# Sven

An emulsifiable concentrate containing 25 g/l (2.6% w/w) esfenvalerate.

A pyrethroid insecticide for the control of aphids and reduction of BYDV (Barley yellow dwarf virus) in wheat and barley, and the control of aphids and other insect pests in potatoes, peas, beans, grassland and a range of vegetable and ornamental crops.

# **PRODUCT BENEFITS**

- Excellent persistence.
- Class leading repellency to reduce non-persistent virus in potatoes.
- Slow UV breakdown.
- Grassland approval for reduction of bibionid larvae.

#### LERAP category: A

Pack size: 1 litre

Storage: PROTECT FROM FROST



#### IMPORTANT INFORMATION

#### FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL INSECTICIDE.

Crop	Maximum individual dose	Maximum number of treatments per crop	Latest time of application
Winter wheat and barley	165 ml/ha	Two	31 March in year of harvest
Winter wheat	200 ml/ha	One	Up to and including late milky ripe stage (GS 77 BBCH)
Winter barley			Up to and including early milky ripe stage (GS 73 BBCH)
Spring wheat	165 ml/ha	Two	Up to and including late milky ripe stage (GS 77 BBCH)
Spring barley			Up to and including early milky ripe stage (GS 73 BBCH)
Potatoes	200 ml/ha	Four	Seven days pre harvest
Vining pea, edible podded pea		Three	
Combining pea, field bean			35 days pre harvest
Cabbage, Chinese cabbage, kale			Seven days pre harvest
Brussels sprouts		Four	
Cauliflower		One	
Broccoli/calabrese			
Kohlrabi			10 days pre harvest
Permanent and rotational grassland (including seed crops), managed amenity turf	300 ml/ha		See other specific restrictions
Ornamental plant production	See other specific restrictions	Тwo	-

Other specific restrictions:

- The maximum individual dose for outdoor or protected bulb production (tulip, hyacinth, iris, gladioli, lily) is 400 ml product/ha.
- The maximum individual dose for protected ornamental plant production (excluding bulbs) is 50 ml product/hl in a maximum of 1200 l/ha spray volume.
- Treated grass should not be used for grazing or cut for feed within 14 days of treatment.

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.

MAPP 14859

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

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# **DIRECTIONS FOR USE**

IMPORTANT: This information is approved 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.

#### WARNINGS

Always use SVEN at the recommended dose rate. Damage may result unless all recommendations are carefully carried out.

There are no restrictions on following crops.

#### **RESISTANCE MANAGEMENT**

Strains of some aphid species are resistant to many aphicides. Where aphids resistant to products containing esfenvalerate occur, SVEN is unlikely to give satisfactory control. Repeat treatments are likely to result in lower levels of control. Glasshouse whitefly strains resistant to one or more groups of insecticides are widespread. Where strains resistant to products containing pyrethroid insecticides occur, SVEN is unlikely to give satisfactory control. As part of a resistance management strategy, alternating with chemicals of a different mode of action, or alternative control methods, should be considered. This is particularly relevant to the uses in protected situations, where a range of ornamental plants may be grown within the same structure and it is important not to rely on only one method of control.

#### PESTS CONTROLLED

SVEN contains the highly active synthetic pyrethroid esfenvalerate, which is a contact and ingested pyrethroid insecticide for the control of cereal aphids and the reduction of BYDV (Barley yellow dwarf virus) in wheat and barley. It also controls a range of potato aphids preventing direct damage and viral transfer, pea and bean weevil and caterpillars in brassicas crops. Damage due to Bibionids is reduced in grassland.

#### **CROP SPECIFIC INFORMATION**

#### Winter wheat and winter barley

#### Autumn/winter use

#### For the control of cereal aphids and reduction in the spread of BYDV up to GS 31.

#### Dose

165 ml in not less than 200 litres of water per hectare.

#### Timing

In high-risk situations such as crops drilled before mid-September, crops following grass or grassy stubbles, or crops in areas with a history of BYDV, the first application of SVEN should be made when aphids are first seen in the crop. This can be during September or early October. A second application may be necessary at the end of aphid migration, which is normally in late October or November. In later sown and emerging crops, apply in late October or early November, or as recommended according to autumn conditions. A total of two applications of SVEN can be made in the autumn and winter up to the end of March in the year of harvest.

