

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BIFLEX ME

Other means of identification : ACETAMIPRID 2.1% + BIFENTHRIN 2.5% W/W ME

#### Manufacturer or supplier's details

Company : FMC India Private Limited

Address : TCG Financial Centre, 2nd Floor, C-53,  
Bandra Kurla Complex,  
Bandra (E), Mumbai, Maharashtra-400098  
India

E-mail address : SDS-Info@fmc.com

Emergency telephone : 022 6704 5504/5404  
000-800-100-7141 (CHEMTREC)

Medical Emergency Number : 022 6704 5504/5404

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

Recommended use : Household insecticide.

Restrictions on use : Use as recommended by the label.

---

### 2. HAZARDS IDENTIFICATION

#### Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

##### Classification

Not classified as hazardous according to criteria laid down in Part I of Schedule-1.

##### GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 5

Acute toxicity (Dermal) : Category 5

Reproductive toxicity : Category 2

Specific target organ toxicity - : Category 1 (Central nervous system)  
single exposure

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

Specific target organ toxicity - repeated exposure : Category 1 (Central nervous system)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

### GHS label elements

Hazard pictograms :



Signal Word : DANGER

Hazard Statements :  
H302 Harmful if swallowed.  
H313 + H333 May be harmful in contact with skin or if inhaled.  
H361d Suspected of damaging the unborn child.  
H370 Causes damage to organs (Central nervous system).  
H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :  
**Prevention:**  
P203 Obtain, read and follow all safety instructions before use.  
P260 Do not breathe mist or vapors.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

### Response:

P301 + P317 + P330 IF SWALLOWED: Get medical help.  
Rinse mouth.  
P302 + P352 + P317 IF ON SKIN: Wash with plenty of water.  
Get medical help.  
P304 + P317 IF INHALED: Get medical help.  
P308 + P316 IF exposed or concerned: Get emergency medical help immediately.  
P391 Collect spillage.

### Storage:

P405 Store locked up.

### Disposal:

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

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version 1.0      Revision Date: 10.01.2025      SDS Number: 50002957      Date of last issue: -  
Date of first issue: 10.01.2025

### Other hazards which do not result in classification

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
acetamiprid (ISO)	160430-64-8	2.1
Bifenthrin	82657-04-3	2.5
propylene carbonate	108-32-7	>= 10 - < 20

### 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Show this material safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and water.  
Call a physician if irritation develops or persists.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.  
Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Harmful if swallowed.  
May be harmful in contact with skin or if inhaled.  
Suspected of damaging the unborn child.  
Causes damage to organs.  
Causes damage to organs through prolonged or repeated exposure.
- Notes to physician : Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

- |  |   |   |
|--|---|---|
| Suitable extinguishing media                   | : | Dry chemical, CO2, water spray or regular foam.   |
| Unsuitable extinguishing media                 | : | High volume water jet<br>Do not spread spilled material with high-pressure water streams.   |
| Specific hazards during fire fighting          | : | Do not allow run-off from fire fighting to enter drains or water courses.   |
| Hazardous combustion products                  | : | Fire may produce irritating, corrosive and/or toxic gases.<br>Chlorine compounds<br>Carbon oxides<br>Nitrogen oxides (NOx)<br>Fluorinated compounds   |
| Specific extinguishing methods                 | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | Firefighters should wear protective clothing and self-contained breathing apparatus.  |

### 6. ACCIDENTAL RELEASE MEASURES

- |   |   |   |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use non-slip safety shoes in areas where spills or leaks can occur.<br>Ensure adequate ventilation.<br>Use personal protective equipment.   |
| Environmental precautions   | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up               | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).<br>Keep in suitable, closed containers for disposal.                             |

### 7. HANDLING AND STORAGE

- |   |   |  |
|---|---|--|
| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection.  |
| Advice on safe handling                         | : | Do not breathe vapors/dust.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Dispose of rinse water in accordance with local and national regulations. |

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection  
Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Always have on hand a cyanide first-aid kit, together with proper instructions.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Form : clear, liquid

Color : light yellow

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

pH	:	6.7 Method: CIPAC MT 75.3 (1% solution in water)
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Flammability (liquids)	:	Not expected to be ignitable
Self-ignition	:	No data available
Vapor pressure	:	No data available
Density	:	1.058 g/cm <sup>3</sup>
Bulk density	:	Not applicable
Solubility(ies) Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Viscosity Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing

---

### 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong acids and strong bases Strong oxidizing agents

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

Hazardous decomposition products : No hazardous decomposition products are known.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Harmful if swallowed.

