

## 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.)  
Avoid release to the environment. Refer to special instructions /safety data sheets.  
Avoid spray drift during application.  
Make sure that product or spray solution cannot contaminate natural surface water.  
DANGEROUS TO BEES. To protect bees and other pollinating insects do not apply to crop plants in flower. Do not use where bees are actively foraging. DO NOT apply when flowering weeds are present.

## Storage and disposal

KEEP OUT OF REACH OF CHILDREN.  
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.  
Store in the original container, tightly closed in a dry, cool (0-32°C), locked pesticide store.  
Store away from food and feeds.  
Do not store near a heat source or naked flame.  
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.

**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.**

SEDEF is a selective aphicide with activity against major aphid species on wheat, barley, oats, triticale, rye, spelt, potatoes, apples, pears, winter oilseed rape, sugar and fodder beet.

## RESTRICTIONS

Consult processor before using on apple or pear crops for processing.  
Do not tank mix with oil based products when used on ware potatoes.  
Fodder beet must not be grazed by livestock or harvested for animal consumption until at least 60 days following the last application.

## RESISTANCE

SEDEF contains the active ingredient flonicamid, it is a chordotonal organ nicotinamidase inhibitor belonging to IRAC mode of action Group 29 insecticides. The active ingredient disrupts the function of chordotonal stretch receptor organs, which are critical for the senses of hearing, gravity, balance, acceleration, proprioception and kinesthesia. This disrupts feeding and other behaviours in target insects.

A maximum one application per crop of SEDEF is permitted on spring barley, oats, sugar beet, fodder beet, potato or winter oilseed rape.

A maximum of two applications per crop of SEEF is permitted on wheat, winter barley, triticale, rye and spelt.  
A maximum of three applications per crop of SEDEF is permitted on apples and pears. DO NOT apply more than TWO consecutive treatments of SEDEF on apples and pears. If further treatments are necessary use an insecticide with a different mode of action against the target species before making any further application of SEDEF.

# Sedef®

**A water dispersible granule (WG) containing 500g/kg of flonicamid.**

**INSECTICIDE**

**1kg**

**e**

**(PCS 07507)**  
**UFI: Q5J3-8NQ1-W80N-XYJA**

**GROUP 29 INSECTICIDE**

**SEDEF is an aphicide for use on potatoes, cereals (wheat, barley, oats, triticale, rye, spelt), sugar and fodder beet, winter oilseed rape and in apple and pear orchards.**

**Contents eg 500g e**      **Batch number and Date of Manufacture**

**FOR PROFESSIONAL USE ONLY**      **PROTECT FROM FROST**

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Tel: +381 11 3072 301; Email: office@fitofarmacija.rs; Website: fitofarmacija.rs  
Emergency numbers: In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital (Dublin): Members of the public 01 809 2166 (8am-10pm every day); Health care professionals 01 809 2566 or 01 837 9964 (24 hours)

**Safety Information**

**Warning**  
Causes serious eye irritation  
Wash hands, forearms and face thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
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 disodium maleate (CAS 371-47-1). May produce an allergic reaction.  
**To avoid risks to human health and the environment, comply with the instructions for use.**  
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).

**(PCS No 07507)**

 **GALENIKA - FITOFARMACIJA**

## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL INSECTICIDE

| Crops                                       | Application rate (kg product/ha) | Maximum number of applications (Maximum total dose kg product/ha) | Latest Timing of Application       |
|---|----------------------------------|---|------------------------------------|
| Potato (ware and seed)*                     | 0.16                             | 1 per crop (0.16 per crop)  | GS 15                              |
| Wheat, Winter barley, Rye, Triticale, Spelt | 0.14                             | 2 per crop (0.28 per crop)  | 28 days before harvest             |
| Spring barley, Oats                         | 0.14                             | 1 per crop (0.14 per crop)  | 28 days before harvest             |
| Sugar beet, Fodder beet**                   | 0.14                             | 1 per crop (0.14 per crop)  | 60 days before harvest             |
| Winter oilseed rape                         | 0.1                              | 1 per crop (0.1 per crop)   | Eight true leaves unfolded (GS 18) |
| Apples, Pears                               | 0.14                             | 3 per year (0.42 per year)  | 21 days before harvest             |

