

# SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

## SVEN



### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

SVEN

Esfenvalerate, 25 g/l emulsifiable concentrate  
GIFAP Code : EC  
EC number: not applicable

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Insecticide (agricultural use)  
Not for public use

#### 1.3. Details of the supplier of the safety data sheet

INTERFARM (UK) LIMITED  
36 Newgate Street  
Doddington  
Cambridgeshire PE15 0SR  
United Kingdom  
Tel.: +44 (0)1354 741414  
email: [technical@interfarm.co.uk](mailto:technical@interfarm.co.uk)

#### 1.4. Emergency Telephone number 24/24hrs

UK & Ireland; +44 (0)333 333 9962

### 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classified as hazardous according to regulation (EC) No 1272/2008 (CLP)

Signal word(s)

Danger

Pictogram (s)



Flam. liq. Cat 3



Acute oral Cat 4  
Acute inhal. Cat 4  
Skin sens. Cat 1A



Serious eye dam. Cat 1



Asp. Hazard Cat 1  
STOT RE Cat 2



Aquatic Acute Cat 1  
Aquatic Chronic Cat 1

Hazard statement(s)

H226: Flammable liquid and vapour  
H302: Harmful if swallowed  
H304: May be fatal if swallowed and enters airways  
H332: Harmful if inhaled.  
H318: Causes serious eye damage  
H317: May cause an allergic skin reaction  
H373: May cause damage to organs through prolonged or repeated exposure  
H400: Very toxic to aquatic life  
H410: Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Signal word(s)

Danger

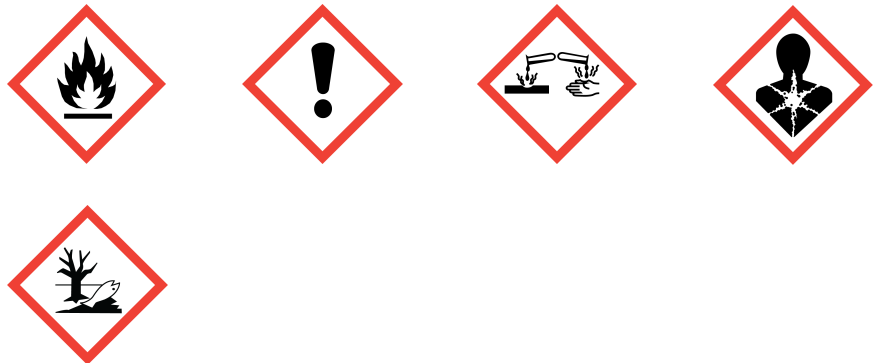
# SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

## SVEN



### Pictogram (s)



### Hazard statement(s)

H226: Flammable liquid and vapour  
H302: Harmful if swallowed  
H304: May be fatal if swallowed and enters airways  
H332: Harmful if inhaled.  
H318: Causes serious eye damage  
H317: May cause an allergic skin reaction  
H373: May cause damage to organs through prolonged or repeated exposure  
H410: Very toxic to aquatic life with long lasting effects.

### Precautionary statement(s)

P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P261: Avoid breathing fume/gas/mist/vapours/spray.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P331: Do NOT induce vomiting.  
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor.  
P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.  
EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

### Special risks and safety precautions (Commission Regulation (EU) 547/2011):

#### General provisions

SP 1: 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.

#### Specific safety precautions

SPo 2: Wash all protective clothing after use.  
SPe 3: To protect aquatic organisms respect an unsprayed buffer zone of 5 metres to surface water bodies.

### 2.3. Other hazards

May cause a transient itching and/or burning sensation in exposed human skin (paresthesia).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. This product is to be considered as a mixture in conformance to EU regulations.