May be harmful in contact with skin or if inhaled.

#### Product:

Acute oral toxicity : LD50(Rat, female): > 300 - 2,000 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50(Rat, male and female): > 5.05 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50(Rat, female): > 2,000 mg/kg  
Method: OECD Test Guideline 402

#### Components:

##### acetamiprid (ISO):

Acute oral toxicity : LD50 (Rat, female): 146 mg/kg  
LD50 (Rat, male): 217 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.15 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Highest attainable concentration.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

##### Bifenthrin:

Acute oral toxicity : LD50 (Rat, male and female): 56.7 mg/kg  
Symptoms: Convulsions, Tremors, ataxia  
LD50 (Mouse, female): 42.5 mg/kg  
Method: OPPTS 870.1100

Acute inhalation toxicity : LC50 (Rat, female): 0.6 - 1.2 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Symptoms: Tremors, Convulsions

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

LC50 (Rat, male): 1.10 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Symptoms: Tremors, Fatality

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Remarks: no mortality

### **propylene carbonate:**

Acute oral toxicity : LD0 (Rat, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
Remarks: no mortality

Acute dermal toxicity : LD0 (Rabbit, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Remarks: no mortality

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

#### **Product:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

#### **Components:**

##### **acetamiprid (ISO):**

Species : Rabbit  
Result : No skin irritation

##### **Bifenthrin:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : slight or no skin irritation.  
GLP : yes

##### **propylene carbonate:**

Species : Rabbit  
Result : No skin irritation

### **Serious eye damage/eye irritation**

Based on available data, the classification criteria are not met.

#### **Product:**

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : No eye irritation



# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

### Components:

#### **acetamiprid (ISO):**

Species	:	Rabbit
Result	:	No eye irritation

#### **Bifenthrin:**

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Slight or no eye irritation
GLP	:	yes

#### **propylene carbonate:**

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irritation to eyes, reversing within 21 days

### **Respiratory or skin sensitization**

#### **Skin sensitization**

Based on available data, the classification criteria are not met.

#### **Respiratory sensitization**

Based on available data, the classification criteria are not met.

### Product:

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.

### Components:

#### **acetamiprid (ISO):**

Species	:	Guinea pig
Result	:	Does not cause skin sensitization.

#### **Bifenthrin:**

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.
GLP	:	yes

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

### **Components:**

#### **acetamiprid (ISO):**

Genotoxicity in vitro	:	Test Type: Ames test Result: negative
		Test Type: Chromosome aberration test in vitro Result: positive
Genotoxicity in vivo	:	Test Type: In vivo micronucleus test Species: mice Result: negative
		Test Type: unscheduled DNA synthesis assay Result: negative
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

#### **Bifenthrin:**

Genotoxicity in vitro	:	Test Type: gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: negative
		Test Type: reverse mutation assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
		Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	:	Test Type: Sex-linked Recessive Lethal Test Species: Drosophila melanogaster (vinegar fly) Result: negative
		Test Type: unscheduled DNA synthesis assay Species: Rat Method: OECD Test Guideline 486 Result: negative

#### **propylene carbonate:**

Genotoxicity in vitro	:	Test Type: in vitro DNA damage and/or repair study Result: negative
		Test Type: reverse mutation assay Result: negative
Genotoxicity in vivo	:	Test Type: In vivo micronucleus test

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

Species: Mouse (male and female)  
Application Route: Intraperitoneal injection  
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Components:

##### **acetamiprid (ISO):**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

##### **Bifenthrin:**

Species : Rat, female  
Application Route : Oral  
Exposure time : 2 Years  
NOAEL : 3 mg/kg bw/day  
Result : negative

Species : Mouse, male  
Application Route : Oral  
Exposure time : 18 month(s)  
NOAEL : 7.6 mg/kg bw/day  
Result : positive  
Symptoms : malignant tumors

### Reproductive toxicity

Suspected of damaging the unborn child.

#### Components:

##### **acetamiprid (ISO):**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments., Suspected of damaging the unborn child.