### Other specific restrictions:

- \*Do not use in a tank mix with oil-based products when used on ware and seed potatoes.
- \*\*Fodder beet MUST NOT be grazed by livestock or harvested for animal consumption until at least 60 days following the last application.
- The total maximum number of treatments with any flonicamid-based product per crop cycle or per agricultural season MUST NEVER exceed the maximum number indicated on the label of one of the flonicamid containing products.

**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

WEAR SUITABLE PROTECTIVE GLOVES when handling the product, when handling contaminated surfaces or applying with hand-held equipment.  
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when applying with broadcast air assisted application equipment.

WEAR SUITABLE PROTECTIVE CLOTHING including rubber boots, gloves and eye protection when handling concentrated product and spray solution.

WHEN USING DO NOT EAT, DRINK OR SMOKE.  
Avoid all unnecessary contact with the product.  
Misuse can have adverse effects on health.

Where more than one application of SEDEF is permitted, do not exclusively use SEDEF 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 SEDEF 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. Integrate other control methods (chemical, cultural, biological) into insect control programs.

The total maximum number of treatments with any flonicamid-based product per crop cycle or per agricultural season MUST NEVER exceed the maximum number indicated on the label of one of the flonicamid containing products.

Strains of some aphids are resistant to many aphicides. Where aphids resistant to products containing flonicamid occur, SEDEF is unlikely to give satisfactory control. Repeat treatments are likely to result in lower levels of control. Do not make repeat applications of an insecticide from the same chemical group (indicated by IRAC mode of action group) if it appears not to work at full rate and if the product has been applied correctly.

For further information on insect resistance consult your adviser, Teagasc or the IRAC website.

#### CROP SPECIFIC INFORMATION

For best results for all crops: apply SEDEF to target the first application against aphids when the warning systems forecast significant infestation; or when the economic threshold is reached.

| Crop(s)                                     | Application rate (kg product/ha) | Maximum number of applications (maximum total dose of product) | Timing   | Latest Timing of Application            |
|---|----------------------------------|--|--|---|
| Potato (ware and seed)                      | 0.16                             | 1 application per crop (max. total dose 0.16 kg/ha/crop)       | The persistence of SEDEF is 21 days. The maximum number of applications is 1 per crop.   | GS 15                                   |
| Wheat, winter barley, triticale, spelt, rye | 0.14                             | 2 applications per crop (max. total dose 0.28 kg/ha/crop)      | The persistence of SEDEF is 21 days. A repeat application may be made if pest pressure remains high for all crops except on winter barley where a previous application was made in the autumn to control aphids carrying virus.  | 28 days before harvest                  |
| Winter barley (autumn application)          | 0.14                             | 1 application per crop (max. total dose 0.14 kg/ha/crop).      | From one leaf stage to mid-tillering. Only 1 application can be made at this stage.  | 28 days before harvest                  |
| Spring barley, oats                         | 0.14                             | 1 application per crop (max. total dose 0.14 kg/ha/crop).      | Flag leaf stage (BBCH 39) up to late milk stage (BBCH 77).   | 28 days before harvest                  |
| Sugar beet, fodder beet*                    | 0.14                             | 1 application per crop (max. total dose 0.14 kg/ha/crop).      | From the 2 leaf stage of the crop (generally May-June).  | 60 days before harvest.                 |
| Winter oilseed rape (autumn application)    | 0.1                              | 1 application per crop (max. total dose 0.1 kg/ha/crop).       | In the autumn from the 2 leaf stage of the crop up to the 8 leaf stage.  | 8 true leaf stage (BBCH 18) of the crop |
| Apple, pear                                 | 0.14                             | 3 applications per year (max. total dose 0.42 kg/ha/year).     | Generally early spring on newly developed leaves and when aphids are present at the end of egg hatch-usually around green cluster to pink bud on apple and green cluster to petal fall on pear.<br>The persistence of SEDEF is 21 days. Repeat applications may be made if pest pressure remains high. | 21 days before harvest                  |

\*Fodder beet MUST NOT be grazed by livestock or harvested for animal consumption until at least 60 days following the last application.