#### Composition/Information on hazardous ingredients

| Number | % w/v | CAS number | Chemical name  |
|--------|-------|------------|--|
| 1      | 2.5   | 66230-04-4 | (S)-.alpha.-Cyano-3-phenoxybenzyl(S)-2-(4-chlorophenyl)-3-methylbutyrate |
| 2      | ≥1    | 122-99-6   | 2-Phenoxyethanol   |
| 3      | ≥10   | 1330-20-7  | Xylene   |
| 4      | ≥10   | 100-41-4   | ethylbenzene   |
| 5      | ≥10   | 90989-38-1 | aromatic hydrocarbons C8   |

## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

### SVEN



| Number | EC number | Annex-1 listing | Regl 1272/2008 Pict. | Hazard statements                              |
|--------|-----------|-----------------|----------------------|--|
| 1      | /         | yes             | GHS06, GHS07, GHS09  | H331, H301, H317, H400, H410                   |
| 2      | 204-589-7 | /               | GHS07                | H302, H319                                     |
| 3      | 215-535-7 | /               | GHS02, GHS07, GHS08  | H226, H332, H312, H315, H304, H319, H335, H373 |
| 4      | 202-849-4 | /               | GHS02, GHS07, GHS08  | H225, H332, H315, H319, H335, H373, H304       |
| 5      | 292-694-9 | /               | GHS02, GHS07, GHS08  | H226, H312, H332, H315, H319, H335, H373, H304 |

Other information SCAE code : R707

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

|                   |  |
|-------------------|--|
| <b>General</b>    | In all cases of doubt, or when symptoms persist, seek medical attention.   |
| <b>Inhalation</b> | Move to fresh air. If symptoms persist, seek medical advice.   |
| <b>Skin</b>       | Remove contaminated clothing. Wash skin immediately with water.  |
| <b>Eye</b>        | Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Always seek medical advice. |
| <b>Ingestion</b>  | Rinse mouth. Do NOT induce vomiting in unconscious or confused persons. Seek medical advice.   |

### 4.2. Most important symptoms and effects, both acute and delayed

May cause a transient itching and/or burning sensation in exposed human skin. Synthetic pyrethroids can produce paresthesia. Typically, symptoms begin several hours after cutaneous exposure, peak within 12 hours and resolve within about 24 hours.  
Harmful if swallowed and if inhaled. Causes serious eye damage. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment is advised.

## 5. FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

|                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | Dry chemical powder, carbon dioxide, sand, foam. |
| <b>Unsuitable extinguishing media</b> | Water with full waterjet                         |

### 5.2. Special hazards arising from the substance or mixture

May emit toxic and irritating fumes under fire conditions.

### 5.3. Advice for fire-fighters

Wear self contained breathing apparatus. Wear suitable protective clothing and eye/face protection.

### Other information

Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment, and emergency procedures

#### For non-emergency personnel

Do not breathe spray. Avoid contact with skin and eyes. Wear protective gloves, safety goggles or face shield, and suitable protective clothing.  
Remove ignition sources.  
Evacuate the danger area.

#### For emergency responders

Do not breathe spray. Avoid contact with skin and eyes. Wear protective nitrile gloves, safety goggles or face shield, and suitable protective clothing.  
Remove ignition sources.  
Evacuate the danger area or consult an expert.

### 6.2. Environmental precautions

Do not allow escape into sewage system or watercourses. Do not wash residues into drains or other waterways.

### 6.3. Methods and material for containment and cleaning up

## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

### SVEN



**Containment of a spill** Do not allow escape into sewage system or watercourses.

**Clean-up procedures** In case of spill (liquid) soak it up immediately with suitable absorbent such as sawdust or granular absorbent clay. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

**6.4. Reference to other sections** For personal protection see section 8.

## 7. HANDLING AND STORAGE

**7.1. Precautions for safe handling** The usual precautions for handling chemicals should be observed. For personal protection see section 8.

**Fire and explosion prevention** Keep away from sources of ignition – No smoking. Prevent electrostatic discharges. Above the flash point an explosive mixture can be formed.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage requirements** Store in a dry and cool place. Keep container in a well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Do not drink, eat and smoke in work areas.

**Other information** Do not mix with water (except for the normal preparation).

**7.3. Specific end use(s)** See label on the container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters** There is no national exposure limit for this product. No chemical safety report is required for this kind of product. The following exposure limit(s) apply for:

| Name         |               |  |
|--------------|---------------|--|
| Xylene       | WEL-TWA (UK)  | 220.000 mg/m <sup>3</sup> Can be absorbed through skin |
|              | WEL-STEL (UK) | 441.000 mg/m <sup>3</sup> Can be absorbed through skin |
| Ethylbenzene | WEL-TWA (UK)  | 441.000 mg/m <sup>3</sup> Can be absorbed through skin |
|              | WEL-STEL (UK) | 552.000 mg/m <sup>3</sup> Can be absorbed through skin |

### 8.2. Exposure controls

**Appropriate engineering controls** Provide adequate ventilation.

#### Individual protection measures

##### Personal protection

##### Respiratory

The usual precautions for handling chemicals should be observed.

