

**1. PRODUCT AND COMPANY IDENTIFICATION****Identification of the substance or mixture**

**Product Name** FARMWORKS® INDOOR/OUTDOOR INSECT CONCENTRATE  
**EPA Reg. No.** 70506-24-84009  
**Chemical Name** Bifenthrin technical  
 Glycerin

**Use of the Substance/Mixture**

**Recommended Use** Insecticide

**Company/Undertaking Identification**

**Distributed by** Ragan & Massey, Inc.  
 101 Ponchatoula Parkway  
 Ponchatoula, Louisiana 70454  
 United States

**Emergency and contact telephone numbers**

<b>Emergency telephone number</b>	<b>1 (800) 434-9300</b>	<b>CHEMTREC® (24 hrs)</b>
	<b>1 (703) 527-3887</b>	
	<b>1 (800) 222-1222</b>	<b>Poison Control Center</b>
<b>Contact telephone number</b>	<b>1 (800) 264-5281</b>	<b>Product Information</b>
	<b>1 (985) 386-6042</b>	

**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4

**Label Elements****Emergency Overview****WARNING****HAZARD STATEMENTS**

HARMFUL IF SWALLOWED  
 HARMFUL IN CONTACT WITH SKIN  
 HARMFUL IF INHALED



**Appearance** Off-white

**Physical State** Liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not get in eyes, on skin, or on clothing  
 Use only outdoors and in well ventilated areas

IF ON SKIN: Wash with plenty of soap and water  
 Call a POISON CENTER or doctor if you feel unwell  
 Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in position comfortable to breathing  
 Call a POISON CENTER or doctor if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards Not Otherwise Classified (HNOC)

#### OTHER INFORMATION

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Bifenthrin technical	82657-04-3	7.9	

### 4. FIRST AID MEASURES

#### First Aid Measures

**Eye contact** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin contact** Rinse skin immediately with plenty of water for 15-20 minutes. Remove and wash contaminated clothing before re-use. Call a poison control center or doctor for treatment advice.

**Inhalation** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately.

**Ingestion** Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

#### Most Important Symptoms and Effects, Both Acute and Delayed

**Most important symptoms** No information available

and effects

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** This product contains a pyrethroid. Treatment is symptomatic and supportive.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available

**Specific Hazards Arising from the Chemical**

No information available.

**Hazardous combustion products** Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Chlorine. Hydrogen chloride. Hydrogen fluoride.

**Explosion data**

**Protective equipment and precautions for firefighters**

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal precautions** Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition.

**Environmental Precautions**

**Environmental Precautions** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

**Methods and Material for Containment and Cleaning Up**

**Methods for Clean-up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling** Keep out of reach of children. Keep away from heat, sparks and open flame. No smoking.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

**Incompatible materials** No materials to be especially mentioned.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Controls</b>	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.
<b><u>Personal protective equipment</u></b>	
<b>Eye / face protection</b>	Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.
<b>Skin protection</b>	Protective gloves. Lightweight protective clothing.
<b>Respiratory protection</b>	Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.
<b>General Hygiene Considerations</b>	Do not eat, drink or smoke when using this product. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Slight
<b>Appearance</b>	Off-white	<b>Color</b>	Not available
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Property</u></b>	<b><u>Values</u></b>
<b>pH</b>	6	<b>Lower Flammability Limit</b>	Not available
<b>Melting Point / Freezing Point</b>	7°C / 45°F	<b>Vapor Pressure</b>	Not available
<b>Boiling Point / Range</b>	Not available	<b>Vapor Density</b>	Not available
<b>Flash Point</b>	> 100°C / >212°F	<b>Specific Gravity</b>	1.039 g/ml
<b>Evaporation Rate</b>	Not available	<b>Water Solubility</b>	Dispersible in water
<b>Flammability (solid, gas)</b>	Not available	<b>Solubility in Other Solvents</b>	Not available
<b>Flammability limit in air</b>		<b>Partition Coefficient: n-octanol/water</b>	Not available
<b>Upper Flammability Limit</b>	Not available	<b>Autoignition temperature</b>	Not available

<b>Decomposition temperature</b>	Not available	<b>Explosive Properties</b>	Not available
<b>Viscosity, Kinematic</b>	Not available	<b>Oxidizing Properties</b>	Not available
<b>Dynamic Viscosity</b>	Not available		
<b><u>OTHER INFORMATION</u></b>			
<b>Softening Point</b>	Not available	<b>Density</b>	Not available
<b>Molecular Weight</b>	Not available	<b>Bulk Density</b>	8.66 lb/gal
<b>VOC Content</b>	Not available		

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical Stability

Stable under recommended storage conditions

### Possibility of Hazardous Reactions

None under normal processing

### Conditions to Avoid

Heat, flames, and sparks

### Incompatible Materials

No materials to be especially mentioned.

### Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), chlorine, Hydrogen chloride, Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

<b>Product Information</b>	<b>FarmWorks INDOOR/OUTDOOR INSECT CONCENTRATE</b>
	<b>Acute oral LD50 - 632 mg/kg (rat)</b>
	<b>Acute dermal LD50 - &gt; 2,000 mg/kg (rabbit)</b>
	<b>Acute Inhalation LC50 - 11.58 mg/L/1 hr (rat)</b>
<b>Inhalation</b>	Harmful by inhalation.
<b>Eye Contact</b>	May cause irritation.
<b>Skin Contact</b>	May be harmful if absorbed through the skin. Skin exposure may result in rashes, numbing, burning, or tingling, which are reversible and usually subside within 12 hours.
<b>Ingestion</b>	HARMFUL IF SWALLOWED.
<b>Component Information</b>	Bifenthrin products may produce skin sensations such as rashes, numbing, burning, or tingling, which are reversible and usually subside in 12 hours.

### Information on Toxicological Effects

<b>Symptoms</b>	No information available
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**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**

<b>Sensitization</b>	No information available
<b>Mutagenic effects</b>	No information available
<b>Carcinogenicity</b>	<p>BIFEN</p> <p>In studies with laboratory animals, Bifenthrin technical did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to Bifenthrin technical. In lifetime feeding studies conducted with rodents a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with Bifenthrin. Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings and liver and kidney damage. There is no sufficient evidence to suggest that aromatic hydrocarbons are reproductive toxicants, mutagens or developmental toxicants. Bifenthrin technical- In studies with laboratory animals, bifenthrin did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals with Bifenthrin. In lifetime feeding studies conducted with rodents, a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with bifenthrin.</p>
<b>Reproductive Effects</b>	No information available
<b>STOT - Single Exposure</b>	No information available
<b>STOT - Repeated Exposure</b>	No information available
<b>Aspiration Hazard</b>	No information available
<b><u>Numerical Measures of Toxicity - Product Information</u></b>	
<b>LD50 Oral</b>	632 mg/kg (rat)
<b>LD50 Dermal</b>	> 2000 mg/kg (rat)
<b>LC50 Inhalation</b>	Inhalation LC50 11.58 mg/l (1 hr)

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Bifenthrin: Highly toxic to fish and aquatic arthropods (LC50 values between 0.0038 to 17.8 ug/L). Slightly toxic to water fowl and upland game birds (LD50 between 1800 to >2150 mg/kg).

**Persistence / Degradability**

No information available.

**Bioaccumulation / Accumulation**

No information available.

**Other Adverse Effects**

No information available.

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

**Waste Disposal Method** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated Packaging** Refer to product label.

**14. TRANSPORT INFORMATION**

<b>DOT</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG / IMO</b>	Not regulated

**15. REGULATORY INFORMATION**

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 for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

**Signal Word** CAUTION

**Ventilation Control** PESTICIDE APPLICATORS & WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

**Harmful if swallowed. Harmful if inhaled or absorbed through skin. Toxic to fish and aquatic invertebrates.**

**International Inventory**

<b>USINV</b>	Not determined
<b>DSL/NDSL</b>	Not determined
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>TSCA</b>	Does not comply

— **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List / Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances / EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Bifenthrin technical	82657-04-3	7.9	1.0

**SARA 311 / 312 Hazardous Categorization**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**CERCLA**

SARA Product RQ 0

**RCRA****Pesticide Information****State Regulations****State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Bifenthrin technical		X		X	

**International Regulations****U.S. EPA Label Information**

EPA Registration Number 70506-24-84009

**16. OTHER INFORMATION****NFPA****HEALTH 1****FLAMMABILITY 1****STABILITY 0****PHYSICAL HAZARD -**

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