet, carrots, parsnip, Brussels sprouts, cabbage, cauliflower, broccoli, calabrese, pears and outdoor lettuce.

MAPP 19343

RISK & SAFETY INFORMATION - 24 HOUR EMERGENCY NUMBER: 01763 212100

WARNING

- Harmful if swallowed
- Harmful if inhaled
- Very toxic to aquatic life with long lasting effects
- Avoid breathing spray.
- Wear protective gloves/clothing and eye/ face protection.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN: Wash with plenty of soap and water.
- If exposed or concerned; get medical advice/attention.
- Avoid release to the environment
- 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.





Contains 2.2'.2"-(hexahyd ro-1.3.5-triazin-1.3.5-trivl). May cause an allergic skin reaction.

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

UFI: E6Q5-E0YT-UC09-CMYM

Approval Holder

SIPCAM OXON S.P.A Via Sempione 195. 20016 Pero (MI) Italy

Marketing Company

SIPCAM UK Ltd, 4C Archway House, The Lanterns, Melbourn Street, Royston, Herts SG8 7BX Tel: 01763 212100 The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.



Scan to view the Safety Data Sheet

Alternatively, download the Safety Data Sheet rom sipcamuk.co.uk or contact your supplier.



PROTECT FROM FROST



IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL INSECTICIDE

TOR OSE ONE! AS A PROFESSIONAL INSECTICIDE			
Crop	Maximum individual dose: (mls product/hectare)	Maximum total dose: (mls product/ha/crop)	Latest time of application
Winter and spring wheat, winter and spring barley	50 ml/ha	200 ml/ha	Before late milk stage (BBCH 77)
Winter and spring oats	50 ml/ha	200 ml/ha	Before watery ripe stage (BBCH 71)
Winter oilseed rape	75 ml/ha	225 ml/ha	Before end of flowering
Spring oilseed rape	75 ml/ha	225 ml/ha	6 weeks before harvest
Combining peas and field beans	75 ml/ha	150 ml/ha	25 days before harvest
Vining peas and edible-podded peas	75 ml/ha	150 ml/ha	-
Potatoes	75 ml/ha	300 ml/ha	-
Sugar beet	75 ml/ha	150 ml/ha	8 weeks before harvest
Pears	90 ml/ha	270 ml/ha	7 days before harvest
Brussels sprouts, cabbage, cauliflower, broccoli and calabrese	100 ml/ha	200 ml/ha	-
Outdoor lettuce	75 ml/ha	150 ml/ha	7 days before harvest
Outdoor carrots and parsnips	75 ml/ha	150 ml/ha	14 days before harvest

Other specific restrictions: This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme for BROADCAST AIR-ASSISTED SPRAYERS ONLY. Before each spraying operation from a broadcast air-assisted sprayer, either a LERAP must be carried out in accordance with CRD's published quidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years. A minimum 7 day interval between applications must be maintained in oilseed rape, pea (vining, combining and edible-podded), field bean, sugar beet, potato, outdoor lettuce, outdoor carrot and outdoor parsnip. A minimum interval of 14 days must be maintained between applications to wheat, barley, oats and pears. A maximum number of 4 applications per crop must not be exceeded. Single application rates must not exceed 10q a.s./ha. Non-returnable containers must not be re-used for any purpose. Returnable containers must be returned to the supplier. Returnable containers must not be re-used for any other purpose.

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.

SAFETY PRECAUTIONS

Operator protection:

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

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

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

WASH CONCENTRATE from skin or eyes immediately.
WHEN USING. DO NOT EAT. DRINK OR SMOKE.

AVOID CONTACT with skin.

If on skin, wash with plenty of soap and water.

WASH HANDS AND EXPOSED SKIN before meals and after work.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

IF SWALLOWED, seek medical advice immediately and show this container and label. DO NOT induce vomiting.

IF YOU FEEL UNWELL, seek medical advice (show label or MSDS where possible).

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. Use appropriate containment to avoid environmental contamination.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing water body or within 1m of the top of a ditch that is dry at the time of application.

DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1m of the top of a bank of a static of flowing water body. Aim spray away from water. THIS PRODUCT IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.

DO NOT ALLOW DIRECT SPRAY from broadcast air-assisted applications to fall within 38m of the top of a bank of a static or flowing water body unless a local environmental risk assessment (LERAP) permits a narrower buffer zone, nor within 5m of the top of a ditch which is dry at the time of application. Aim spray away from water.

