



## SAFETY DATA SHEET

Capture® LFR Insecticide

SDS #: 6303-A  
Revision date: 2016-05-26  
Format: AP  
Version 1.01

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Capture® LFR Insecticide
Product Code(s)	6303-A
Synonyms	BIFENTHRIN: (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name); 2-methylbiphenyl-3-ylmethyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name)
Formula code	006303
Active Ingredient(s)	Bifenthrin
Chemical Family	Pyrethroid Pesticide
Recommended Use:	Insecticide.
Restrictions on Use:	Use as recommended by the label.
Manufacturer/Supplier	FMC Corporation 2929 Walnut Street Philadelphia, PA 19104 (215) 299-6000 (General Information) msdsinfo@fmc.com (E-Mail General Information)
Emergency telephone	For leak, fire, spill or accident emergencies, call: 1 800 / 424 9300 (CHEMTREC - U.S.A.) 1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)  Medical Emergencies: 1 800 / 331-3148 (PROSAR - U.S.A. & Canada) 1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

### Section 2: HAZARDS IDENTIFICATION

#### GHS - Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 2
STOT - single exposure	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

#### Label Elements



Signal Word

Danger

**Hazard Statements**

H301 - Toxic if swallowed  
 H313 - May be harmful in contact with skin  
 H332 - Harmful if inhaled  
 H351 - Suspected of causing cancer  
 H370 - Causes damage to organs  
 H372 - Causes damage to organs through prolonged or repeated exposure  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

P202 - Do not handle until all safety precautions have been read and understood  
 P281 - Use personal protective equipment as required  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P271 - Use only outdoors or in a well-ventilated area  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P273 - Avoid release to the environment

**Precautionary Statements - Response**

P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor  
 P321 - Specific treatment (see supplemental first aid instructions on this label)  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P312 - Call a POISON CENTER or doctor if you feel unwell  
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor  
 P330 - Rinse mouth  
 P391 - Collect spillage

**Precautionary Statements - Storage**

P405 - Store locked up

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container to an approved waste disposal plant

**Other Information**

Very toxic to aquatic life with long lasting effects.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms** BIFENTHRIN: (2-methyl[1,1'-biphenyl]-3-yl)methyl

3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name); 2-methylbiphenyl-3-ylmethyl  
 (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name)

Chemical name	CAS-No	Weight %
Bifenthrin	82657-04-3	17.15
Propylene glycol	57-55-6	5-10
Crystalline silica, quartz	14808-60-7	<0.3

### Section 4: FIRST AID MEASURES

**Inhalation**

Move to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**Skin Contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctor for further treatment advice.

**Eye Contact**

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

**Ingestion**

Call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

Central nervous system effects.

**Protection of first-aiders**

Use personal protective equipment. See Section 8 for more detail.

**Indication of immediate medical attention and special treatment needed, if necessary**

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

**Section 5: FIRE FIGHTING MEASURES****Suitable Extinguishing Media**

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Soft stream or water fog only if necessary.

**Unsuitable extinguishing media**

No information available

**Specific Hazards Arising from the Chemical**

None known.

**Hazardous Combustion Products**

Carbon oxides (CO<sub>x</sub>), Hydrogen chloride, Hydrogen fluoride, Sulfur oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

**Section 6: ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

**Other**

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**Environmental Precautions**

Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for Containment**

Dike to prevent runoff.

**Methods for cleaning up**

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

**Section 7: HANDLING AND STORAGE****Handling**

Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

**Storage**

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

**Materials to avoid**

None known

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits**

Component	China	Japan	Korea	Australia	Taiwan
Propylene glycol 57-55-6 ( 5-10 )				TWA 150 ppm TWA 474 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	
Crystalline silica, quartz 14808-60-7 ( <0.3 )	TWA: 0.7 mg/m <sup>3</sup> TWA: 0.3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup> STEL: 1.4 mg/m <sup>3</sup> STEL: 1 mg/m <sup>3</sup> STEL: 0.6 mg/m <sup>3</sup> STEL: 0.4 mg/m <sup>3</sup> C1		TWA: 0.05 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	

**Engineering measures**

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Personal protective equipment****Respiratory Protection**

For dust, splash, mist or spray exposures wear a filtering mask.

**Hand Protection**

Protective gloves.

**Eye/Face Protection**

For dust, splash, mist or spray exposure, wear chemical protective goggles.

