



SAFETY DATA SHEET

Revision Number: 5.0
Revision Date: Sep 13, 2016

Section 1 - Identification

Product Identifier: Fenstro™ FC

Other means of Identification: Azoxystrobin / Bifenthrin LFF Mixed SC

Recommended use: Refer to product label for use information

Manufacturer/Supplier: Vive Crop Protection Inc., 700 Bay St. #1100, Toronto, ON M5G 1Z6, Canada

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Section 2 – Hazard Identification

Classification:

The following hazard classification is in accordance with **29 CFR 1910.1200 [OSHA HCS 2012]** in the United States of America, and **WHMIS 2015** in Canada.

Acute Toxicity - 4 (Oral)

Acute Toxicity – 4 (Inhalation)

Eye Irritation – 2B

Carcinogenicity - 2

Acute Hazards to the Aquatic Environment – 1

Long-Term Hazards to the Aquatic Environment – 1

Label Elements, Including Precautionary Statements:



Signal Word: Warning

EPA Pesticide Signal Word: Warning

Hazard Statements:

H302 – Harmful if swallowed

H320 – Causes eye irritation

H332 – Harmful if inhaled

H351 – Suspected of causing cancer

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P201 – Obtain special instructions before use

P202 – Do not handle until all safety precautions have been read and understood

P264 – Wash thoroughly after handling

P270 – Do not eat, drink or smoke when using this product

P271 – Use only outdoors or in a well-ventilated area

P273 – Avoid release to the environment

P281 – Use personal protective equipment as required

Other Hazards Which do not Result in Classification:

None

Section 3: Composition/Information on Ingredients

Component A: Azoxystrobin

CAS 131860-33-8, 10.9 % (w/w)

Component B: Bifenthrin

CAS 82657-04-3, 5.8 % (w/w)

Component C: The specific chemical identity and percentage composition of this component is being withheld as a trade secret under 29 CFR 1910.1200(i).

Component D: The specific chemical identity and percentage composition of this component is being withheld as a trade secret under 29 CFR 1910.1200(i).

Contains other ingredients not otherwise classified as hazardous or present in concentrations which warrant inclusion in this SDS.

Section 4 – First-Aid Measures

Ingestion:

P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 – Rinse mouth

Skin Contact:

P302 + P352 – IF ON SKIN: Wash with plenty of water

P332 + P313 – If skin irritation occurs: Get medical attention

P362 + P364 – Take off contaminated clothing and wash it before reuse

Inhalation:

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 – Call a POISON CENTER or physician if you feel unwell

Eye Contact:

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 – If eye irritation persists: Get medical attention

Symptoms/Effects, Acute and Delayed:

Ingestion or inhalation may cause incoordination, tremors, salivation, vomiting, diarrhea, respiratory tract pain, headache, dizziness, and irritability to sound and touch. Dermal exposure may cause tingling sensations, rash, redness, irritation, or inflammation. May cause eye pain.

Section 5 – Fire Fighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Specific hazards: May produce toxic fumes including carbon oxides, nitrogen oxides, hydrogen chloride gas, hydrogen fluoride

Special protective equipment: Wear self contained breathing apparatus for fire fighting

Section 6 – Accidental Release Measures

Personal Precautions: Wear respiratory protection. Wear protective gloves/protective clothing. Do not breathe mist/spray. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environment Precautions: Do not let product enter drains. Discharge into the environment must be avoided.

Methods and Materials for Containment and Cleaning Up: Absorb using inert materials and dispose of in accordance with local regulations.

Section 7 – Handling and Storage

Precautions for Safe Handling:

P264 – Wash thoroughly after handling

P261 – Avoid breathing dust/mist/spray

P270 – Do not eat, drink or smoke when using this product

P271 – Use only outdoors or in a well-ventilated area

P273 – Avoid release to the environment

Conditions for Safe Storage:

P405 - Store locked up

Avoid extreme temperatures

Store in cool, dry places and avoid excess heat.

Section 8 - Exposure Controls/Personal Protection:

Exposure limits have not been set for the formulated product. The following limits and controls are based on available data for bifenthrin.

Control Parameters:

OSHA PEL:	Not established
ACGIH TLV:	Not established
Acceptable Operator Exposure Level (AOEL):	0.0075 mg/kg/day
NTP/IARC/OSHA Carcinogen	No

Engineering Controls:

This product is intended to be used outdoors. If necessary, provide local exhaust ventilation and use appropriate containment procedures to maintain airborne levels at a safe concentration.

Personal Protective Equipment:

Applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Hygiene Measures – Avoid contact with skin, eyes and clothing. Do not breathe dust or spray. Wash hands after handling the product. Do not eat, drink, or smoke when using this product.

