SPARVIERO® is a quick-acting contact and ingested pyrethroid insecticide for control of a wide range of pests in wheat, barley, oats, oilseed rape, combine, vining and edible-podded peas, field beans, potatoes, sugar beet, carrots, parsnips, outdoor lettuce, brussels sprouts, cabbage, cauliflower, broccoli, calabrese and pear crops.

Contains 100g/l lambda-cyhalothrin as a capsule suspension formulation.

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(MAPP 15687)

Approval Holder:
Oxon Italia S.p.A., Via Sempione 195, 20016,
Pero (MI) ITALY

Distributed by:
SIPCAM UK LTD 4C Archway House
The Lanterns, Melbourn Street,
Royston, Herts, SG8 7BX
Tel: 01763 212100

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

WARNING
- Avoid spraying 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 waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.
- Do not contaminate water with the product or its container.
- To protect aquatic organisms respect an unsprayed buffer zone distance to surface water bodies in line with LERAP requirements.
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- To protect aquatic organisms respect an unsprayed buffer zone distance to surface water bodies in line with LERAP requirements.

For 24 hour emergency information Telephone 01763 212100

IMPORTANT INFORMATION
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL INSECTICIDE

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum individual dose (mls product/ha)</th>
<th>Maximum total dose (mls product/ha)</th>
<th>Latest time of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter and spring wheat, winter and spring barley:</td>
<td>50 mlsa/ha</td>
<td>200 mlsa/ha</td>
<td>Before late milk stage (BBCH 77)</td>
</tr>
<tr>
<td>Winter and spring oats:</td>
<td>50 mlsa/ha</td>
<td>200 mlsa/ha</td>
<td>Before waxery ripe stage (BBCH 71)</td>
</tr>
<tr>
<td>Winter oilseed rape:</td>
<td>75 mlsa/ha</td>
<td>225 mlsa/ha</td>
<td>Before end of flowering</td>
</tr>
<tr>
<td>Spring oilseed rape:</td>
<td>75 mlsa/ha</td>
<td>225 mlsa/ha</td>
<td>6 weeks before harvest</td>
</tr>
<tr>
<td>Combining peas and field beans:</td>
<td>75 mlsa/ha</td>
<td>150 mlsa/ha</td>
<td>25 days before harvest</td>
</tr>
<tr>
<td>Vining peas and edible-podded peas:</td>
<td>75 mlsa/ha</td>
<td>150 mlsa/ha</td>
<td>None</td>
</tr>
<tr>
<td>Potatoes:</td>
<td>75 mlsa/ha</td>
<td>300 mlsa/ha</td>
<td>None</td>
</tr>
<tr>
<td>Sugar beet:</td>
<td>75 mlsa/ha</td>
<td>150 mlsa/ha</td>
<td>8 weeks before harvest</td>
</tr>
<tr>
<td>Peas:</td>
<td>90 mlsa/ha</td>
<td>270 mlsa/ha</td>
<td>7 days before harvest</td>
</tr>
<tr>
<td>Brussels sprouts, cabbage, cauliflower, broccoli and calabrese:</td>
<td>100 mlsa/ha</td>
<td>200 mlsa/ha</td>
<td>None</td>
</tr>
<tr>
<td>Outdoor lettuce:</td>
<td>75 mlsa/ha</td>
<td>150 mlsa/ha</td>
<td>7 days before harvest</td>
</tr>
<tr>
<td>Outdoor carrots and parsnips:</td>
<td>75 mlsa/ha</td>
<td>150 mlsa/ha</td>
<td>14 days before harvest</td>
</tr>
</tbody>
</table>

Other specific restrictions:
A 7 day interval between applications must be maintained in oilseed rape, peas (vining, combining and edible-podded), field beans, sugar beet, potatoes, outdoor lettuce, carrots and parsnips. A 10 day interval must be maintained between applications to brussels sprouts, cabbage, cauliflower, broccoli and calabrese. A 14 day interval between applications must be maintained in wheat, barley, oats and peas. The maximum number of applications per crop is 4.

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.

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 from sipcamuk.co.uk or contact your supplier.

Net contents: 1L

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sipcamuk.co.uk
SAFETY PRECAUTIONS

Precautions marked * are a legal requirement

1. 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.

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. 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 owing 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 or owing 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 1.8m of the top of a bank of a static or owing 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. 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).

3. 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 thorougly 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.
   Do not use container for any other purpose.
   Return empty container to the supplier.
   Do not rinse out the container.
   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.

PROTECT FROM FROST

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.

SPARVIERO is a contact and stomach-acting pyrethroid insecticide for control of a wide range of pests in wheat, barley, oats, oilseed rape, combine, vining and edible podded peas, veld beans, potatoes, sugar beet, carrots, parsnip, outdoor lettuce, Brussels sprouts, cabbage, cauliflower, broccoli, kale, and brassicae and pear crops. 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 other arthropods:
• For application to cereals DO NOT SPRAY WITHIN 5M OF THE FIELD BOUNDARY.
• For application to other arable and vegetable crops, use tractor mounted sprayers. Aim spraying within 5m of the field boundary.
• For application to peas using broadcast air-assisted sprayers the best available application technique, which minimises off-target drift, should be used. These buffer distances should be measured from the field boundary which for the purposes of this labelling is defined as from the edge of non-cropped land (i.e. land taken permanently out of agricultural production including the 1-2m strips adjacent to hedgerows and watercourses established under the Single Payment Scheme). Cropped land includes managed buffer strips (e.g. grass strips, wild flower margins and conservation headlands), but since these are usually set up as havens for wildlife, it is best practice to minimise spray drift into them.