**Skin and Body Protection**

Wear long-sleeved shirt, long pants, socks, and shoes.

**Hygiene measures**

Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	White to off-white Viscous liquid
<b>Odor</b>	Latex
<b>Color</b>	White to off white
<b>Odor threshold</b>	No information available
<b>pH</b>	6.1
<b>Melting point/freezing point</b>	No information available
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility(ies)</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available

Density 1.05 g/mL; 8.75 lb/gal  
Bulk density No information available

## Section 10: STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions.

**Stability** Stable under recommended storage conditions

**Hazardous reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid** Heat, flames and sparks.

**Incompatible products** None known.

**Hazardous Decomposition Products** Carbon oxides (COx), Hydrogen chloride, Hydrogen fluoride, Sulfur oxides.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Numerical measures of toxicity - Product Information

LD50 Oral 175 mg/kg (rat)  
LD50 Dermal > 5,000 mg/kg (rabbit)  
LC50 Inhalation > 2.28 mg/L 4 hr (rat)

Skin corrosion/irritation Slightly irritating (rabbit).  
Serious eye damage/eye irritation Minimally irritating (rabbit).  
Sensitization Non-sensitizing.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Mutagenicity** Bifenthrin: Not genotoxic in laboratory studies.

**Carcinogenicity** Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder tumors (lesion) in male mice.

**Reproductive toxicity** Bifenthrin: No toxicity to reproduction in animal studies.

**Developmental toxicity** Bifenthrin: Not teratogenic in animal studies.

**STOT - single exposure** Causes damage to organs: See listed target organs below.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure: See listed target organs below.

**Target organ effects** Bifenthrin: Central Nervous System.

**Neurological effects** Bifenthrin: Causes clinical signs of neurotoxicity (tremors, impaired gait, excessive salivation) following acute or subchronic exposure. Tremors disappeared with continued exposure.

**Symptoms** Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge.

**Aspiration hazard** No information available.

Chemical name	China	IARC
Crystalline silica, quartz		Group 1

## Section 12: ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Bifenthrin (82657-04-3)				
Active Ingredient(s)	Duration	Species	Value	Units

Bifenthrin	96 h LC50	Fish	0.1	µg/L
	72 h EC50	Algae	0.822	mg/L
	48 h EC50	Crustacea	0.11	µg/L
	21 d NOEC	Fish	0.012	µg/L
	21 d NOEC	Crustacea	0.0013	µg/L

<b>Persistence and degradability</b>	Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.
<b>Bioaccumulation</b>	Bifenthrin: The substance has some potential to bioaccumulate in the environment.
<b>Mobility</b>	Bifenthrin: Immobile, Not expected to reach groundwater.
<b>Other Adverse Effects</b>	No information available.

### Section 13: DISPOSAL CONSIDERATIONS

<b>Waste disposal methods</b>	Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.
<b>Contaminated Packaging</b>	Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this container.

### Section 14: TRANSPORT INFORMATION

#### IMDG/IMO

<b>UN/ID no</b>	UN3352
<b>Proper Shipping Name</b>	Pyrethroid pesticide, liquid, toxic
<b>Hazard class</b>	6.1
<b>Packing Group</b>	III
<b>EmS No.</b>	F-A, S-A
<b>Special Provisions</b>	EmS Number: F-E, S-E
<b>Marine Pollutant</b>	Bifenthrin,
<b>Description</b>	UN3352, Pyrethroid pesticide, liquid, toxic (Bifenthrin), 6.1, PG III, Marine Pollutant

#### ICAO/IATA

<b>UN/ID no</b>	UN3352
<b>Proper Shipping Name</b>	Pyrethroid pesticide, liquid, toxic
<b>Hazard class</b>	6.1
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Bifenthrin,
<b>Description</b>	UN3352, Pyrethroid pesticide, liquid, toxic (Bifenthrin), 6.1, PG III, Marine pollutant

### Section 15: REGULATORY INFORMATION

#### International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin 82657-04-3	X			X	X	X		
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X
Crystalline silica,	X	X	X	X	X	X	X	X

quartz 14808-60-7								
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**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 Chemical Substances/European 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

## Section 16: OTHER INFORMATION

**Prepared By:** FMC Corporation

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**Revision note** (M)SDS sections updated.

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**End of Safety Data Sheet**