##### **Bifenthrin:**

Effects on fertility : Test Type: Two-generation study  
Species: Rat  
Application Route: Oral  
General Toxicity Parent: NOAEL: 3 mg/kg bw/day  
General Toxicity F1: NOAEL: 5 mg/kg bw/day  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rabbit  
Application Route: Oral

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

General Toxicity Maternal: NOAEL: 2.7 mg/kg bw/day  
Teratogenicity: NOAEL: 2.7 mg/kg bw/day  
Symptoms: Maternal effects.  
Result: No teratogenic effects.

Test Type: Embryo-fetal development  
Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 1 mg/kg bw/day  
Teratogenicity: NOAEL: 2 mg/kg bw/day  
Result: No teratogenic effects.

Species: Rat  
Application Route: Oral  
General Toxicity Maternal: LOAEL: 7.2 mg/kg bw/day  
Developmental Toxicity: LOAEL: 7.2 mg/kg bw/day  
Embryo-fetal toxicity.: NOEL: 9.0 mg/kg bw/day  
Method: OECD Test Guideline 426  
Result: Animal testing did not show any effects on fertility.,  
Some evidence of adverse effects on development, based on  
animal experiments.

### propylene carbonate:

Effects on fertility : Test Type: Two-generation study  
Species: Mouse, male and female  
Application Route: Oral  
Dose: 0,1820,4800,10100 mg/kgbw/day  
General Toxicity Parent: NOAEL: 10,100 mg/kg bw/day  
General Toxicity F1: NOAEL: 10,100 mg/kg bw/day  
General Toxicity F2: NOAEL: 10,100 mg/kg bw/day

Effects on fetal development : Test Type: reproductive and developmental toxicity study  
Species: Mouse  
Application Route: Oral  
Duration of Single Treatment: 18 d  
General Toxicity Maternal: NOAEL: 52 mg/kg bw/day  
Developmental Toxicity: NOAEL: 10,400 mg/kg bw/day  
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

### STOT-single exposure

Causes damage to organs (Central nervous system).

### Components:

#### Bifenthrin:

Target Organs : Central nervous system  
Assessment : Causes damage to organs.

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

### propylene carbonate:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

### STOT-repeated exposure

Causes damage to organs (Central nervous system) through prolonged or repeated exposure.

### Components:

#### Bifenthrin:

Target Organs : Central nervous system  
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

### Repeated dose toxicity

### Components:

#### Bifenthrin:

Species : Rat, male and female  
NOEL : 100 ppm  
Application Route : Oral - feed  
Exposure time : 90 d  
Remarks : No toxicologically significant effects were found.

Species : Dog, male and female  
NOEL : 2.5 mg/kg bw/day  
Application Route : Oral - feed  
Exposure time : 13 w  
Symptoms : Tremors

### propylene carbonate:

Species : Rat, male and female  
NOAEL : >5000 mg/kg bw/day  
Application Route : Oral  
Exposure time : 90 d  
Dose : 1000, 3000, 5000 mg/kg bw/day

Species : Rat, male and female  
NOAEC : 1000 mg/m<sup>3</sup>  
Application Route : inhalation (dust/mist/fume)  
Test atmosphere : dust/mist  
Exposure time : 93 d  
Dose : 0, 100, 500, 1000 mg/m<sup>3</sup>

### Aspiration toxicity

Based on available data, the classification criteria are not met.

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

### Components:

#### **Bifenthrin:**

The substance does not have properties associated with aspiration hazard potential.

### **Further information**

#### Product:

Remarks : No data available

## 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### Components:

##### **acetamiprid (ISO):**

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 49.8 mg/l Exposure time: 48 h  EC50 (Chironomus riparius (harlequin fly)): 0.024 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	ErC50 ( Scenedesmus subspicatus): > 98.3 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.005 mg/l Exposure time: 28 d Species: Chironomus riparius (harlequin fly)
M-Factor (Chronic aquatic toxicity)	:	10
Toxicity to terrestrial organisms	:	LD50: 98 ppm Species: Anas platyrhynchos (Mallard duck)  LD50: 9.26 µg/bee End point: Acute contact toxicity Species: Apis mellifera (bees)  LD50: 8.85 µg/bee End point: Acute oral toxicity Species: Apis mellifera (bees)

