# Safety data sheet



## 1. Substance/preparation and company identification

### FENDONA® 15 SC

Use: biocide

Company:
BASF New Zealand Limited
3 Airpark Drive, Airport Oaks, Manukau
P.O. Box 407, Auckland 1015, NEW ZEALAND
Telephone: +64 9 255-4300
Telefax number: +64 9 255-4307

Emergency information:
National Poisons Centre: 0800 764 766
BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)
BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

## 2. Hazard identification

The product contains: alpha-Cypermethrin
May cause paraesthesia.

**Classification:** Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (New Zealand)

**Subclasses:** Subclass 6.1 Category E - Substance which are acutely toxic
Subclass 9.1 Category A - Substance that are ecotoxic to aquatic environment

## 3. Composition/information on ingredients

**Chemical nature**

biocide, insecticide, suspension concentrate (SC)

Hazardous ingredients

Alpha-Cypermethrin
Content (W/W): 1.5 %
CAS Number: 67375-30-8
INDEX-Number: 607-422-00-X
Hazard symbol(s): T, N
R-phrase(s): 20, 25, 37/38, 48/22, 50/53

propane-1,2-diol
Content (W/W): < 15 %
CAS Number: 57-55-6
EC-Number: 200-338-0

The wording of the hazard symbols and R-phrases is specified in chapter 16 if dangerous ingredients are mentioned.

## 4. First-Aid Measures

General advice:
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 immediately and then drink plenty of water, induce vomiting, seek medical attention.

Note to physician:
Symptoms: numbness and tingling of hands and feet, convulsions
Treatment: Symptomatic treatment (decontamination, vital functions).

## 5. Fire-Fighting Measures

Suitable extinguishing media:
water spray, foam, dry powder, carbon dioxide

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

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

## 6. Accidental Release Measures

Personal precautions:
Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.

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

Methods for cleaning up or taking up:
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
For large amounts: Dike spillage. Pump off product.
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. Incinerate or take to a special waste disposal site in accordance with local authority regulations.

## 7. Handling and Storage

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:
No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Storage

Segregate from foods and animal feeds.
Further information on storage conditions: Keep away from heat. Protect from direct sunlight. Protect against moisture.

Protect from temperatures below: 0 °C

The product can crystallize below the limit temperature.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## 8. Exposure controls and personal protection

Components with occupational exposure limits

propane-1,2-diol, 57-55-6;
TWA value 474 mg/m3 ; 150 ppm (OEL (NZ)), Vapor and particulates
TWA value 10 mg/m3 (OEL (NZ)), Particulate
TWA value 10 mg/m3 (OEL (NZ)), Particulate
TWA value 474 mg/m3 ; 150 ppm (OEL (NZ)), Vapor and particulates

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:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Avoid contact with the skin, eyes and clothing. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## 9. Physical and Chemical Properties

| | |
|---|---|
| Form: | liquid, suspension |
| Colour: | white |
| Odour: | odourless |
| pH value: | approx. 6 - 8<br>(10 g/l, 20 °C) |
| Freezing point: | -5.9 °C |
| onset of boiling: | approx. 100 °C<br>(1,013 hPa) |

| | | |
|---|---|---|
| Flash point: | | (DIN EN 22719; ISO 2719) |
| | No flash point - Measurement made up to the boiling point. | |
| Flammability: | does not ignite | |
| Lower explosion limit: | | |
| | not determined | |
| Upper explosion limit: | | |
| | not determined | |
| Ignition temperature: | 425 °C<br>The product has not been tested.<br>The statement has been derived from substances/products of a similar structure or composition. | |
| Explosion hazard: | not explosive | |
| Fire promoting properties: | not fire-propagating | |
| Vapour pressure: | approx. 23.4 hPa<br>(20 °C)<br>Information applies to the solvent. | |
| Density: | approx. 1.00 - 1.05 g/cm3<br>(20 °C) | (OECD Guideline 109) |
| Relative vapour density (air): | | |
| | not determined | |
| Solubility in water: | dispersible | |
| Partitioning coefficient n-octanol/water (log Pow): | | |
| | not applicable | |
| Viscosity, dynamic: | 21 mPa.s<br>(40 °C, 100 1/s) | (OECD 114) |
| Viscosity, kinematic: | 20.6 mm2/s<br>(40 °C) | |

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

## 10. Stability and Reactivity

Conditions to avoid:
See MSDS section 7 - Handling and storage.

