

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 27.08.2012

Version: 4.0

Product: **FENDONA**

(ID no. 30355055/SDS\_CPA\_EU/EN)

Date of print 28.08.2012

## 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier

**FENDONA**

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

Relevant identified uses: crop protection product, insecticide

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: Produktinformation-Pflanzenschutz@basf.com

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



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Signal Word:

Warning

Hazard Statement:

H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Response):

P391 Collect spillage.

Labeling of special preparations (GHS):

| May cause paraesthesia. Alpha-Cypermethrin

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

Hazard symbol(s)

N Dangerous for the environment.



R-phrases(s)

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S2 Keep out of the reach of children.  
 S13 Keep away from food, drink and animal feeding stuffs.  
 S20/21 When using do not eat, drink or smoke.  
 S29/35 Do not empty into drains, this material and its container must be disposed of in a safe way.  
 S57 Use appropriate container to avoid environmental contamination.

| The product contains: Alpha-Cypermethrin

May cause paraesthesia.

**Classification of the substance or mixture**According to Regulation (EC) No 1272/2008 [CLP]

| Aquatic Acute 1  
 | Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

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

For the classifications not written out in full in this section the full text can be found in section 16.

### Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

## 3. Composition/Information on Ingredients

### Mixtures

#### Chemical nature

crop protection product, insecticide, Wettable powder (WP)

#### Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

#### | Alpha-Cypermethrin

Content (W/W): 5 %

CAS Number: 67375-30-8

INDEX-Number: 607-422-00-X

Acute Tox. 4 (Inhalation - dust)

Acute Tox. 3 (oral)

STOT SE 3 (irr. to respiratory syst.)

STOT RE 2

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 10000

M-factor chronic: 1000

H332, H301, H400, H410, H335, H373

#### | Docusate sodium

Content (W/W): < 3 %

CAS Number: 577-11-7

EC-Number: 209-406-4

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

H318, H315

#### | Kaolin

Content (W/W): < 90 %

CAS Number: 1332-58-7

EC-Number: 310-194-1

Eye Dam./Irrit. 2

H319

#### Hazardous ingredients

according to Directive 1999/45/EC

**| Alpha-Cypermethrin**

Content (W/W): 5 %

CAS Number: 67375-30-8

**| INDEX-Number: 607-422-00-X**

Hazard symbol(s): T, N

R-phrases: 20, 25, 37/38, 48/22, 50/53

**| Docusate sodium**

Content (W/W): &lt; 3 %

CAS Number: 577-11-7

**| EC-Number: 209-406-4**

Hazard symbol(s): Xi

**| R-phrases: 38, 41****Kaolin**

Content (W/W): &lt; 90 %

CAS Number: 1332-58-7

**| EC-Number: 310-194-1**

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

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## 4. First-Aid Measures

**Description of first aid measures****| Remove contaminated clothing.**

If inhaled:

**| Keep patient calm, remove to fresh air.**

On skin contact:

**| Wash thoroughly with soap and water.**

On contact with eyes:

**| Wash affected eyes for at least 15 minutes under running water with eyelids held open.**

On ingestion:

**| Rinse mouth and then drink plenty of water.****Most important symptoms and effects, both acute and delayed**

Symptoms: No significant reaction of the human body to the product known.

**Indication of any immediate medical attention and special treatment needed****| Treatment: Symptomatic treatment (decontamination, vital functions).**

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## 5. Fire-Fighting Measures

**Extinguishing media**

Suitable extinguishing media:

dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:  
carbon dioxide

### **Special hazards arising from the substance or mixture**

carbon monoxide, hydrogen chloride, Carbon dioxide, nitrogen oxides, organochloric compounds  
The substances/groups of substances mentioned can be released in case of fire.

### **Advice for fire-fighters**

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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## **6. Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### **Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

### **Methods and material for containment and cleaning up**

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

### **Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## **7. Handling and Storage**

### **Precautions for safe handling**

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities: Segregate from foods and animal feeds. Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

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Storage stability:  
Storage duration: 36 Months

**Specific end use(s)**

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## 8. Exposure Controls/Personal Protection

### Control parameters

#### Components with workplace control parameters

1332-58-7: Kaolin

67375-30-8: .alpha.-cypermethrin (ISO); racemate comprising (R)-.alpha.-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate;

(S)-.alpha.-cyano-3-phenoxybenzyl

(1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

577-11-7: Docusate sodium

### Exposure controls

#### Personal protective equipment

Respiratory protection:  
Respiratory protection not required.

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Form: powder, free flowing  
Colour: white

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Odour:	odourless
Odour threshold:	not determined
pH value:	approx. 4 - 10
Melting point:	The product has not been tested.
Boiling range:	The product has not been tested.
Flash point:	not applicable
Evaporation rate:	not applicable
Flammability:	not determined
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Vapour pressure:	The product has not been tested.
Density:	not determined
Relative vapour density (air):	not determined
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	not applicable
Self ignition:	not determined
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	not applicable
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.