To protect aquatic organisms, respect an unsprayed buffer zone distance to surface water bodies in accordance with LERAP requirements.

This product qualifies for inclusion in the local environmental risk assessment for pesticides (LERAP) scheme for broadcast air-assisted sprayers only. Before each spraying operation from a broadcast air-assisted sprayer either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

To protect non-target insects and arthropods respect an untreated buffer zone of 5m to non- crop land (see Directions for use).

Storage and disposal:

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

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

Rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at the time of filling and dispose of safely.

 $\label{eq:container} \mbox{DO NOT RE-USE CONTAINER for any other purpose.}$

Return empty container to the supplier.

Open the container only as directed.

This material and its container must be disposed of in a safe way. Do not contaminate water with product or its container.

Use appropriate containment to avoid environmental contamination.

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.

BALLIOL is a contact and stomach-acting pyrethroid insecticide for control of a wide range of pests in wheat, barley, oats, oilseed rape, combining, vining and edible-podded peas, field beans, potatoes, sugar beet, carrots, parsnip, Brussels sprouts, cabbage, cauliflower, broccoli, calabrese, pears and outdoor lettuce. To maximise the contact activity, ensure good spray coverage of the target during application.

Restrictions

Consult processors before treating crops which are destined for processing.

To reduce the effects on non-target insects and arthropods:

Do not spray cereals within 5m of the field boundary.

When using tractor-mounted boom sprayers in arable and vegetable crops, do not spray within 5m of the field boundary.

When treating pears with broadcast air-assisted sprayers, apply in a way which minimises off-target drift.

Field boundary buffer distances are measured from the edge of non-cropped land, including the 1-2m adjacent to hedgerows and waterbodies established under the Single Payment Scheme. Whilst cropped land includes buffer strips such as wild flower margins and conservation headlands, these are areas dedicated to be wildlife refuges and it is best practice to minimise spray driff into them

Resistance

The BALLIOL mode of action is classified by the IRAC mode of action code: "3A." To reduce the risk of the development of resistance to BALLIOL, 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.

Strains of some aphids have developed resistance to many aphicides. Where aphids resistant to lambda-cyhalothrin occur, BALLIOL will not give satisfactory control and repeated applications will not improve activity.

Pear suckers resistant to one or more groups of insecticides are widespread. Where strains



resistant to products containing lambda-cyhalothrin insecticides occur, BALLIOL is unlikely to give satisfactory control. Where repeat treatments are necessary use different active ingredients.

Pollen beetle populations resistant to pyrethroids may occur. Please refer to current IRAG and AHDB advice on resistance management and control of pollen beetle in OSR. Spray only where beetle numbers exceed the appropriate current threshold. Inspect crops in the headland and mid field. Use a non-pyrethroid if above threshold numbers of beetles survive a pyrethroid treatment, or in areas of high pyrethroid resistance risk.

For aphid control use a suitable aphicide depending on other pests present; consult agronomist.

CROP SPECIFIC INFORMATION

Rate of application, timing and pests controlled Cereals:

- 1.1 Yellow cereal fly (winter wheat): Apply 50 ml/ha BALLIOL in 200 L/ha water egg hatch which usually starts in late January, depending on the season. Crops which have emerged early are most susceptible but an application of BALLIOL against BYDV vectors will also give some control of this pest.
- 1.2 Grain aphid or rose grain aphid on the ear: Apply 50 ml/ha BALLIOL 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 late milk stage (GS77). AHDB 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 Aphid vectors of barley yellow dwarf virus: Apply a routine spray of 50 ml/ha BALLIOL 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 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.