#### Spring/Summer use

#### For the control of summer cereal aphids on crop ears.

SVEN must not be applied to a cereal crop if another product containing a pyrethroid insecticide or dimethoate has been applied to that crop *after* the start of ear emergence (GS 51).

#### Dose

200 ml in not less than 200 litres of water per hectare.

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#### Timing

Apply between the onset of flowering and the milky-ripe stage (GS 61–73, BBCH) when 66% or more ears are infested (equivalent to five aphids per ear) and aphid numbers are increasing. When used to control aphids on the ear SVEN can also give useful control of aphids on the flag leaf. One application of SVEN can be made on wheat ears up to late milky ripe stage (GS 77), or barley ears up to early milky ripe stage (GS 73).

#### Spring wheat and spring barley

#### Spring use

#### Control of cereal aphids and reduction in spread of BYDV up to crop growth stage 31.

#### Dose

165 ml in not less than 200 litres of water per hectare.

#### Timing

Apply in spring if aphids can be found colonising the crop from the two to three leaf stage (GS 12–13). A second application may be required if aphids re-infest the crop before the first node growth stage (GS 31). While useful reductions in aphid numbers and spread of BYDV can be achieved, control may be less than desired where a rapid influx of aphids occurs or where the crop is growing rapidly. For details of thresholds or further information consult your specialist adviser. A total of two applications of SVEN can be made on spring wheat up to late milky ripe stage (GS 77), or spring barley up to early milky ripe stage (GS 73).

#### Potatoes

#### Control of aphids in ware potatoes.

#### Dose

200 ml in 200-600 litres of water per hectare.

#### Timing

Apply as soon as damage is observed when on average five aphids per composite leaf are seen. Repeat treatments may be applied at 7–14 day intervals. For further information consult your specialist adviser.

Maximum of four applications per crop. The latest timing for application is seven days before harvest.

# Control of aphids in seed potatoes to prevent transmission of viruses (including potato virus Y (PVY) and potato leaf roll virus (PLRV))

#### Dose

200 ml in 200-600 litres of water per hectare.

#### Timing

Apply from crop emergence. Repeat application at 7–14 day intervals. For details of thresholds or further information consult your specialist adviser.

Maximum of four applications per crop. Application up to seven days before lifting will protect the crop until lifted.

#### Peas and field beans

#### Control of pea and bean weevil

#### Dose

200 ml in 200-600 litres of water per hectare.

#### Timing

Apply when severe damage by adults to growing points is being caused in the early growth stages of the crop. Under high pest pressure a repeat application may be required two to three

weeks after the initial application. Where there is a history of severe weevil damage, a first application made at first sign of adult attack (leaf notching) may be beneficial in some situations.

Maximum of three applications per crop. The latest timing for application is seven days before harvest for vining and edible podded peas and 35 days before harvest for combining peas and field beans.

#### Peas

#### Control of field thrips.

#### Dose

200 ml in 200–600 litres of water per hectare.

#### Timing

Apply as soon as field thrips are seen on young plants. Repeat with an interval of 7–10 days. For further information consult your specialist adviser.

Maximum of three applications per crop. The latest timing for application is seven days before harvest for vining and edible podded peas and 35 days before harvest for combining peas.

#### **Brussels sprouts**

#### Control of cabbage white caterpillars, diamond back moth and swede midge.

#### Dose

200 ml in 200–800 litres of water per hectare.

#### Timing

Apply at the first sign of caterpillar attack or as soon as midge eggs are visible and repeat after 7–10 days as required. For further information consult your specialist adviser.

Maximum of four applications per crop. The latest timing for application is seven days before harvest.

#### Cabbages, Chinese cabbage, kale

#### Control of cabbage white caterpillars, diamond back moth and swede midge.

#### Dose

200 ml in 200-800 litres of water per hectare.

#### Timing

Apply at the first sign of caterpillar attack or as soon as midge eggs are visible and repeat after 7–10 days as required. For further information consult your specialist adviser.

Maximum of three applications per crop. The latest timing for application is seven days before harvest.

#### Cauliflower, broccoli, kohlrabi

#### Control of cabbage white caterpillars, diamond back moth and swede midge.

#### Dose

200 ml in 200-800 litres of water per hectare.

#### Timing

Apply at the first sign of caterpillar attack or as soon as midge eggs are visible. For further information consult your specialist adviser.