Section 9 – Physical and Chemical Properties

Appearance:	Off White Liquid
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point:	Not available
Freezing point:	Not available
Boiling point:	Not available
Flash point:	Not available
Evaporation rate:	Not available
Flammability:	Not available
Lower explosion limit:	Not available
Upper explosion limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Solubility:	Not available
Partition coefficient:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	non-Newtonian

Section 10 –Stability and Reactivity

Reactivity: Not compatible with alkaline materials

Chemical Stability: Relatively stable in neutral and weakly basic media

Possibility of Hazardous Reactions: When heated to decomposition, will emit toxic vapors of fluorine and chlorine

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Conditions to Avoid: High temperatures

Incompatible Materials: Alkaline materials

Hazardous Decomposition Products: No data Available. In the event of a fire, see section 5

Section 11 – Toxicological information:

Acute toxicity:

Oral LD50 rat:	550 mg/kg
Dermal LD50 rabbit	> 2000 mg/kg
Inhalation LC50 (4 hour) rat:	> 2.02 mg/L

Skin Corrosion/Irritation:

No irritation

Serious Eye Damage/Irritation:

Rabbit:	Significant conjunctival irritant fully reversible within 1 week
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Dermal Sensitization:

Guinea pig:	Not a sensitizer
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Germ Cell Mutagenicity:

No data available

Carcinogenicity:

Not classified as carcinogenic by IARC or ACGIH. Listed as possible human carcinogen (Category C) by the US-EPA HED-CPRC¹.

Reproductive Toxicity:

Not a developmental or reproductive toxicant

STOT-Single Exposure:

No data available

STOT-Repeated Exposure:

No data available

Aspiration Hazard:

¹ http://npic.orst.edu/chemicals_evaluated.pdf

No data available

Acute Exposure Symptoms: Acute exposure may lead to tremors, twitching, uncoordinated movement/ataxia, convulsions and skin irritation/rash, respiratory tract pain, eye pain, headache or dizziness.

Chronic Exposure Symptoms: Chronic exposure may lead to tremors, twitching, uncoordinated movement/ataxia, and convulsions.

Interactions: None known

Section 12 – Ecological Information:

While no additional ecotoxicity effects have been determined for this mixture. It is recommended that this material be treated as hazardous material and precautions be taken to ensure this material is not released into the environment. The following information is based on the testing bifenthrin alone.

Toxicity:

Birds – Acute LD50:	1800 mg/kg
Birds – Dietary LD50:	4450 mg/kg feed
Fish – Acute 96 hour LC50:	2.6 µg/L
Fish – Chronic 30 Day NOEC:	0.12 µg/L
Aquatic invertebrate – Acute EC50:	1.1 µg/L
Aquatic crustaceans – Acute LC50:	0.012 µg/L
Algae – Acute 72 hour EC50:	0.882 mg/L
Honeybees – Acute 48 hour LD50:	0.1 µg/bee
Earthworms – Acute 14 day LC50:	> 8 mg/kg

Persistence and degradability

Soil degradation (aerobic) DT50 field:	26
Aqueous photolysis, pH 7, DT50:	255
Aqueous hydrolysis, pH 5-9, DT50:	Stable

Bioaccumulative potential

BCF: 1703

Section 13 – Disposal:

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

Dangerous to the environment. Avoid all releases to sewer.

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Section 14 – Transportation Information:

DOT (US)

UN-Number: 3352
Class: 6.1
Packing Group: III
Proper Shipping Name: Pyrethroid pesticide, liquid, toxic (Bifenthrin)
Other: Marine Pollutant (49 CFR 171.4)

Exemptions

- Marine pollutant categorization does not apply to non-bulk packagings transported by motor vehicle, rail car or aircraft.
- Marine pollutant categorization does not apply to single or combination packaging containing a net quantity per single or inner packaging of 5 L or less.

IATA

UN-Number: 3352
Class: 6.1
Packing Group: III
Proper Shipping Name: Pyrethroid pesticide, liquid, toxic (Bifenthrin)
Other: Marine Pollutant

Section 15 – Regulatory Information:

FIFRA:

This mixture is a pesticide product as per the United States 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 (SDS) and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

- Harmful if swallowed.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Harmful if absorbed through skin.
- Causes moderate eye irritation.
- Avoid contact with skin, eyes or clothing.

- Remove and wash contaminated clothing before reuse.

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Section 16 – Other Information:

LEGAL NOTICE

Vive Crop Inc. requests all users of this product to study this Safety Data Sheet (SDS) and become aware of all product hazards and safety information. The data in this SDS relate only to the specific product designated herein and do not relate to use of such product in combination with any other material or in any process. To promote the safe use of this product, all users should notify their employees, agents and contractors of the information in this SDS and any other product hazards and safety information.

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PREPARATION INFORMATION

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