

**SAFETY DATA SHEET**  
**BRIGADE 2 EC Insecticide/Miticide**

SDS #: 6196-1-A  
Revision date: 2020-05-05  
Format: NA  
Version 1.03



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** BRIGADE 2 EC Insecticide/Miticide

**Other means of identification**

**Product Code(s)** 6196-1-A

**Synonyms** BIFENTHRIN: (2-methyl[1,1'-biphenyl]-3-yl)methyl (1R,3R)-rel-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylate (CAS name); 2-methyl-3-phenylbenzyl (1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name)

**Active Ingredient(s)** Bifenthrin

**Alternate Commercial Name** Capture 240 EC Insecticide  
**PCP #** 31396

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label.

**Supplier Address**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
SDS-Info@fmc.com (E-Mail General Information)

**Emergency telephone number**

Medical Emergencies :  
1 800 / 331-3148 (U.S.A. & Canada)  
1 651 / 632-6793 (All Other Countries - Collect)

For leak, fire, spill or accident emergencies, call:  
1 800 / 424-9300 (CHEMTREC - U.S.A.)  
1 703 / 741-5970 (CHEMTREC - International)  
1 703 / 527-3887 (CHEMTREC - Alternate)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

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

Acute toxicity - Oral

Category 3

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3


**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**  
H301 - Toxic if swallowed  
H304 - May be fatal if swallowed and enters airways  
H317 - May cause an allergic skin reaction  
H332 - Harmful if inhaled  
H351 - Suspected of causing cancer  
H370 - Causes damage to organs  
H372 - Causes damage to organs through prolonged or repeated exposure

**Physical Hazards**  
H226 - Flammable liquid and vapor



**Precautionary Statements - Prevention**

- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- 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
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical/ventilating/lighting equipment
- P242 - Use only non-sparking tools
- P243 - Take precautionary measures against static discharge
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

- P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P363 - Wash contaminated clothing before reuse
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- 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
- P331 - Do NOT induce vomiting
- P330 - Rinse mouth
- P370 + P378 - In case of fire: Use Foam. Carbon dioxide (CO2). Dry chemical. Water spray or fog for extinction

**Precautionary Statements - Storage**

## BRIGADE 2 EC Insecticide/Miticide

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P405 - Store locked up  
P403 + P235 - Store in a well-ventilated place. Keep cool

### Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

### Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

### Other Information

Very toxic to aquatic life with long lasting effects.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Naphtha (petroleum), heavy aromatic	64742-94-5	50-60
Bifenthrin	82657-04-3	25.1
Pseudocumene	95-63-6	<20
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	<5
Xylenes	1330-20-7	<1
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	<1
Cumene	98-82-8	<1
Propylene glycol	57-55-6	<1

Synonyms are provided in Section 1.

## 4. FIRST AID MEASURES

<b>Eye Contact</b>	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for further treatment advice.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	Move victim to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not induce vomiting or give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	Allergic skin reactions. Central nervous system effects.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	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 Contains petroleum distillate Vomiting may cause aspiration pneumonia

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Dry chemical. Carbon dioxide (CO<sub>2</sub>).

<b>Large Fire</b>	Water spray. Foam.
<b>Unsuitable extinguishing media</b>	Avoid heavy hose streams.
<b>Specific Hazards Arising from the Chemical</b>	Combustible liquid
<b>Hazardous Combustion Products</b>	Carbon oxides (COx), Hydrogen chloride, Hydrogen fluoride.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. See Section 12 for additional Ecological Information.
<b>Methods for Containment</b>	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Clean and neutralize spill area, tools and equipment by washing with 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.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	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.
<b>Packaging material</b>	Must only be kept in original packaging.
<b>Incompatible products</b>	No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Pseudocumene (95-63-6)	-	-	TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>	-
Xylenes (1330-20-7)	STEL 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	-	Mexico: TWA 100 ppm Mexico: STEL 150 ppm
Cumene (98-82-8)	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m <sup>3</sup>	Mexico: TWA 50 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta

Xylenes (1330-20-7)	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m <sup>3</sup> STEL: 150 ppm STEL: 651 mg/m <sup>3</sup>	TWA: 100 ppm  STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m <sup>3</sup> STEL: 150 ppm STEL: 651 mg/m <sup>3</sup>
Cumene (98-82-8)	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 246 mg/m <sup>3</sup>	TWA: 50 ppm	TWA: 50 ppm TWA: 246 mg/m <sup>3</sup>
Propylene glycol (57-55-6)	-	-	TWA: 10 mg/m <sup>3</sup> aerosol only  TWA: 50 ppm aerosol and vapor  TWA: 155 mg/m <sup>3</sup> aerosol and vapor	-

**Appropriate engineering controls****Engineering measures**

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

**Individual protection measures, such as personal protective equipment****Eye/Face Protection**

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

**Skin and Body Protection**

Minimize skin contamination by following good industrial hygiene practices.