Maximum of one application per crop. The latest timing for application is seven days (cauliflower/broccoli) or 10 days (kohlrabi) before harvest.

#### Grassland (including seed crops), pastures, managed amenity turf and turf production) Reduction in damage due to bibionid fly larvae.

#### Dose

300 ml in 600–1000 litres of water per hectare.

#### Timing

Apply in the autumn. Do not apply slurry or farmyard manure before application. Rain after application may assist control. For thresholds and further information consult your specialist adviser.

Maximum of one application per crop. Treated grass should not be used for grazing or cut for feed within 14 days of treatment. Sports field must not be trodden on for up to five days after application.

#### Bulb production; tulip, hyacinth, iris, gladioli

#### To reduce the spread of aphid-borne non-persistent viruses.

#### Dose

400 ml in 200–400 litres (outdoor) or 500–1000 litres (protected) of water per hectare.

#### Timing

Apply at seven day intervals as soon as aphids appear. In Tulips continue applications until late June. In gladiolus only apply on virus-free batches. For thresholds and further information consult your specialist adviser.

Maximum of two applications per crop.

#### **Bulb production; lilies**

#### To reduce the spread of aphid-borne non-persistent viruses.

#### Dose

400 ml in 200-400 litres (outdoor) or 500-1000 litres (protected) of water per hectare.

#### Timing

Apply as soon as aphids appear and repeat at seven day intervals in May, June and July. Repeat at 10 day intervals in August and September. Application in combination with mineral oil may improve the efficacy. Consult partner product label for application rate of mineral oil. For thresholds and further information consult your specialist adviser.

Maximum of two applications per crop.

#### **Proctected flowers**

#### Control of aphids, caterpillars, leaf rollers, whitefly, leaf miners and thrips.

#### Dose

Add 50 ml product to 100 litres of water; apply 500–1000 litres (800–1200 litres for roses) of spray per hectare.

#### Timing

Apply as soon as the first signs of damage are seen. Repeat at seven day interval. For further information consult your specialist adviser.

Maximum of two applications per crop.

#### **MIXING AND SPRAYING**

Fill the spray tank with clean water and agitate vigorously. Add the recommended quantity of SVEN and apply immediately. DO NOT leave spray solution standing in spray tank.

If a tank mix with another material is required, add SVEN to the tank first unless instructed otherwise.

SVEN can be applied in 200–1200 litres of water per hectare as a MEDIUM spray as defined by BCPC. The higher volume of water should be used where crops are dense. Always ensure that foliage is well covered.

#### COMPATIBILITIES

Before tank mixing, consult the relevant product labels. For further details of compatibilities, consult your agrochemical adviser or Interfarm UK Limited.

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#### **SVEN**

#### An emulsifiable concentrate containing 25 g/l (2.6% w/w) esfenvalerate.



#### DANGER

#### Flammable.

Harmful by inhalation and if swallowed.

Risk of serious damage to eyes.

May cause sensitisation by skin contact.

Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Wear suitable gloves and eye/face protection.

Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Keep away from sources of ignition – no smoking.

Use only in well-ventilated areas.

This material and its container must be disposed of in a safe way.

Use appropriate containment to avoid environmental contamination.

Do not breathe fumes, vapour or spray.

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

# **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 CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE SHIELD) when handling the concentrate. However engineering controls may replace personal protective equipment if a COSSH assessment shows they provide an equal or higher standard of protection.

TAKE OFF IMMEDIATELY all contaminated clothing.

WHEN USING DO NOT EAT DRINK OR SMOKE.

WASH CONCENTRATE from skin or eyes immediately.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

IF YOU FEEL UNWELL, seek medical advice (show the label 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 DO

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NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 metres of the top of the bank of a static or flowing waterbody, or within 1 metre of the top of a ditch which is dry at the time of application.

DO NOT ALLOW DIRECT SPRAY from hand held sprayers to fall within 1m of the top of the bank of a static or flowing waterbody. Aim spray away from water.

THIS PRODUCT IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP SCHEME.

TO PROTECT NON-TARGET ARTHROPODS respect an untreated buffer zone of 5 metres to non-crop land.

#### Storage and disposal

DO NOT RE-USE CONTAINER for any purpose. Store in the dark away from sunlight.

Keep dry and frost-proof in a suitable pesticide store.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

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 time of filling and dispose of safely.