Thermal decomposition: not determined

Substances to avoid:
strong bases, strong acids, strong oxidizing agents

Corrosion to metals: mild steel
tin

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

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

## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

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

LC50 rat (by inhalation): > 2.06 mg/l 4 h
No mortality was observed.

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

### Irritation

Assessment of irritating effects:
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to the eyes. Not irritating to the skin.

Primary irritations of the mucous membrane rabbit: non-irritant

### Sensitization

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

modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies.

### Repeated dose toxicity

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.
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### Genetic toxicity

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.

### Other relevant toxicity information

Misuse can be harmful to health. May cause paraesthesia.

The product contains: alpha-Cypermethrin
May cause paraesthesia.

## 12. Ecological Information

### Ecotoxicity

Assessment of aquatic toxicity:
Very toxic to aquatic organisms.

Information on: Alpha-Cypermethrin
Toxicity to fish:
LC50 (96 h) 0.93 µg/l, Pimephales promelas (OPP 72-1 (EPA-Guideline), Flow through.)
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Information on: Alpha-Cypermethrin
Aquatic invertebrates:
EC50 (48 h) 12,6 ng/L, Chironomus riparius (OECD Guideline 202, part 1, static)
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Information on: Alpha-Cypermethrin
Aquatic plants:

EC50 (72 h) > 1 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static)

No observed effect concentration (7 d) >= 1,39 µg/L (growth rate), Lemna gibba (OECD guideline 221, static)

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Information on: Alpha-Cypermethrin
Chronic toxicity to fish:
No observed effect concentration (34 d) 0,03 µg/L, Pimephales promelas (OPP 72-4 (EPA-Guideline), Flow through.)

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Information on: Alpha-Cypermethrin
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (28 d), 0,024 µg/L, Chironomus riparius (OECD 219, static)

No observed effect concentration (21 d), 0,03 µg/L, Daphnia magna (OPP 72-4 (EPA-Guideline), semistatic)

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## Mobility

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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## Persistence and degradability

Assessment biodegradation and elimination (H2O):
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 (H2O):
Not readily biodegradable (by OECD criteria). Poorly biodegradable.

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## Bioaccumulation 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: 155 - 910 (73 d), Cyprinus carpio (OECD Guideline 305 C)
Accumulation in organisms is not to be expected.

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### Additional information

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

## 13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

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

## 14. Transport Information

**Domestic transport:**

| | |
|---|---|
| Hazard class: | 9 |
| Packing group: | III |
| ID number: | UN 3082 |
| Hazard label: | 9, EHSM |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ALPHA-CYPERMETHRIN) |

**Further information**
Hazchem Code:3Z
IERG Number:47

**Sea transport**
IMDG

| | |
|---|---|
| Hazard class: | 9 |
| Packing group: | III |
| ID number: | UN 3082 |
| Hazard label: | 9, EHSM |
| Marine pollutant: | YES |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ALPHA-CYPERMETHRIN) |

**Air transport**
IATA/ICAO

| | |
|---|---|
| Hazard class: | 9 |
| Packing group: | III |
| ID number: | UN 3082 |
| Hazard label: | 9, EHSM |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ALPHA-CYPERMETHRIN) |

## 15. Regulatory Information

**Classification:** Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (New Zealand)

**Subclasses:** Subclass 6.1 Category E - Substance which are acutely toxic
Subclass 9.1 Category A - Substance that are ecotoxic to aquatic environment

**Other regulations**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

**Registration status:**

| | |
|---|---|
| NZIOC, NZ | released / listed |
| GrpStd HSR000286 | |

## 16. Other Information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 3:

| | |
|---|---|
| T | Toxic. |
| N | Dangerous for the environment. |
| 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. |

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

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.