#### Application water volumes

Apply SEDEF evenly over the crop via tractor mounted or drawn boom or air assisted sprayer in the following water volumes:

On potatoes, wheat, barley, oats, rye, triticale, spelt, sugar beet and fodder beet apply in 200-500 L of water/ha.

On winter oilseed rape apply in 200-300 L of water/ha.

On apple and pear apply in 200-1000 L/ha (up to a maximum of 1500 L of water/ha if necessary). Adjust the water volume for tree size, stage of development and spray equipment used.

#### MIXING AND SPRAYING

**IMPORTANT:** SEDEF is applied at a very low dose rate therefore it is very important that the amount of product is weighed accurately for each spray operation to ensure the correct dose is applied. Spray equipment must be calibrated accurately prior to use to ensure accurate dosing.

#### Spray preparation

Before use ensure that all application equipment is thoroughly cleaned, particularly filters and nozzles where they have been used for other purposes and on other crops, and correctly calibrated to ensure correct dose rates are applied.

Add half the required volume of water to the spray tank and start agitation, add the required quantity of SEDEF. Triple rinse empty containers, add the washings to the spray tank and then fill the tank to the required volume whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete.

DO NOT allow the diluted product to stand overnight.

#### Spraying

Appropriate measures to avoid spray drift onto non-target crops or watercourses should be taken, follow appropriate wind speed guidelines.

#### Cleaning

All application equipment must be thoroughly cleaned with water prior to storage or use on another crop. Ensure that the minimal quantity of product remains in the spray tank at the end of spray application. Dilute the remainder of the spray solution with tank cleaning water, do not spray on treated fields. Any spillage should be collected and disposed of in appropriate chemical waste. Ensure there is no contamination of waterways or surface water with the spray solutions and washings.

#### COMPANY ADVISORY INFORMATION

This information is not part of the approved product label under the (EC) 1107/2009 Regulation and only provides additional company advice on the product use.

| Crop(s)                                     | Pest(s) controlled   |
|---|--|
| Potato (ware and seed)                      | Control of aphids:<br>Potato aphid: <i>Macrosiphum euphorbiae</i> ;<br>Peach potato aphid: <i>Myzus persicae</i> ;<br>Buckthorn-potato aphid: <i>Aphis nasturtii</i>                           |
| Wheat, Winter barley, Rye, Triticale, Spelt | Control of aphids on ears:<br>English grain aphid: <i>Sitobion (Macrosiphum) avenae</i> ,<br>Rose grain aphid: <i>Metopolophium dirhodum</i> ,<br>Bird-cherry aphid: <i>Rhopalosiphum padi</i> |
| Winter barley (autumn application)          | Aphids carrying virus  |
| Spring barley, oats                         | Aphids   |
| Sugar beet, fodder beet                     | Control of aphids carrying virus:<br>Black bean aphid: <i>Aphis fabae</i> ,<br>Peach potato aphid: <i>Myzus persicae</i>   |
| Winter oilseed rape (autumn application)    | Control of aphids carrying virus:<br>Peach potato aphid: <i>Myzus persicae</i>   |
| Apple, pear                                 | Control of aphids on apple:<br>Rose apple aphid: <i>Dysaphis plantaginea</i> ,<br>Green apple aphid: <i>Aphis pomi</i><br>Control of aphids on pear:<br>Pear aphid: <i>Dysaphis pyri</i>       |

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