Winter and spring oilseed rape

- 2.1 Flea beetle: Apply 75 ml/ha BALLIOL in 200 L/ha water at the first sign of pest attack and repeat 10-14 days later if necessary.
- 2.2 Pollen beetles: Apply 75 ml/ha BALLIOL 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). Inspect crops in the headland and mid field. Pollen beetle populations resistant to pyrethroids may occur, please refer to advice under 'resistance management'.
- 2.3 Seed weevil & pod midge: Apply 75 ml/ha BALLIOL 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). The best timing of the spray is at the peak adult activity, which often occurs between 20% pod set and the end of flowering on the main raceme (i.e. 75% petal fall across the entire crop). 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. For spring sown varieties apply at green to yellow bud stage if seed weevils are present at threshold levels

2.4 Cabbage stem flea beetle: Apply 50 ml/ha BALLIOL 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.

Winter and spring field beans

3.1 Pea & bean weevil: Apply 75 ml/ha BALLIOL 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.

Peas

4.1 Pea & bean weevil: For the reduction of feeding damage apply 75 ml/ha BALLIOL 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 midge: Apply 75 ml/ha BALLIOL 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.
- 4.3 Pea moth: Apply 50 ml/ha BALLIOL 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.
- 4.4 Pea aphid: Apply 50 ml/ha BALLIOL 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 tank-mixture 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.

Potatoes

5.1 Aphids: Apply 75 ml/ha BALLIOL 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 BALLIOL can also give some control of cutworms since the timing coincides with that for aphids. Resistance to pirimicarb by *Myzus persicae* is widespread. Where resistant strains are present, using BALLIOL in tank mixture with pirimicarb is unlikely to give satisfactory control and is not recommended. Alternative approved products containing actives of a different modes of action should be used.

Sugar beet

6.1 Aphids: If beet aphids (Peach potato aphid or black bean aphid) are present when applying the treatments listed above, use a tank mixture with 280 g/ha 50% w/w pirmicarb product to control the aphids provided that resistant strains are not present. Resistance to pirimicarb by Myzus persicae is widespread. Where resistant strains are present, using BALLIOL in tank mixture with pirimicarb is unlikely to give satisfactory control and is not recommended. Alternative approved products containing actives of a different modes of action should be used.

- 6.2 Flea beetle: Apply 75 ml/ha BALLIOL in 200 L/ha water as soon as adult feeding damage is seen in the crop and repeat if necessary.
- 6.3 Beet leaf miner (Mangold fly): Apply 75 ml/ha BALLIOL in 200 L/ha water at egg hatch and repeat as necessary.
- 6.4 Cutworm: Apply 75 ml/ha BALLIOL in 400 1000 L/ha water at egg hatch and repeat 10 14 days later, noting the eight week harvest interval. Use sufficient water volume to ensure thorough crop penetration.

Pears

7.1 Pear sucker: Apply 90 ml/ha BALLIOL in 200 – 2000 L/ha water to achieve good crop penetration when the first sucker eggs are being laid in Spring (late Feb – 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, BALLIOL may not give satisfactory control. Where repeat treatments are necessary use different active ingredients.

Outdoor lettuce

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

Carrots and parsnips

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

Horticultural brassicae (Brussels sprouts, cabbage, cauliflower, broccoli & calabrese):

10.1 Caterpillars: Apply 50 ml/ha BALLIOL 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.

10.2 White fly: Apply 100 ml/ha BALLIOL 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.

10.3 Aphids: If Peach potato aphid is present when applying the treatments listed above, use a tank mixture with 280 g/ha 50% w/w pirimicarb product to control the aphids provided that resistant strains are not present.

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 BALLIOL either direct 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 washings to the tank then add the remaining water and continue agitation until spraying completed. Do not allow the spray mixture to stand. Immediately after use wash sprayer and other equipment thoroughly with water and detergent. Dispose of empty rinsed containers according to the MAPP/HSE Code of Practice for the Safe Use of Pesticides on Farms and Holdings. Thoroughly wash all equipment after use.

Spray Quality

Apply as a MEDIUM spray (as defined by BCPC).

Water Volume

Apply BALLIOL in 200-300 litres of water per hectare to cereals, oilseed rape and field beans. Potatoes require at least 400 L/ha and horticultural brassica crops require 300-600 L/ha plus a nonorgano-silicone non-ionic wetter at the manufacturers recommended rate. Sugar beet requires 200-1000 L/ha according to the target while

lettuce and carrots should be treated with 200 – 1000 L/ha. Peas need to be treated in 200 – 600 L/ha while pears require 200 – 2000 L/ha. See crop specific information for details of which target pests require which water volume

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.

COMPANY ADVISORY INFORMATION

This section is not part of the (EC) 1107/2009 Regulation and provides additional advice on the product use.

GOOD AGRICULTURAL PRACTICE – when using in tank mixture, check the conditions of approval of the mixture product before using, products should only be tank-mixed if each product can be applied within the label recommendations for its use.

