

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12

Version: 1.2

Page: 1/12

(30692888/SDS_CPA_CA/EN)

1. Identification

Product identifier used on the label

Insure® Cereal FX4

Recommended use of the chemical and restriction on use

Recommended use*: fungicide

* 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 Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

PCP # 33210, 33211

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Hazards not otherwise classified

Labeling of special preparations (GHS):

May produce an allergic reaction. Contains: metalaxyl, 1,2-benzisothiazol-3(2H)-one

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

Contains 1,2-benzisothiazolin-3-one as a preservative.

Contains 2-methyl-4-isothiazolin-3-one as a preservative.

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 2/12
(30692888/SDS_CPA_CA/EN)

Contains 2-bromo-2-nitropropane-1,3-diol as a preservative.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Not WHMIS controlled.

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:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or 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, nitrogen oxides

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

Advice for fire-fighters

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 3/12
(30692888/SDS_CPA_CA/EN)

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 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

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.

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.

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.

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 4/12
(30692888/SDS_CPA_CA/EN)

Personal protective equipment

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: | suspension |
| Odour: | odourless |
| Odour threshold: | not applicable, odour not perceivable |
| Colour: | red |
| pH value: | approx. 6 - 8 (1 %(m), 23 °C) |
| Melting point: | approx. -8 °C |
| Boiling point: | approx. 100 °C |
| Flash point: | Information applies to the solvent. > 79 °C |
| Flammability: | 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. |
| Autoignition: | 475 °C |
| Vapour pressure: | approx. 23.4 hPa (20 °C) Information applies to the solvent. |

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 5/12
(30692888/SDS_CPA_CA/EN)

| | |
|---|---|
| Density: | approx. 1.07 g/cm ³ (20 °C) |
| Vapour density: | not applicable |
| Partitioning coefficient n-octanol/water (log Pow): | not applicable |
| <i>Information on: metalaxyl</i> | |
| Partitioning coefficient n-octanol/water (log Pow): | 1.53 (20 °C) |
| ----- | |
| Thermal decomposition: | 170 °C, 250 kJ/kg (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1. |
| Viscosity, dynamic: | approx. 59 mPa.s (approx. 20 °C) |
| Solubility in water: | 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:
not fire-propagating

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

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:

170 °C

(onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 6/12
(30692888/SDS_CPA_CA/EN)

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

Oral

Type of value: LD50
Species: rat (female)
Value: > 2,000 mg/kg

Inhalation

Type of value: LC50
Species: rat (male/female)
Value: > 5.9 mg/l
Exposure time: 4 h

Dermal

Type of value: LD50
Species: rat (male/female)
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: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit
Result: non-irritant

Eye

Species: rabbit
Result: 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.

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.

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 7/12
(30692888/SDS_CPA_CA/EN)

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: Fluxapyroxad

Assessment of repeated dose toxicity: Adaptive effects were observed after repeated exposure in animal studies.

Information on: Pyraclostrobin

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.

Information on: 1,2-benzisothiazol-3(2H)-one

Information on: metalaxyl

Assessment of repeated dose toxicity: Prolonged or repeated exposure may cause liver damage.

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.

Information on: Fluxapyroxad

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests.

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.

Information on: Triticonazole

Assessment of teratogenicity: The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

Information on: metalaxyl

Assessment of teratogenicity: Causes developmental effects in animals at high, maternally toxic doses.

Other Information

Misuse can be harmful to health.

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 8/12
(30692888/SDS_CPA_CA/EN)

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

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: Fluxapyroxad

LC50 (96 h) 0.29 mg/l, Cyprinus carpio (Fish test acute, semistatic)

LC50 (96 h) 0.546 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)

LC50 (96 h) 1.15 mg/l, Lepomis macrochirus (OECD Guideline 203, static)

LC50 (96 h) 0.466 mg/l, Pimephales promelas (OECD Guideline 203, static)

Information on: Pyraclostrobin

LC50 (96 h) 0.0062 mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: metalaxyl

LC50 (96 h) 132 mg/l, Oncorhynchus mykiss

Information on: Triticonazole

LC50 (96 h) > 3.6 mg/l, Oncorhynchus mykiss

Information on: Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-[2,4,6-tris(1-phenylethyl)phenoxy]-, ammonium salt

LC50 (96 h) 33 mg/l, Oncorhynchus mykiss

LC50 (96 h) < 99 mg/l, Lepomis macrochirus

Aquatic invertebrates

Information on: Fluxapyroxad

EC50 (48 h) 6.78 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Information on: Pyraclostrobin

EC50 (48 h) 0.016 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration.

