We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Product name:
Fendona 10 SC

Use: biocide, insecticide

Manufacturer/supplier:
BASF Vietnam Co. Ltd.
Level 23, Deutsches Haus, 33 Le Duan,
Sai Gon Ward, Ho Chi Minh City, Vietnam
Telephone: +84 28 3824 3833
Telefax number: +84 28 3824 3832
E-mail address: minh-triet.thieu@basf.com

Emergency information:
BASF Emergency Advice Number: 18001703 (within Vietnam)
International emergency number:
Telephone: +49 180 2273-112
Telefax number: +84 28 3824 3832

2. Hazard identification

Classification of the substance and mixture:
Acute toxicity: Cat.5 (oral)
Hazardous to the aquatic environment - acute: Cat.1
Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:



Signal Word:
Warning

Hazard Statement:

H303	May be harmful if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P273	Avoid release to the environment.
P262	Do not get in eyes, on skin, or on clothing.

Precautionary Statements (Response):

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:
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.

May cause paraesthesia. Contains:
alpha-cypermethrin
May produce an allergic reaction. Contains:
1,2-benzisothiazol-3(2H)-one

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

Biocidal product, insecticide, suspension concentrate (SC)

Hazardous ingredients

alpha-cypermethrin

Content (W/W): 9.6 %	Acute Tox.: Cat. 4 (Inhalation - dust)
CAS Number: 67375-30-8	Acute Tox.: Cat. 3 (oral)
	Skin Corr./Irrit.: Cat. 3
	STOT SE: Cat. 3 (irr. to respiratory syst.)
	STOT RE (Nervous system): Cat. 2
	Aquatic Acute: Cat. 1
	Aquatic Chronic: Cat. 1
	M-factor acute: 10000
	M-factor chronic: 1000

1,2-benzisothiazol-3(2H)-one

Content (W/W): < 0.05 %	Acute Tox.: Cat. 2 (Inhalation - dust)
CAS Number: 2634-33-5	Acute Tox.: Cat. 4 (oral)
	Skin Irrit.: Cat. 2
	Eye Dam.: Cat. 1
	Skin Sens.: Cat. 1A
	Aquatic Acute: Cat. 1
	Aquatic Chronic: Cat. 1
	M-factor acute: 1
	M-factor chronic: 1

propane-1,2-diol

Content (W/W): < 20 %
CAS Number: 57-55-6

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

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:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far
Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

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, hydrogen bromide, nitrogen oxides, organochloric compounds, phosphorus oxides, cyanides, sulfur oxides, halogenated 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:
Do not breathe vapour/spray.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 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. Wear suitable protective equipment.

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

Storage

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

Storage stability:
Storage duration: 60 Months

Protect from temperatures below: -10 °C
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
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

alpha-Cypermethrin, 67375-30-8;
TWA value 0.11 mg/m3 (BASF recomm. occupational exposure limit)

Personal protective equipment

Respiratory protection:
Respiratory protection not required.

Hand protection:
Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

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. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	liquid
Colour:	white
Odour:	characteristic
Odour threshold:	Not determined due to potential health hazard by inhalation.

pH value:	approx. 6 - 8 (5 %(m), 25 °C)	
Melting temperature:	approx. 0 °C Information applies to the solvent.	
boiling temperature:	approx. 100 °C Information applies to the solvent.	
Flash point:	Non-flammable.	(ISO 2719)
Flammability (solid/gas):	not flammable	
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Ignition temperature:	Based on the water content the product does not ignite.	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.	
Density:	approx. 1.04 g/cm3 (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures	
Viscosity, dynamic:	approx. 103 - 171 mPa.s (25 °C, 10 1/s)	
Viscosity, kinematic:	approx. 131.73 mm2/s (20 °C)	(calculated (from dynamic viscosity))

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

10. Stability and Reactivity

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

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

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

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.

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

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

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): 4,932 mg/kg

Acute inhalation toxicity

LC50 rat (by inhalation): > 5.5 mg/l 4 h (OECD Guideline 403)
An aerosol was tested.

Acute dermal toxicity

LD50 rat (dermal): > 2,000 mg/kg
No mortality was observed.

Assessment of acute toxicity

Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
(Further) symptoms and / or effects are not known so far

Irritation

Assessment of irritating effects:
Not irritating to eyes and skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Assessment of sensitization:
No sensitizing effect.