RESISTANCE:

Some strains of aphid species have developed resistance to many aphicides. Where aphids resistant to lambda-cyhalothrin occur, SPARVIERO will not give satisfactory control and repeated applications will not improve activity. The SPARVIERO mode of action is classified by the IRAC mode of action code: F. To reduce the risk of the development of resistance to SPARVIERO it is important to ensure that a non-pyrethroid insecticide classified with another mode of action code is incorporated into the pest control programme each year. Pear sucker resistant to one or more groups of insecticides may occur. Pear sucker is unlikely to give satisfactory control. Where repeat treatments are necessary use different active ingredients. Pollen beetles populations resistant to pyrethroids may occur. Please refer to current IPAR and HGCA advice on resistance management and control of pollen beetle in OSR. 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

1. CEREALS:
   1.1 Yellow cereal y (winter wheat): Apply 50 ml/ha SPARVIERO in 200 L/ha at egg hatch which usually starts in late January depending on the season. Crops which have emerged early are more susceptible but an application of SPARVIERO 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 SPARVIERO in 200–300 L/ha water to achieve thorough crop penetration of the plant just before ear emergence (GS57) but applications can be made up to late milk stage (GS77) HGCA: threshold of treatment is when aphids are present on two-thirds of tillers. Where aphid numbers are lower than this threshold, 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 SPARVIERO in 200 L/ha 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 where 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 ley due to the risk of direct aphid transfer to the crop.

2. WINTER & SPRING OILSEED RAPE:
   2.1 Flea beetle: Apply 75 ml/ha SPARVIERO in 200 L/ha at the first sign of pest attack and repeat 10-14 days later if necessary.
   2.2 Pollen beetles: Apply 75 ml/ha SPARVIERO 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 pgon-damaged crops and 3 beetles per plant in spring oilseed rape). Insect 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 SPARVIERO 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 are 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 is spring rape. A repeat application may be required when pest attack is prolonged. Different oilseed rape 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 SPARVIERO in 200 L/ha water with non-organic-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.

3. WINTER & SPRING FIELD BEANS:
   3.1 Pea & bean weevil: Apply 75 ml/ha SPARVIERO 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.
   3.2 Flea beetle: Apply 50 ml/ha SPARVIERO 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.
   3.3 Seed weevil & pod midge: Apply 75 ml/ha SPARVIERO 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 are 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 is spring rape. A repeat application may be required when pest attack is prolonged. Different oilseed rape varieties apply at green to yellow bud stage if seed weevils are present at threshold levels.

4. PEAS:
   4.1 Pea & bean weevil: For the reduction of feeding damage apply 75 ml/ha SPARVIERO in 200 L/ha at the first sign of pest attack and repeat 10–14 days later if necessary. Where pest attack is prolonged. For spring sown varieties apply at green to yellow bud stage if seed weevils are present at threshold levels.
   4.2 Pea midge: Apply 75 ml/ha SPARVIERO 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:
   5.1 Aphids: Apply 75 ml/ha SPARVIERO 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/v pirimicarb product (e.g. MAPP 1515) to improve activity provided that aphids resistant to pirimicarb are not present. An application of SPARVIERO 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 Sparviero in tank mixture with pirimicarb is unlikely to give satisfactory control and is not recommended. Alternative approved products containing actives of a different mode of action should be used.

6. 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/v pirimicarb product (e.g. MAPP 1515) 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 Sparviero 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 Pea flea beetle: Apply 75 ml/ha SPARVIERO 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 y): Apply 75 ml/ha SPARVIERO in 200 L/ha water at egg hatch and repeat as necessary.
   6.4 Cutworm: Apply 75 ml/ha SPARVIERO in 450–1200 L/ha water at egg hatch and repeat 10–14 days later; note the eight week harvest interval. Use sufficient water volume to ensure thorough crop penetration.

7. PEARS:
   7.1 Pear sucker: Apply 90 ml/ha SPARVIERO in 200–2000 L/ha water to achieve good canopy 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 SPARVIERO may not give satisfactory control. Use ingredients with a different mode of action code when retreating.

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 peat may require a second treatment 10–14 days after the first spray but vining peat should only receive a single spray on the advised date.

4.4 Pea aphid: Apply 50 ml/ha SPARVIERO 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 combine crops). Inspect the crops 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/v pirimicarb (e.g. MAPP 1515). 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.
CROP SPECIFIC INFORMATION

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

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

10. HORTICULTURAL BRASSICAE (Brussels sprouts, cabbage, cauliflower, broccoli & calabrese):
10.1 Caterpillars: Apply 50 ml/ha SPARVIERO in 300 – 600 L/ha water with a non-organo-silicone non-ionic wetter at the manufacturers rec. 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 y: Apply 100 ml/ha SPARVIERO in 300 – 600 L/ha water with a non-organo-silicone non-ionic wetter at the manufacturers rec. 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 (eg MAPP 10515) 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 SPARVIERO 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 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. 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 SPARVIERO in 200-300 litres of water per hectare to cereals, oilseed rape and field beans. Potatoes require at least 400 L/ha and horticultural brassicae crops require 300-600 L/ha plus a nonorganosilicone 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.