##### Hand

Wear protective nitrile gloves.

##### Eye

Wear safety goggles or face shield.

##### Skin and body

Wear suitable protective clothing.

##### Other information

Launder clothes before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|   |  |
|---|--|
| <b>Name</b>   | <b><i>Esfenvalerate, 25 g/l emulsifiable concentrate</i></b> |
| <b>Appearance</b>                                   | clear liquid (visual inspection)                             |
| <b>Colour</b>                                       | pale yellow (visual inspection)                              |
| <b>Odour</b>  | faint characteristic (olfactory assessment, in-house method) |
| <b>Odour threshold</b>                              | not determined   |
| <b>pH value</b>                                     | 7.20 (21°C, 1% emulsion in water, CIPAC MT 75)               |
| <b>Melting point/freezing point</b>                 | not applicable   |
| <b>Initial boiling point &amp; boiling range</b>    | not determined   |
| <b>Flash point</b>                                  | 26.8°C (closed cup, EEC A.9)                                 |
| <b>Evaporation rate</b>                             | not applicable   |
| <b>Flammability</b>                                 | flammable (based on flash point)                             |
| <b>Upper/lower flammability or explosive limits</b> | not determined   |
| <b>Vapour pressure</b>                              | not determined   |

## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

### SVEN



|                                       |   |
|---------------------------------------|---|
| Vapour density                        | not applicable  |
| Relative density                      | 0.89 g/ml (20°C) (EEC A3)   |
| Bulk density                          | not applicable  |
| Solubility in water                   | emulsifiable in water (solubility of Esfenvalerate: < 0.001 mg/l, 20°C, EEC A.6)                  |
| Solubility in other solvents          | not applicable  |
| Partition coefficient n-octanol/water | not determined (Esfenvalerate: log Pow = 6.24, 25°C, OECD 107)                                    |
| Autoignition temperature              | 476°C (EEC A.15)  |
| Decomposition temperature             | the active substance does not decompose below 360°C (boiling point)                               |
| Dynamic viscosity                     | 1.2 mPa.s (20°C) (OECD 114)   |
| Kinematic viscosity                   | 1.1353 mm <sup>2</sup> /s, 20°C<br>0.8835 mm <sup>2</sup> /s, 40°C (ASTM D445, based on OECD 114) |
| Explosive properties                  | vapours may form explosive mixtures with air (xylene)   |
| Explosion limits                      | no evidence of explosive properties (expert statement)  |
| Oxidising properties                  | no evidence of explosive properties (expert statement)  |

#### 9.2. Other information

|                                   |   |
|-----------------------------------|---|
| Relative vapour density (air = 1) | not determined                            |
| Surface tension                   | 28.5 mN/m (25°C), (equivalent to EEC A.5) |

---

## 10. STABILITY AND REACTIVITY

---

|  |  |
|--|--|
| 10.1. Reactivity                         | Stable under recommended storage and handling conditions (see also section 7).                     |
| 10.2. Chemical stability                 | Stable for a minimum of 2 years under recommended storage and handling conditions (see section 7). |
| 10.3. Possibility of hazardous reactions | None known.  |
| 10.4. Conditions to avoid                | Avoid high temperature, light, humidity. Keep away from sources of ignition – No smoking.          |
| 10.5. Incompatible materials             | Alkaline materials.  |
| 10.6. Hazardous decomposition products   | May emit toxic and irritating fumes under fire conditions (see also section 5).                    |

---

## 11. TOXICOLOGICAL INFORMATION

---

### 11.1. Information on toxicological effects

|                |  |
|----------------|--|
| Name           | <b><i>Esfenvalerate, 25 g/l emulsifiable concentrate</i></b> |
| Acute toxicity |  |
| Oral           | LD50 rat: 436 mg/kg (OECD 401)                               |
| Dermal         | LD50 rat: >2000 mg/kg (OECD 402)                             |
| Inhalation     | LC50 rat (4 hours, whole body): 4.8 mg/l (OECD 403)          |
| Irritation     |  |
| Skin           | moderately irritating (EPA 81-5)                             |
| Eye            | severely irritating (EPA 81-4)                               |
| Sensitisation  | sensitising (maximisation test, OECD 406)                    |