**Other information**Bulk density: approx. 343 kg/m<sup>3</sup>

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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**10. Stability and Reactivity****Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

**Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

**Possibility of hazardous reactions**

No hazardous reactions if stored and handled as prescribed/indicated.

**Conditions to avoid**

See MSDS section 7 - Handling and storage.

**Incompatible materials**

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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**11. Toxicological Information****Information on toxicological effects**Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): > 3,300 mg/kg

LD50 rat (dermal): > 2,000 mg/kg

*Information on: Alpha-Cypermethrin*

*Experimental/calculated data:*

*LC50 rat (by inhalation): 2.29 mg/l 4 h (OECD Guideline 403)*

*Tested as dust aerosol.*

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Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Germ cell mutagenicity



**Assessment of mutagenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

**Carcinogenicity****Assessment of carcinogenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

**Reproductive toxicity****Assessment of reproduction toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

**Developmental toxicity****Assessment of teratogenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)****Assessment of repeated dose toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components.

**| *Information on: Alpha-Cypermethrin*****| *Assessment of repeated dose toxicity:*****| *Repeated oral exposure may affect certain organs. Damages the peripheral nerve system.***  
-----**Other relevant toxicity information**

Misuse can be harmful to health. May cause paraesthesia.

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**12. Ecological Information****Toxicity****Assessment of aquatic toxicity:**

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

***Information on: alpha-Cypermethrin******Toxicity to fish:******LC50 (96 h) 0.0028 mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 84/449/EEC, C.1)***  
-----***Information on: alpha-Cypermethrin******Aquatic invertebrates:******EC50 (48 h) 0.0003 mg/l, Daphnia magna (OECD Guideline 202, part 1)***

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*Information on: alpha-Cypermethrin**Aquatic plants:**EC50 (72 h) > 1 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201)**EC50 (7 d) > 0.00139 mg/l (growth rate), Lemna gibba*  
-----*Information on: alpha-Cypermethrin**Chronic toxicity to fish:***|** *No observed effect concentration (34 d) 0,03 µg/l, Pimephales promelas*  
-----*Information on: alpha-Cypermethrin**Chronic toxicity to aquatic invertebrates:***|** *No observed effect concentration (21 d), 0,03 µg/l, Daphnia magna*  
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### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: alpha-Cypermethrin**Assessment biodegradation and elimination (H<sub>2</sub>O):**Not readily biodegradable (by OECD criteria). -----*

### **Bioaccumulative potential**

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

**|** *Information on: Alpha-Cypermethrin**Bioaccumulation potential:***|** *Bioconcentration factor: 910, Cyprinus carpio*  
**|** *Accumulation in organisms is not to be expected.*  
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### **Mobility in soil (and other compartments if available)**

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

**|** *Information on: Alpha-Cypermethrin**Assessment transport between environmental compartments:***|** *Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.*  
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### **Results of PBT and vPvB assessment**

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The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

### Additional information

Other ecotoxicological advice:  
Do not discharge product into the environment without control.

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## 13. Disposal Considerations

### Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:  
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Land transport

ADR

Hazard class:	9
Packing group:	III
ID number:	UN 3077
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains ALPHA-CYPERMETHRIN)

RID

Hazard class:	9
Packing group:	III
ID number:	UN 3077
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains ALPHA-CYPERMETHRIN)

### Inland waterway transport

ADN

Hazard class:	9
Packing group:	III
ID number:	UN 3077

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Hazard label: 9, EHSM  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (contains ALPHA-CYPERMETHRIN)

**Sea transport****IMDG**

Hazard class: 9  
 Packing group: III  
 ID number: UN 3077  
 Hazard label: 9, EHSM  
 Marine pollutant: YES  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (contains ALPHA-CYPERMETHRIN)

**Air transport****IATA/ICAO**

Hazard class: 9  
 Packing group: III  
 ID number: UN 3077  
 Hazard label: 9, EHSM  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (contains ALPHA-CYPERMETHRIN)

**15. Regulatory Information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

**Chemical Safety Assessment**

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

**16. Other Information**

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

T	Toxic.
N	Dangerous for the environment.
Xi	Irritant.
20	Harmful by inhalation.
25	Toxic if swallowed.
37/38	Irritating to respiratory system and skin.
48/22	Harmful: danger of serious damage to health by prolonged exposure if

	swallowed.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
38	Irritating to skin.
41	Risk of serious damage to eyes.
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Acute Tox.	Acute toxicity
STOT SE	Specific target organ toxicity — single exposure
STOT RE	Specific target organ toxicity — repeated exposure
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
H332	Harmful if inhaled.
H301	Toxic if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H335	May cause respiratory irritation.
H373	May cause damage to organs ( ) through prolonged or repeated exposure.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.