Experimental/calculated data:
Guinea pig maximization test guinea pig: Non-sensitizing.

Germ cell mutagenicity

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

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.

Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

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.

Aspiration hazard

not applicable

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
Very toxic to aquatic life with long lasting effects.
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) 0.00093 mg/l, Pimephales promelas (OPP 72-1 (EPA-Guideline), Flow through.)

Information on: alpha-cypermethrin
Aquatic invertebrates:
EC50 (48 h) 12,6 ng/l, Chironomus riparius

Information on: alpha-cypermethrin
Aquatic plants:
EC50 (7 d) > 0.00139 mg/l (growth rate), Lemna gibba (OECD Guideline 201)

No observed effect concentration (7 d) > 0.00139 mg/l (growth rate), Lemna gibba (OECD Guideline 221, static)

EC50 (72 h) > 0.027 mg/l (growth rate), Anabaena flos-aquae (OECD Guideline 201)

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.)

Information on: alpha-cypermethrin
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0,03 µg/L, Daphnia magna (OPP 72-4 (EPA-Guideline), semistatic)

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.

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).

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)

Additional information

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

13. Disposal Considerations

Information on disposal regulations: Must comply with regulations on hazardous waste such as:

- Decree No. 08/2022/ND-CP of the Government: detailing a number of articles of the Law on Environmental Protection.

- Circular No. 02/2022/TT-BTNMT of the Ministry of Natural Resources and Environment: detailing a number of articles of the Law on Environmental Protection.

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:

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALPHA-CYPERMETHRIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Sea transport
IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALPHA-CYPERMETHRIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport
IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALPHA-CYPERMETHRIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Other regulations

Legal information on safety, health and environment for chemicals:
Law on Chemicals No. 06/2007/QH12
Chemical Safety Sheets (SDS) are compiled in accordance with international regulations on chemical classification and labelling (GHS) as well as relevant applicable legal regulations:
- QCVN 05A:2020/BCT National Technical Regulation on safety in production, trading, use, preservation and transportation of hazardous chemicals.
- Amendment 1:2024 QCVN 05A:2020/BCT National technical regulation on safety in production, trading, use, preservation and transportation of hazardous chemicals.
- Decree No. 113/2017/ND-CP dated 09/10/2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals;
- Circular No. 32/2017/TT-BCT dated 28/12/2017 of the Ministry of Industry and Trade specifying and guiding the implementation of a number of articles of the Law on Chemicals and Decree No. 113/2017/ND-CP dated 09/10/2017 of the Government detailing and guiding the implementation of a number of articles of the Law on Chemicals;
- Decree No. 82/2022/ND-CP dated October 18, 2022 of the Government amending and supplementing a number of articles of the Government's Decree No. 113/2017/ND-CP dated October 09, 2017 detailing and guiding the implementation of a number of articles of the Law on Chemicals
- Circular No. 17/2022/TT-BCT dated October 27, 2022 of the Ministry of Industry and Trade amending and supplementing a number of articles of Circular No. 32/2017/TT-BCT dated December 28, 2017 of the Minister of Industry and Trade specifying and guiding the implementation of a number of articles of the Law on Chemicals and the Government's Decree No. 113/2017/ND-CP dated October 09, 2017 detailing and guiding the exam a number of articles of the Law on Chemicals
- Decree No. 161/2024 ND-CP dated December 18, 2024 of the Government regulating the list of dangerous goods, transportation of dangerous goods and the order and procedures for issuance of licenses and certificates of completion of training programs for drivers or escorts transporting dangerous goods on roads;
- Decree 34/2024/ND-CP dated 31/03/2024 regulating the list of dangerous goods, transporting dangerous goods by road motor vehicles and inland waterway vehicles
- Circular No. 37/2020/TT-BCT dated 30/11/2020 of the Ministry of Industry and Trade stipulating the list of dangerous goods that must be packed in the process of transporting and transporting dangerous goods by road, railway and inland waterway motor vehicles.

- Decree No. 71/2019/ND-CP dated August 30, 2019 of the Government stipulating the sanctioning of administrative violations in the field of chemicals and industrial explosives.

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

16. Other Information

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. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.