The following data are applicable to the ingredient listed below:

|                                 |  |
|---------------------------------|--|
| Name                            | <b>Active substance <i>Esfenvalerate technical grade</i>:</b>  |
| Other toxicological information | <ul style="list-style-type: none"><li>- Genotoxicity: negative (in-house methods)</li><li>- Carcinogenicity (rats, mice): no carcinogenic effect. (OECD 451)</li><li>- Multigeneration reproduction study (rat): negative (OECD 416)</li><li>- Teratogenicity studies (rat, rabbit): negative (US EPA 83-3)</li><li>- Acute neurotoxicity (rat): NOAEL = 1.9 mg/kg for males and 1.75 mg/kg for females (OPPTS 870.6200, US EPA 712-C-98-238)</li><li>- 90d-neurotoxicity (rat): NOAEL = 3.0 mg/kg bw/day (US EPA; OECD)</li></ul> |

Based on the available data, the classification criteria are met for the acute toxicity, irritation and skin sensitization hazard classes.

#### Information on likely routes of exposure

## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

## SVEN



This product is for agricultural use, therefore the most probable routes of exposure are via skin or inhalation.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

No experimental ecological data are available on the preparation as such. The following data are applicable to a close formulation or ingredient(s) listed below:

|                  |   |
|------------------|---|
| <b>Name</b>      | <b><i>Esfenvalerate, 50 g/l emulsifiable concentrate (code: R506)</i></b>   |
| <b>Fish</b>      | Acute toxicity, 96h-LC50 ( <i>Oncorhynchus mykiss</i> ): 4.5 µg/l (OECD 203)<br>Chronic toxicity, 21 days-NOEC ( <i>Oncorhynchus mykiss</i> ): 0.18 µg/l (OECD 204)   |
| <b>Daphnia</b>   | Acute toxicity, 48h-EC50 ( <i>Daphnia magna</i> ): 3.4 µg/l (static) (OECD 202)<br>Reproduction test, 21d- NOEC ( <i>Daphnia magna</i> ): 0.056 µg/l (OECD 202)   |
| <b>Algae</b>     | Acute toxicity ( <i>Scenedesmus subspicatus</i> ):<br>96h -EC50 (biomass): 135 µl/l; 24-48h EC50 (growth rate): 215 µg/l<br>NOEC = 0.05 mg/l (OECD 201)   |
| <b>Bees</b>      | Acute toxicity, 48h-oral LD50 ( <i>Apis mellifera</i> ): 0.21 µg a.s/bee (BBA Guideline VI, 23-1)<br>Acute toxicity, 48h-contact LD50 ( <i>Apis mellifera</i> ): 0.07 µg a.s/bee (BBA Guideline VI, 23-1)<br>Not expected to present a significant risk to honey bees under field conditions. |
| <b>Earthworm</b> | Acute toxicity, 14d-LC50 ( <i>Eisenia foetida</i> ): 212.5 mg/kg soil (i.e. 10.6 mg a.s/kg soil)<br>(OECD 207)  |

|                                |   |
|--------------------------------|---|
| <b>Name</b>                    | <b>Active substance <i>Esfenvalerate, technical grade</i></b>   |
| <b>Sediment dwelling midge</b> | Chronic toxicity, 28d-NOEC ( <i>Chironomus riparius</i> ) = 0.160 µg/l (BBA guideline)  |
| <b>Birds</b>                   | Acute toxicity, LC50 (Mallard duck): > 2250 mg/kg b.w. (FIFRA 71-1)<br>Acute toxicity, LC50 (Bobwhite quail): 1312 mg/kg b.w (FIFRA 71-1)                                     |
| <b>Bees</b>                    | Acute contact toxicity, 48h-LD50 ( <i>Apis mellifera</i> ): 0.06 µg/bee (in-house method)<br>Not expected to present a significant risk to honey bees under field conditions. |
| <b>Soil micro organisms</b>    | No significant impact on carbon mineralization or nitrogen transformation at up to 1278 g/ha (0.4 mg/kg dry soil) (BBA guidelines, VI, 1-1)                                   |