**Hand Protection**

Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

**Respiratory Protection**

For dust, splash, mist or spray exposures, wear elastomeric full-face or half mask respirator with appropriate cartridges and/or filters, which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).

**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.

**General information**

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Appearance</b>	Amber Liquid
<b>Physical State</b>	Liquid
<b>Color</b>	Amber
<b>Odor</b>	Aromatic hydrocarbon
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	44 - 46 °C / 111.2 - 114.8 °F Closed cup
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available

Vapor density	No information available
Relative density	7.8 - 8.0 lb/gal. (940 - 960 g/L)
Specific gravity	0.94 - 0.96 @ 20°C
Water solubility	Emulsifies
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	None under normal use conditions
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks
<b>Incompatible materials</b>	No information available.
<b>Hazardous Decomposition Products</b>	Carbon oxides (COx). Hydrogen chloride. Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

<b>LD50 Oral</b>	262 mg/kg (rat)
<b>LD50 Dermal</b>	> 2000 mg/kg (rabbit)
<b>LC50 Inhalation (dust)</b>	1.86 mg/L 4 hr (rat) (mist)

<b>Serious eye damage/eye irritation</b>	Slight irritation (rabbit).
<b>Skin corrosion/irritation</b>	Non-irritating during normal use (rabbit).
<b>Sensitization</b>	May cause sensitization by skin contact

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Naphtha (petroleum), heavy aromatic (64742-94-5)	300-2000 mg/kg	> 2 mL/kg (Nyúl)	>5,2 mg/L
Bifenthrin (82657-04-3)	55 mg/kg (rat)	> 2000 mg/kg (rat)	0.8 mg/L (female, rat) 4 h
Pseudocumene (95-63-6)	3280 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m <sup>3</sup> (Rat) 4 h
Petroleum distillates, solvent dewaxed light paraffinic (64742-56-9)	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5399 mg/m <sup>3</sup> (Rat) 4 h
Xylenes (1330-20-7)	3500 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	11 mg/l (Rat) 4 h
Petroleum distillates, solvent dewaxed heavy paraffinic (64742-65-0)	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m <sup>3</sup> (Rat) 4 h
Cumene (98-82-8)	1400 mg/kg (Rat)	3160 mg/kg (Rabbit)	> 17,6 mg/L (Rat) 4 h
Propylene glycol	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	

(57-55-6)			
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### Information on toxicological effects

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

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

**Chronic toxicity** Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued 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

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

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

**Aspiration hazard** Aspiration may cause chemical pneumonitis.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	A2		Known	
Xylenes 1330-20-7		Group 3		
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	A2		Known	
Cumene 98-82-8		Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - *Suspected Human Carcinogen*

IARC (International Agency for Research on Cancer)

Group 2B - *Possibly Carcinogenic to Humans*

Group 3 - *Not classifiable as to its carcinogenicity to humans*

NTP (National Toxicology Program)

Known - *Known Carcinogen*

Reasonably Anticipated - *Reasonably Anticipated to be a Human Carcinogen*

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - *Present*

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

<b>Bifenthrin (82657-04-3)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
	14-day LC50	Eisenia fetida	> 8	mg/kg soil

**BRIGADE 2 EC Insecticide/Miticide**

**SDS # :** 6196-1-A  
**Revision date:** 2020-05-05  
**Version** 1.03

	LD50	Bobwhite quail	1800	mg/kg
	96 h LC50	Salmo gairdneri	0.1	µg/L
	48 h EC50	Daphnia magna	0.11	µg/L
	21 d NOEC	Daphnia magna	0.00095	µg/L
	21 d NOEC	Pimephales promelas	1.86	µg/L
	30 d NOEC	Salmo gairdneri	0.012	µg/L