#### **Bifenthrin:**

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

Toxicity to fish	: LC50 (Salmo gairdneri): 0.00015 mg/l Exposure time: 96 h Test Type: flow-through test  LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.00035 mg/l Exposure time: 96 h Test Type: flow-through test  LC50 (Oncorhynchus mykiss (rainbow trout)): 0.000256 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes  LC50 (Pimephales promelas (fathead minnow)): 0.000234 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia): 0.00011 mg/l Exposure time: 48 h  LC50 (Daphnia): 0.0016 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	: EC50 (algae): 0.822 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	: 1,000
Toxicity to fish (Chronic toxicity)	: NOEC: 0.00012 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.0013 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea)  NOEC: 0.00095 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	: 100,000
Toxicity to soil dwelling organisms	: LD50: > 16 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organ-	: LD50: 1,800 mg/kg

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

isms Species: *Colinus virginianus* (Bobwhite quail)

LD50: > 2,150 mg/kg  
Species: *Anas platyrhynchos* (Mallard duck)

LD50: 0.1 - 0.35 µg/bee  
Exposure time: 24 h  
End point: Acute oral toxicity  
Species: *Apis mellifera* (bees)  
Method: OECD Test Guideline 213

LD50: 0.1 - 0.3 µg/bee  
Exposure time: 24 h  
End point: Acute contact toxicity  
Species: *Apis mellifera* (bees)  
Method: OECD Test Guideline 214

### propylene carbonate:

Toxicity to fish : LC50 (*Cyprinus carpio* (Carp)): > 1,000 mg/l  
Exposure time: 96 h  
Method: Regulation (EC) No. 440/2008, Annex, C.1

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 1,000 mg/l  
Exposure time: 48 h  
Method: Regulation (EC) No. 440/2008, Annex, C.2

Toxicity to algae/aquatic plants : NOEC (*Desmodesmus subspicatus* (green algae)): 900 mg/l  
Exposure time: 72 h  
Test Type: static test  
  
EC50 (*Desmodesmus subspicatus* (green algae)): > 900 mg/l  
Exposure time: 72 h  
Test Type: static test

Toxicity to microorganisms : EC50 (*Pseudomonas putida*): 25,619 mg/l  
Exposure time: 16 h  
Method: DIN 38 412 Part 8

### Persistence and degradability

#### Components:

#### acetamiprid (ISO):

Biodegradability : Result: Not readily biodegradable.

#### Bifenthrin:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life (DT50): 2.2 d  
Hydrolysis: at 60 °C



# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

---

Degradation half life (DT50): 15.6 d  
Hydrolysis: at 40 °C

### propylene carbonate:

Biodegradability : Inoculum: activated sludge  
Result: Readily biodegradable.  
Biodegradation: 87.7 %  
Exposure time: 29 d  
Method: OECD Test Guideline 301B

### Bioaccumulative potential

#### Components:

#### acetamiprid (ISO):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 0.8

#### Bifenthrin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): 1,709  
Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.  
See section 9 for octanol-water partition coefficient.

Partition coefficient: n-octanol/water : log Pow: 6.6

### propylene carbonate:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -0.41 (20 °C)  
Method: QSAR

### Mobility in soil

#### Components:

#### acetamiprid (ISO):

Distribution among environmental compartments : Koc: 200 ml/g, log Koc: 2.3  
Remarks: Mobile in soils

Stability in soil :

#### Bifenthrin:

Distribution among environmental compartments : Koc: 236610 ml/g, log Koc: 5.37  
Remarks: immobile

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

### Other adverse effects

#### Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

### International Regulations

#### **UNRTDG**

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bifenthrin, Acetamiprid)  
Class : 9  
Packing group : III  
Labels : 9  
Environmentally hazardous : yes

#### **IATA-DGR**

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Bifenthrin, Acetamiprid)  
Class : 9  
Packing group : III  
Labels : Miscellaneous  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Environmentally hazardous : yes

#### **IMDG-Code**

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

	N.O.S. (Bifenthrin, Acetamiprid)
Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: yes

### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 15. REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### The ingredients of this product are reported in the following inventories:

TCSI	: On the inventory, or in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.  Bifenthrin acetamiprid (ISO)
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

## 16. OTHER INFORMATION

# SAFETY DATA SHEET

according to the Globally Harmonized System



## BIFLEX ME

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.01.2025	50002957	Date of first issue: 10.01.2025

Revision Date : 10.01.2025

Date format : dd.mm.yyyy

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

IN / EN