SAFETY DATA SHEET
Revision Number: 3.2
Revision Date: Jan 30, 2019

Section 1 – Identification
Product Identifier: Bifender FC Insecticide
Recommended use: Refer to product label for use information
Manufacturer/Supplier: Vive Crop Protection Inc., 6275 Northam Drive Suite 1, Mississauga, ON L4V 1Y8, Canada
Web: http://www.vivecrop.com
Technical Assistance: support@vivecrop.com
Sales enquiries: sales@vivecrop.com
Phone: +1-416-260-8889; 1-888-760-0187
24-Hour Emergency Phone: ChemTel Inc.
North America: 1-800-255-3924
Outside North America: +1-813-248-0585

Section 2 – Hazards 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 – 3 (Oral)
Acute Toxicity – 4 (Inhalation)
Skin Irritation – 3
Eye Irritation – 2B
Carcinogenicity – 2
Acute Hazard to the Aquatic Environment – 1
Long-Term Hazards to the Aquatic Environment – 1
Label Elements, Including Precautionary Statements:

Signal Word: Danger, Warning
EPA Pesticide Signal Word: Warning

Hazard Statements:
H301 – Toxic if swallowed;
H316 – Causes mild skin irritation;
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;
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;
P280 – Wear protective gloves;
P281 – Use personal protective equipment as required.

Other Hazards Which do not Result in Classification: None

Section 3 – Composition/Information on Ingredients
Component A: Bifenthrin
CAS 82657-04-3, 19.3 % (w/w)

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

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).

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 + P330 – IF SWALLOWED: Immediately call a POISON CENTER or physician; 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, and irritability to sound and touch.
Dermal exposure may cause tingling sensations, rash, redness, irritation, or inflammation.

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 firefighting.

Section 6 – Accidental Release Measures

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
GHS 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: Avoid extreme temperatures.

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

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 other handlers (other than mixers and loaders) must wear:
• Long-sleeved shirt and long pants
• Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
• Shoes plus socks
Mixers and Loaders must wear:
• Long-sleeved shirt and long pants
• Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
• Shoes plus socks
• Protective eyewear

Section 9 – Physical and Chemical Properties
Appearance: Pale beige
Odor: Moderate unsaturated
Odor threshold: Not available
pH: 6 - 8
Melting point: Not available
Freezing point: Not available
Boiling point: Not available
Flash point: Not available
Evaporation rate: Not available
Flammability (solid, gas): Not available
Lower explosive limit: Not available
Upper explosive limit: Not available
Vapor pressure: Not available
Vapor density: Not available
Relative Density: 1.05 – 1.11
Solubility: Not available
Partition coefficient (n-octanol/water): 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
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Possibility of Hazardous Reactions: When heated to decomposition, will emit toxic vapors of fluorine and chlorine

Conditions to Avoid: High temperatures, strong oxidizers

Incompatible Materials: Alkaline materials

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

Section 11 – 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:
PS01 – Dispose of contents/container in accordance with local/regional/national/international regulations.
Dangers to the environment. Avoid all releases to sewer. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. These wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

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: 3532
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. May be fatal 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.

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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