

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Bifenthrin 2.5% EW

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as insecticide only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Corporation

Address : 2929 WALNUT ST
PHILADELPHIA PA 19104
USA

Telephone : (215) 299-6000

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

Emergency telephone : For leak, fire, spill or accident emergencies, call:
0086-0532 8388 9090 (National Registration Center for Chemicals)

Medical emergency:
86 532 8388 9090

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance : liquid
Color : white

Harmful if swallowed or in contact with skin. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs (Central nervous system). May cause damage to organs (Central nervous system) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 4

Skin sensitization : Sub-category 1B

Carcinogenicity : Category 2

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Specific target organ toxicity - single exposure : Category 2 (Central nervous system)

Specific target organ toxicity - repeated exposure : Category 2 (Central nervous system)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : H302 + H312 Harmful if swallowed or in contact with skin.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H371 May cause damage to organs (Central nervous system).
H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

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

Physical and chemical hazards

Not classified based on available information.

Health hazards

Harmful if swallowed. Harmful in contact with skin. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs. May cause damage to organs through prolonged or repeated exposure.

Environmental hazards

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

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)
Bifenthrin	82657-04-3	2.5
Solvent naphtha (petroleum), heavy arom.	64742-94-5	>= 10 -< 20

4. FIRST AID MEASURES

General advice	: Move out of dangerous area. Show this 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	: If on skin, rinse well with water.
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.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version 1.0	Revision Date: 2023/03/16	SDS Number: 50001572	Date of last issue: - Date of first issue: 2023/03/16
----------------	------------------------------	-------------------------	--

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 or in contact with skin.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause damage to organs.
May cause damage to organs through prolonged or repeated exposure.

Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical
Carbon dioxide (CO₂)
Foam

Unsuitable extinguishing media : High volume water jet

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.
Carbon oxides
Fluorinated compounds
Chlorinated compounds

Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
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).
Keep in suitable, closed containers for disposal.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

7. HANDLING AND STORAGE

Handling

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Avoidance of contact : Strong oxidizing agents
Strong acids and strong bases

Storage

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Solvent naphtha (petroleum), heavy arom.	64742-94-5	TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH

Personal protective equipment

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

Eye/face protection : Eye wash bottle with pure water

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version 1.0	Revision Date: 2023/03/16	SDS Number: 50001572	Date of last issue: - Date of first issue: 2023/03/16
----------------	------------------------------	-------------------------	--

	Tightly fitting safety goggles
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hand protection Material	: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
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

Appearance	: liquid
Color	: white
pH	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 97 °C
Flash point	: > 97 °C
Flammability (liquids)	: Not highly flammable
Self-ignition	: No data available
Density	: 1.210 g/cm ³ (25 °C)
Partition coefficient: n-octanol/water	: Not applicable
Viscosity Viscosity, dynamic	: 2,156 mPa.s
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: The product is not oxidizing.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Metal corrosion rate : Not corrosive to metals.

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	: Protect from frost, heat and sunlight.
Incompatible materials	: Strong oxidizing agents Strong acids and strong bases
Hazardous decomposition products	: Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or in contact with skin.

Product:

Acute oral toxicity	: LD50 (Rat, male): 583 mg/kg LD50 (Rat, female): 500 mg/kg
Acute inhalation toxicity	: LC50 (Rat, male and female): > 2 mg/l Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50 (Rat, male and female): 1,080 mg/kg

Components:

Bifenthrin:

Acute oral toxicity	: LD50 (Rat, male and female): 50.2 - 58.8 mg/kg Symptoms: Convulsions, Tremors
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 LC50 (Rat, male): 1.10 mg/l Exposure time: 4 h Test atmosphere: dust/mist

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Method: OECD Test Guideline 403

Symptoms: Tremors, Fatality

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

Solvent naphtha (petroleum), heavy arom.:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 4.778 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit
Result : No skin irritation

Remarks : May cause skin irritation and/or dermatitis.

Components:

Bifenthrin:

Species : Rabbit
Result : slight or no skin irritation.
GLP : yes

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

Solvent naphtha (petroleum), heavy arom.:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species : Rabbit

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Result : slight irritation

Remarks : Vapors may cause irritation to the eyes, respiratory system and the skin.

Components:

Bifenthrin:

Species : Rabbit

Result : Slight or no eye irritation

Method : OECD Test Guideline 405

GLP : yes

Solvent naphtha (petroleum), heavy arom.:

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Product:

Species : Guinea pig

Result : The product is a skin sensitizer, sub-category 1B.

Remarks : Causes sensitization.

Components:

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

Solvent naphtha (petroleum), heavy arom.:

Test Type : Maximization Test

Species : Guinea pig

Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Components:

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

Solvent naphtha (petroleum), heavy arom.:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Remarks: Based on data from similar materials Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Application Route: Ingestion Result: negative

Carcinogenicity

Suspected of causing cancer.

Components:

Bifenthrin:

Species	:	Rat, female
Application Route	:	Oral
Exposure time	:	2 Years

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

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

Solvent naphtha (petroleum), heavy arom.:

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Not classified based on available information.