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Xylenes 1330-20-7		96 h LC50: 13,1 - 16,5 mg/L (Lepomis macrochirus) flow-through 96 h LC50: 13,5 - 17,3 mg/L (Oncorhynchus mykiss) 96 h LC50: 2,661 - 4,093 mg/L (Oncorhynchus mykiss) static 96 h LC50: 23,53 - 29,97 mg/L (Pimephales promelas) static 96 h LC50: 30,26 - 40,75 mg/L (Poecilia reticulata) static 96 h LC50: 7,711 - 9,591 mg/L (Lepomis macrochirus) static 96 h LC50: = 13,4 mg/L (Pimephales promelas) flow-through 96 h LC50: = 19 mg/L (Lepomis macrochirus) 96 h LC50: = 780 mg/L (Cyprinus carpio) semi-static 96 h LC50: > 780 mg/L (Cyprinus carpio)	48 h LC50: = 0,6 mg/L (Gammarus lacustris) 48 h EC50: = 3,82 mg/L (water flea)
Polyethylene glycol 25322-68-3		24 h LC50: > 5000 mg/L (Carassius auratus)	
Propylene glycol 57-55-6	96 h EC50: = 19000 mg/L (Pseudokirchneriella subcapitata)	96 h LC50: 41 - 47 mL/L (Oncorhynchus mykiss) static 96 h LC50: = 51400 mg/L (Pimephales promelas) static 96 h LC50: = 51600 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 710 mg/L (Pimephales promelas)	48 h EC50: > 1000 mg/L (Daphnia magna) Static 24 h EC50: > 10000 mg/L (Daphnia magna)
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9		96 h LC50: > 5000 mg/L (Oncorhynchus mykiss)	48 h EC50: > 1000 mg/L (Daphnia magna)
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0		96 h LC50: > 5000 mg/L (Oncorhynchus mykiss)	48 h EC50: > 1000 mg/L (Daphnia magna)
Naphtha (petroleum), heavy aromatic 64742-94-5	72 h EC50: = 2,5 mg/L (Skeletonema costatum)	96 h LC50: = 1740 mg/L (Lepomis macrochirus) static 96 h LC50: = 19 mg/L (Pimephales promelas) static 96 h LC50: = 2,34 mg/L (Oncorhynchus mykiss) 96 h LC50: = 41 mg/L (Pimephales promelas) 96 h LC50: = 45 mg/L (Pimephales promelas) flow-through	48 h EC50: = 0,95 mg/L (Daphnia magna)
n-Butanol 71-36-3	72 h EC50: > 500 mg/L (Desmodesmus subspicatus) 96 h EC50: > 500 mg/L (Desmodesmus subspicatus)	96 h LC50: 100000 - 500000 µg/L (Lepomis macrochirus) static 96 h LC50: 1730 - 1910 mg/L (Pimephales promelas) static 96 h LC50: = 1740 mg/L (Pimephales promelas) flow-through 96 h LC50: = 1910000 µg/L (Pimephales promelas) static	48 h EC50: 1897 - 2072 mg/L (Daphnia magna) Static 48 h EC50: = 1983 mg/L (Daphnia magna)
Pseudocumene 95-63-6		96 h LC50: 7,19 - 8,28 mg/L (Pimephales promelas) flow-through	48 h EC50: = 6,14 mg/L (Daphnia magna)
Cumene 98-82-8	72 h EC50: = 2,6 mg/L (Pseudokirchneriella subcapitata)	96 h LC50: 6,04 - 6,61 mg/L (Pimephales promelas) flow-through 96 h LC50: = 2,7 mg/L (Oncorhynchus mykiss) semi-static 96 h LC50: = 4,8 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: = 5,1 mg/L (Poecilia reticulata) semi-static	48 h EC50: 7,9 - 14,1 mg/L (Daphnia magna) Static 48 h EC50: = 0,6 mg/L (Daphnia magna)

**Persistence and degradability**

Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.



