

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 1/12

(30769370/SDS_CPA_US/EN)

1. Identification

Product identifier used on the label

Fendona CS Controlled Release Insecticide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, insecticide

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713
USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 987311
EPA Registration number: 499-570

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Label elements

Pictogram:



Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 2/12

(30769370/SDS_CPA_US/EN)

Signal Word:
Warning

Hazard Statement:

H401 Toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P102 Keep out of reach of children.

P103 Read label before use.

Precautionary Statements (Prevention):

P262 Do not get in eyes, on skin, or on clothing.

Precautionary Statements (Response):

P391 Collect spillage.

Precautionary Statements (Disposal):

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

Hazards not otherwise classified

Labeling of special preparations (GHS):

May produce an allergic reaction. Contains: 1,2-benzisothiazol-3(2H)-one, mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

May cause paraesthesia. alpha-Cypermethrin

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

alpha-Cypermethrin

CAS Number: 67375-30-8

Content (W/W): 3.0 %

Synonym: No data available.

Diphenylmethane-4,4'-diisocyanate (MDI)

CAS Number: 101-68-8

Content (W/W): 0.1 - 1.0%

Synonym: Diphenylmethane diisocyanate; 4,4'-Methylenediphenyl diisocyanate

ethylenediamine

CAS Number: 107-15-3

Content (W/W): 0.1 - 1.0%

Synonym: 1,2-Ethanediamine; Ethylenediamine

bronopol

CAS Number: 52-51-7

Content (W/W): < 0.1%

Synonym: 2-Bromo-2-nitro-1,3-propanediol; Bronopol

Diphenylmethane Diisocyanate, isomers and homologues

CAS Number: 9016-87-9

Content (W/W): 0.1 - < 1.0%

Synonym: Isocyanic acid polymethylenepolyphenylene ester; Polymethylene

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 3/12

(30769370/SDS_CPA_US/EN)

polyphenylene isocyanate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

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

If on skin:

Wash thoroughly with soap and water

If in eyes:

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

If swallowed:

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

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrogen chloride, hydrogen bromide, nitrogen oxides, halogenated compounds, cyanides, silica compounds, sulfur oxides

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

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

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 4/12

(30769370/SDS_CPA_US/EN)

or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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 and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Protect contents from the effects of light. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

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

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Protect from temperatures below: 0 °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: 50 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 5/12

(30769370/SDS_CPA_US/EN)

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

No occupational exposure limits known.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

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. 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
Odour:	odourless
Odour threshold:	not applicable, odour not perceivable
Colour:	opaque
pH value:	approx. 5 - 7 (20 °C)
Melting point:	< 0 °C Information based on the main components.
Boiling point:	approx. 100 °C Information applies to the solvent.
Flash point:	No flash point - Measurement made up to the boiling point.
Flammability:	not highly flammable

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18
Version: 1.0

Page: 6/12
(30769370/SDS_CPA_US/EN)

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.
Autoignition:	Based on the composition, the product does not ignite
Vapour pressure:	The product has not been tested.
Density:	approx. 0.97 g/cm ³ (20 °C)
Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	No data available.
Solubility in water:	(20 °C) dispersible
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

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

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

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 SDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18
Version: 1.0

Page: 7/12
(30769370/SDS_CPA_US/EN)

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

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

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Inhalation

Type of value: LC50

Species: rat

Value: > 5 mg/l

No mortality was observed.

Dermal

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Assessment other acute effects

Assessment of STOT single:

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

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

Irritation / corrosion

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

Skin

Species: rabbit

Result: non-irritant

Eye

Species: rabbit

Result: non-irritant

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 substances/products of a similar structure or composition.

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18
Version: 1.0

Page: 8/12
(30769370/SDS_CPA_US/EN)

Buehler test
Species: guinea pig
Result: Non-sensitizing.

Aspiration Hazard

The product has not been tested. The statement has been derived from the properties of the individual components. No aspiration hazard expected.

Chronic Toxicity/Effects

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.

Information on: Diphenylmethane Diisocyanate, isomers and homologues

Assessment of repeated dose toxicity: The substance may cause damage to the lung even after repeated inhalation of low doses, as shown in animal studies.

Information on: bronopol

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

Information on: mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. Based on available Data, the classification criteria are not met.

Genetic toxicity

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

Information on: Diphenylmethane Diisocyanate, isomers and homologues

Assessment of mutagenicity: The substance was mutagenic in various test systems with microorganisms and cell cultures; however, these results could not be confirmed in tests with mammals.

Information on: bronopol

Assessment of mutagenicity: The substance was mutagenic in a mammalian cell culture test system. No mutagenic effect was found in various tests with bacteria and mammals.

Information on: ethylenediamine

Assessment of mutagenicity: In the majority of studies performed with microorganisms and in mammalian cell culture, a mutagenic effect was not found. A mutagenic effect was also not observed in in vivo tests. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

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

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 9/12

(30769370/SDS_CPA_US/EN)

Information on: Diphenylmethane Diisocyanate, isomers and homologues

Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure. IARC Group 3 (not classifiable as to human carcinogenicity).

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.

Teratogenicity

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 Information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Aquatic toxicity

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.

Toxicity to fish

Information on: alpha-cypermethrin

LC50 (96 h) 0.00093 mg/l, Pimephales promelas (OPP 72-1 (EPA-Guideline), Flow through.)

Aquatic invertebrates

Information on: alpha-cypermethrin

EC50 (48 h) 12,6 ng/l, Chironomus riparius

Aquatic plants

Information on: alpha-cypermethrin

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)

Chronic toxicity to fish

Information on: alpha-cypermethrin

No observed effect concentration (34 d) 0,03 µg/L, Pimephales promelas (OPP 72-4 (EPA-Guideline), Flow through.)

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18
Version: 1.0

Page: 10/12
(30769370/SDS_CPA_US/EN)

Chronic toxicity to aquatic invertebrates

Information on: alpha-cypermethrin

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

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.

Assessment biodegradation and elimination (H₂O)

Information on: alpha-cypermethrin

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.

Bioaccumulation potential

Information on: alpha-cypermethrin

Bioconcentration factor: 155 - 910 (73 d), Cyprinus carpio (OECD Guideline 305 C)

Mobility in soil

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

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions,

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 11/12

(30769370/SDS_CPA_US/EN)

contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

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)

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

Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

Safety Data Sheet

Fendona CS Controlled Release Insecticide

Revision date : 2020/05/18

Version: 1.0

Page: 12/12

(30769370/SDS_CPA_US/EN)

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

BASF Risk Assessment, CA Prop. 65:

Based on an evaluation of the product's composition and the use(s), this product does not require a California Proposition 65 Warning.

Labeling requirements under FIFRA

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

Causes moderate eye irritation.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

16. Other Information

SDS Prepared by:

BASF Agricultural Solutions US NA Product Regulations

SDS Prepared on: 2020/05/18

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

END OF DATA SHEET