Information on: metalaxyl

EC50 (48 h) 28 mg/l, Daphnia magna

EC50 (96 h) 25.7 mg/l, Americamysis bahia

EC50 (96 h) 4.6 mg/l, Crassostrea virginica

Information on: Triticonazole

EC50 (48 h) 9.0 mg/l, Daphnia magna

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 9/12
(30692888/SDS_CPA_CA/EN)

Information on: Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-[2,4,6-tris(1-phenylethyl)phenoxy]-, ammonium salt
EC50 (48 h) 24 mg/l, Daphnia magna

Aquatic plants

Information on: Fluxapyroxad
EC50 (72 h) 0.70 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)

Information on: Pyraclostrobin
EC50 (72 h) > 0.843 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)
The statement of the toxic effect relates to the analytically determined concentration.

Information on: Triticonazole
EC50 (96 h) > 1 mg/l (growth rate), Selenastrum capricornutum

Chronic toxicity to fish

Information on: Fluxapyroxad
No observed effect concentration (33 d) 0.0359 mg/l, Pimephales promelas (OECD Guideline 210, Flow through.)

Information on: Pyraclostrobin
No observed effect concentration (98 d) 0.00235 mg/l, Oncorhynchus mykiss (OECD Guideline 210, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Information on: metalaxyl
No observed effect concentration (30 d) 9.1 mg/l, Pimephales promelas

Chronic toxicity to aquatic invertebrates

Information on: Fluxapyroxad
No observed effect concentration (21 d) 0.5 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

Information on: Pyraclostrobin
No observed effect concentration (21 d) 0.004 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)
The details of the toxic effect relate to the nominal concentration.
No observed effect concentration (28 d) 0.00128 mg/l, Mysidopsis bahia (OPP 72-4 (EPA-Guideline), Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Information on: metalaxyl
No observed effect concentration (14 d) 0.1 mg/l, Daphnia magna

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)

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 10/12
(30692888/SDS_CPA_CA/EN)

Information on: Fluxapyroxad

Not readily biodegradable (by OECD criteria).

Information on: Pyraclostrobin

Not readily biodegradable (by OECD criteria).

Information on: metalaxyl

Not readily biodegradable (by OECD criteria).

Information on: Triticonazole

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.

Assessment bioaccumulation potential

Information on: metalaxyl

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Information on: Fluxapyroxad

*Bioconcentration factor: 36 - 37 (28 d), Lepomis macrochirus (OECD-Guideline 305)
Does not accumulate in organisms.*

Information on: Pyraclostrobin

Bioconcentration factor: 379 - 507 (37 d), Lepomis macrochirus (OECD Guideline 305 E)

Information on: Triticonazole

*Bioconcentration factor: 72.55
Significant accumulation in organisms is not to be expected.*

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: Fluxapyroxad

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

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 11/12
(30692888/SDS_CPA_CA/EN)

Information on: Triconazole

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Information on: Pyraclostrobin

*The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is expected.*

Information on: metalaxyl

No data available.

Additional information

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

13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

Container disposal:

Rinse the container or liner as needed for disposal. Add rinsate to spray tank. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Consult the product label for additional details.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

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 TRITICONAZOLE, FLUXAPYROXAD) |

Air transport

IATA/ICAO

| | |
|----------------|---------|
| Hazard class: | 9 |
| Packing group: | III |
| ID number: | UN 3082 |

Safety Data Sheet

Insure® Cereal FX4

Revision date : 2018/10/12
Version: 1.2

Page: 12/12
(30692888/SDS_CPA_CA/EN)

| | |
|-----------------------|---|
| Hazard label: | 9, EHSM |
| Proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TRITICONAZOLE, FLUXAPYROXAD) |

15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection DSL, CA released / exempt

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2018/10/12

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.

Insure® Cereal FX4 is a registered trademark of BASF Canada or BASF SE
END OF DATA SHEET