### 12.2. Persistence and degradability

The following data are applicable to ingredient(s) listed below:

|  |  |
|--|--|
| <b>Name</b>                                    | <b>Active substance <i>Esfenvalerate, technical grade</i></b>  |
| <b>Degradation Biotic</b>                      | Not readily biodegradable (OECD 301B)  |
| <b>Degradation Abiotic</b>                     | Hydrolysis (OECD 111)<br>pH4: stable<br>pH7: DT50 = 427.7 days at 20°C<br>pH9: DT50 = 5.3 days at 20°C |
| <b>Biological methods for sewage treatment</b> | 3h-EC50 activated sludge: > 1000 mg/L (OECD 209)   |

### 12.3. Bioaccumulative potential

The following data are applicable to ingredient(s) listed below:

|                        |  |
|------------------------|--|
| <b>Name</b>            | <b>Active substance <i>Esfenvalerate, technical grade</i></b>  |
| <b>Bioaccumulation</b> | Partition coefficient n-octanol/water log Pow: 6.24 (25°C) (OECD 107)<br>Bio Concentration Factor (BCF), exposure 28 days ( <i>Cyprinus carpio</i> ): 3110<br>(depuration time: CT50 = 7.9 days) |

### 12.4. Mobility in soil

The following data are applicable to ingredient(s) listed below:

|             |  |
|-------------|--|
| <b>Name</b> | <b>Active substance <i>Esfenvalerate, technical grade</i></b>  |
|             | Adsorption K <sub>oc</sub> values: 85,700 - 596,200<br>Therefore the substance is immobile (OECD 106). |

### 12.5. Results of PBT and vPvB assessment

Not required (no chemical safety report required).

### 12.6. Other adverse effects

No other known adverse effects on the environment.

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

# SVEN



**Substance and/or Mixture** According to local regulations. For further advice contact manufacturer.  
**Contaminated packaging** According to local regulations.

## 14. TRANSPORT INFORMATION

Land transport ADR/RID, Sea transport IMO/IMDG, Air transport ICAO-TI/IATA-DGR:

**14.1. UN Number** 1993

**14.2. UN proper shipping name** FLAMMABLE LIQUID, N.O.S. (contains: xylene)

**14.3. Transport hazard class(es)**

|                                       |   |        |   |
|---------------------------------------|---|--------|---|
| Land transport ADR/RID class:         | 3 | label: | 3 |
| IMO/IMDG code class:                  | 3 |        |   |
| Air transport ICAO-TI/IATA-DGR class: | 3 |        |   |

**14.4. Packing group** III

**14.5. Environmental hazards** Marine pollutant: yes

**14.6. Special precautions for user** EMS: F-E, S-E  
No other special precaution required.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code**  
Not applicable

## 15. REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

There is no specific regulation/legislation for this mixture.

### 15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

## 16. OTHER INFORMATION

**Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the purpose of classification:**

Classification based on tests, properties of the active substance and of a close formulation (R506), classification of ingredients.

**Changes made to the previous version:** Section 1; change to emergency telephone number. Sections 9, 11, 12, were modified to update the data. [Based on SA2.5ECxCLP/EU/530gb from SCAE]

### Full text of hazard statement(s) used in this document:

H225: Highly flammable liquid and vapour  
H226: Flammable liquid and vapour  
H301: Toxic if swallowed  
H302: Harmful if swallowed  
H304: May be fatal if swallowed and enters airways  
H312: Harmful in contact with skin  
H332: Harmful if inhaled  
H315: Causes skin irritation  
H317: May cause an allergic skin reaction  
H318: Causes serious eye damage  
H319: Causes serious eye irritation  
H331: Toxic if inhaled  
H335: May cause respiratory irritation  
H373: May cause damage to organs through prolonged or repeated exposure.  
H400: Very toxic to aquatic life  
H410: Very toxic to aquatic life with long lasting effects



## SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)  
and Commission Regulation (EU) No 453/2010

### SVEN



This information only concerns the above mentioned product for the specific use mentioned and is not valid for such product used in combination with any other product. The information is to our best present knowledge correct and complete and is given in good faith as of the date indicated. It is the user's responsibility to use this information as appropriate for his own particular use of this product.