**Bioaccumulation** Bifenthrin: The substance has a potential for bioconcentration.

**Mobility** Bifenthrin: Immobile. Not expected to reach groundwater.

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods** 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. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

**Contaminated containers and packages** Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

### 14. TRANSPORT INFORMATION

#### DOT

**UN/ID no** UN3351  
**Proper Shipping Name** Pyrethroid pesticide, liquid, toxic, flammable  
**Hazard class** 6.1  
**Subsidiary class** 3  
**Packing Group** III  
**Description** UN3351, Pyrethroid pesticide, liquid, toxic, flammable, 6.1 (3), PG III

#### TDG

**UN/ID no** UN3351  
**Proper Shipping Name** Pyrethroid pesticide, liquid, toxic, flammable  
**Hazard class** 6.1  
**Subsidiary class** 3  
**Packing Group** III  
**Marine Pollutant** Bifenthrin.  
**Description** UN3351, Pyrethroid pesticide, liquid, toxic, flammable (Bifenthrin, aromatic hydrocarbons), 6.1 (3), PG III

#### ICAO/IATA

**UN/ID no** UN3351  
**Proper Shipping Name** Pyrethroid pesticide, liquid, toxic, flammable  
**Hazard class** 6.1  
**Subsidiary Hazard Class** 3  
**Packing Group** III  
**Description** UN3351, Pyrethroid pesticide, liquid, toxic, flammable (Bifenthrin, aromatic hydrocarbons), 6.1 (3), PG III

#### IMDG/IMO

**UN/ID no** UN3351  
**Proper Shipping Name** Pyrethroid pesticide, liquid, toxic, flammable  
**Hazard class** 6.1  
**Subsidiary Hazard Class** 3  
**Packing Group** III  
**EmS No.** F-E, S-D  
**Marine Pollutant** Bifenthrin  
**Description** UN3351, Pyrethroid pesticide, liquid, toxic, flammable (Bifenthrin, aromatic hydrocarbons), 6.1 (3), PG III (42°C c.c.)

### 15. REGULATORY INFORMATION

## U.S. 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 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Bifenthrin - 82657-04-3	82657-04-3	25.1	1.0
Pseudocumene - 95-63-6	95-63-6	<20	1.0
Xylenes - 1330-20-7	1330-20-7	<1	1.0
Cumene - 98-82-8	98-82-8	<1	1.0

### **SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylenes 1330-20-7	100 lb			X

### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Xylenes 1330-20-7	100 lb 45.4 kg	
n-Butanol 71-36-3	5000 lb 2270 kg	
Cumene 98-82-8	5000 lb 2270 kg	

### **FIFRA 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. Following is the hazard information as required on the pesticide label:*

#### **Warning**

*May be fatal if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation.  
This pesticide is extremely toxic to fish and aquatic invertebrates.*

## US State Regulations

### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Cumene - 98-82-8	Carcinogen

### U.S. State Right-to-Know Regulations

**BRIGADE 2 EC Insecticide/Miticide**

**SDS # :** 6196-1-A  
**Revision date:** 2020-05-05  
**Version** 1.03

Chemical name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin 82657-04-3	X		
Pseudocumene 95-63-6	X	X	X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9		X	
Xylenes 1330-20-7	X	X	X
Cumene 98-82-8	X	X	X
Propylene glycol 57-55-6	X		X

**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Naphtha (petroleum), heavy aromatic 64742-94-5	X	X	X		X	X	X	X
Bifenthrin 82657-04-3				X	X	X		
Pseudocumene 95-63-6	X	X	X	X	X	X	X	X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	X	X	X		X	X	X	X
Xylenes 1330-20-7	X	X	X	X	X	X	X	X
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	X	X	X		X	X	X	X
Cumene 98-82-8	X	X	X	X	X	X	X	X
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X

**CANADA**

This Safety Data Sheet is for a pesticide product registered by the Pest Management Regulatory Agency (PMRA), and is therefore also subject to certain requirements under Canadian pesticide laws, including the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required by the Hazardous Product Regulations (HPR) and WHMIS 2015 for safety data sheets, and for workplace labels of non-pesticide chemicals. The following information is determined by PMRA.

The approved pest control product label (the label), under the Pest Control Products Act, needs to be followed at all times and in cases where there are any discrepancies between the approved label and an SDS for that product it is the label information that prevails.

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b> 2	<b>Flammability</b> 2	<b>Instability</b> 0	<b>Special Hazards</b> -
<b>HMIS</b>	<b>Health Hazards</b> 2*	<b>Flammability</b> 2	<b>Physical hazard</b> 0	<b>Personal Protection</b> X

\*Indicates a chronic health hazard.

**NFPA/HMIS Ratings Legend**

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

## BRIGADE 2 EC Insecticide/Miticide

SDS #: 6196-1-A  
Revision date: 2020-05-05  
Version 1.03

Revision date: 2020-05-05  
Reason for revision: SDS sections updated.

### Disclaimer

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**End of Safety Data Sheet**