Components:

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 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.

Solvent naphtha (petroleum), heavy arom.:

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Effects on fertility : Test Type: Three-generation study
Species: Rat, male and female
Application Route: Inhalation
Result: negative

Effects on fetal development : Test Type: Pre-natal
Species: Rat
Application Route: Ingestion
Symptoms: Maternal effects.
Method: OECD Test Guideline 414
Result: negative

STOT-single exposure

May cause damage to organs (Central nervous system).

Components:

Bifenthrin:

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

STOT-repeated exposure

May cause 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.

Solvent naphtha (petroleum), heavy arom.:

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

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

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Solvent naphtha (petroleum), heavy arom.:

Species	:	Rat
NOAEL	:	300 mg/kg
Application Route	:	Oral - gavage
Exposure time	:	13 weeks
Remarks	:	mortality

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

Bifenthrin:

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

Solvent naphtha (petroleum), heavy arom.:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks	:	No data available
---------	---	-------------------

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	LC50 (Zebra fish): 0.06 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia): 0.010 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (algae): 6.22 mg/l Exposure time: 72 h
Toxicity to terrestrial organisms	:	LD50 (Birds): > 8,000 mg/kg End point: Acute oral toxicity LD50 (Apis mellifera (bees)): 0.17 µg/bee Exposure time: 48 h End point: Acute contact toxicity LC50 (Apis mellifera (bees)): 108.7 mg/l Exposure time: 48 h

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

End point: Acute oral toxicity

LC50 (*Bombyx mori*): 0.5 mg/kg

End point: Acute oral toxicity

Components:

Bifenthrin:

Toxicity to fish	:	LC50 (<i>Salmo gairdneri</i>): 0.00015 mg/l Exposure time: 96 h Test Type: flow-through test
		LC50 (<i>Lepomis macrochirus</i> (Bluegill sunfish)): 0.00035 mg/l Exposure time: 96 h Test Type: flow-through test
		LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 0.000256 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
		LC50 (<i>Pimephales promelas</i> (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 (<i>Daphnia</i>): 0.00011 mg/l Exposure time: 48 h
		LC50 (<i>Daphnia</i>): 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 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 0.00012 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (<i>Daphnia magna</i> (Water flea)): 0.0013 µg/l Exposure time: 21 d
		NOEC (<i>Daphnia magna</i> (Water flea)): 0.00095 µg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	100,000

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Toxicity to soil dwelling organisms	:	LD50 (<i>Eisenia fetida</i> (earthworms)): > 16 mg/kg Exposure time: 14 d
Toxicity to terrestrial organisms	:	LD50 (<i>Colinus virginianus</i> (Bobwhite quail)): 1,800 mg/kg LD50 (<i>Anas platyrhynchos</i> (Mallard duck)): > 2,150 mg/kg LD50 (<i>Apis mellifera</i> (bees)): 0.1 - 0.35 µg/bee Exposure time: 24 h End point: Acute oral toxicity Method: OECD Test Guideline 213 LD50 (<i>Apis mellifera</i> (bees)): 0.1 - 0.3 µg/bee Exposure time: 24 h End point: Acute contact toxicity Method: OECD Test Guideline 214

Solvent naphtha (petroleum), heavy arom.:

Toxicity to fish	:	LL50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 3 mg/l Exposure time: 96 h Method: EPA OPP 72-1
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (<i>Daphnia magna</i> (Water flea)): 1.1 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	NOELR (<i>Pseudokirchneriella subcapitata</i> (green algae)): 0.22 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 EL50 (<i>Pseudokirchneriella subcapitata</i> (green algae)): 7.9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOELR (<i>Oncorhynchus mykiss</i> (rainbow trout)): 0.103 mg/l Exposure time: 28 d Method: QSAR
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOELR (<i>Daphnia magna</i> (Water flea)): 0.18 mg/l Exposure time: 21 d Method: QSAR

Persistence and degradability

Components:

Bifenthrin:

Biodegradability	:	Result: Not readily biodegradable.
------------------	---	------------------------------------

Solvent naphtha (petroleum), heavy arom.:

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 60.74 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Bioaccumulative potential

Components:

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

Solvent naphtha (petroleum), heavy arom.:

Partition coefficient: n-octanol/water : log Pow: 3.17 - 5.6
Method: QSAR

Mobility in soil

Components:

Bifenthrin:

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

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.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

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

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin)
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, N.O.S. (Bifenthrin)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

GB 6944/12268

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

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

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

National regulatory information

Law on the Prevention and Control of Occupational Diseases

Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

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. 2-METHYLBIPHENYL-3-YLMETHYL (Z)-(1RS,3RS)-3-(2-CHLORO-3,3,3-TRIFLUOROPROP-1-ENYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATE
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date	: 2023/03/16
Date format	: yyyy/mm/dd

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	: 8-hour, time-weighted average

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



Bifenthrin 2.5% EW

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/03/16	50001572	Date of first issue: 2023/03/16

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.

CN / EN