BIFLEX® ULTRA-LO-ODOUR



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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BIFLEX® ULTRA-LO-ODOUR

Other means of identification : BIFLEX ULTRA

BIFENTHRIN 100 G/L EC

Recommended use of the chemical and restrictions on use

Recommended use : Termiticide and insecticide

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Australasia Pty Ltd

Address : Building B, Level 2, 12 Julius Avenue,

North Ryde NSW 2113

Telephone : +6161029887900

Emergency telephone number : For leak, fire, spill or accident emergencies, call:

1800 033 111 (Ixom)

Medical emergency:

1 800 033 111 (Transport and 24 h Medical information)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Serious eye damage/eye irri-

tation

Category 1

Skin sensitisation : Category 1

Specific target organ toxicity - :

repeated exposure

Category 1 (Nervous system)

Aspiration hazard : Category 1

GHS label elements

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Hazard pictograms :







Signal word : Danger

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H372 Causes damage to organs (Nervous system) through

prolonged or repeated exposure.

Precautionary statements : Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash 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/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER or doctor/ physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER or doctor/ physician.

P314 Get medical advice/ attention if you feel unwell.

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical ad-

vice/ attention.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

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Components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 60 -<= 80
Alcohols, C12-14. ethoxylated	68439-50-9	>= 10 -< 30
bifenthrin (ISO)	82657-04-3	>= 10 -< 20
Benzenesulfonic acid, 4-C10-14-alkyl derivs.,	90194-26-6	>= 1 -< 3
calcium salts		

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

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 skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tis-

sue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Keep respiratory tract clear. Do NOT induce vomiting.

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 or if inhaled.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

Causes serious eye damage.

Causes damage to organs through prolonged or repeated

exposure.

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

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Suitable extinguishing media : Carbon dioxide (CO2)

Dry chemical

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 prod-

ucts

Thermal decomposition can lead to release of irritating gases

and vapours.

Halogenated compounds

Carbon oxides

Specific extinguishing meth-

ods

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 firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Hazchem Code : •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Ensure adequate ventilation.

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.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/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 ap-

plication area.

To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national

regulations.

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Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

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 stor-

age stability

No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated middle	64742-46-7	TWA (Mist)	5 mg/m3	AU OEL

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable per-

sonal respiratory protection and protective suit.

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.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Impervious clothing

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

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Colour : yellow-orange

Odour : aromatic, hydrocarbon-like

pH : not determined

Melting point/freezing point : not determined

Boiling point/boiling range : not determined

Flash point : 94 °C

Density : ca. 0.9 g/cm3

Solubility(ies)

Water solubility : emulsifiable

Metal corrosion rate : Not corrosive to metals

SECTION 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 reac-

tions

No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Strong acids Strong bases

Hazardous decomposition

products

Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : LD50 (Rat, male and female): 531 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 4.94 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Components:

Distillates (petroleum), hydrotreated middle:

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, male and female): 4.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 1.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 3,000 mg/kg

Method: OECD Test Guideline 402

bifenthrin (ISO):

Acute oral toxicity : LD50 (Rat): 53.4 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0.8 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

LC50 (Rat, male): 1.01 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Acute oral toxicity : LD50 (Rat, male and female): 1,080 - 1,630 mg/kg

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Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat, 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 : Extremely corrosive and destructive to tissue.

Components:

Distillates (petroleum), hydrotreated middle:

Species : Rabbit Result : Skin irritation

Remarks : Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

bifenthrin (ISO):

Species : Rabbit

Method : EPA OPP 81-5
Result : No skin irritation

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Species : reconstructed human epidermis (RhE)

Method : OECD Test Guideline 439

Result : Skin irritation

Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species : Rabbit

Result : Irreversible effects on the eye

Remarks : May cause irreversible eye damage.

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Components:

Distillates (petroleum), hydrotreated middle:

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Species : Rabbit

Result : Irreversible effects on the eye Method : OECD Test Guideline 405

bifenthrin (ISO):

Species : Rabbit

Result : No eye irritation Method : EPA OPP 81-4

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Species : Bovine cornea

Result : Irreversible effects on the eye Method : OECD Test Guideline 437

Remarks : Based on data from similar materials

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Species : Guinea pig

Result : May cause sensitisation by skin contact.

Remarks : Causes sensitisation.

Components:

Distillates (petroleum), hydrotreated middle:

Test Type : Buehler Test Exposure routes : Skin contact Species : Guinea pig

Result : Does not cause skin sensitisation.
Remarks : Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Exposure routes : Skin contact Species : Guinea pig

Method : Directive 67/548/EEC, Annex V, B.6. Result : Does not cause skin sensitisation.

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: Skin contact : Humans

: Does not cause skin sensitisation.

bifenthrin (ISO):

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.
Remarks : Based on data from similar materials

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: Mutagenicity (Salmonella typhimurium - reverse mu-

tation assay) Result: negative

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration

Species: Rat (male and female)

Application Route: Intraperitoneal injection

Result: negative

Alcohols, C12-14. ethoxylated:

Genotoxicity in vitro : Test Type: reverse mutation assay

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo : Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

bifenthrin (ISO):

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Genotoxicity in vitro : Test system: Chinese hamster ovary cells

Result: negative

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration

Species: Rat Result: negative

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Genotoxicity in vitro : Test Type: reverse mutation assay

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration

Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 475

Result: negative

Remarks: Based on data from similar materials

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

Not classified based on available information.

Components:

Alcohols, C12-14. ethoxylated:

Species : Rat, male and female

Exposure time : 24 month(s)
Result : negative

bifenthrin (ISO):

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

NOAEL : 3 mg/kg bw/day

Result : negative

Species : Mouse Application Route : Oral

Exposure time : 18 month(s)

NOAEL : 7.6 mg/kg bw/day

Result : positive

Carcinogenicity - Assess-

: Weight of evidence does not support classification as a car-

ment cinogen

Reproductive toxicity

Not classified based on available information.

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Components:

Distillates (petroleum), hydrotreated middle:

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: Oral

General Toxicity F1: NOAEL: 1,000 mg/kg body weight

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Dermal

General Toxicity Maternal: LOAEL: 50 mg/kg body weight Developmental Toxicity: NOAEL: 50 mg/kg body weight Remarks: Developmental effects are a consequence of ma-

ternal toxicity.

Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

bifenthrin (ISO):

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: 3 mg/kg bw/day

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rabbit

Application Route: Oral

General Toxicity Maternal: NOAEL: 2.7 mg/kg bw/day

Symptoms: Maternal effects Result: No teratogenic effects

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Effects on fertility : Test Type: Two-generation study

General Toxicity - Parent: NOAEL: > 350 mg/kg body weight General Toxicity F1: NOAEL: > 350 mg/kg body weight

Method: OECD Test Guideline 416

Result: negative

Remarks: Based on data from similar materials

Effects on foetal develop-

ment

: Test Type: reproductive and developmental toxicity study

Species: Rat

Developmental Toxicity: NOAEL: > 350 mg/kg body weight

Result: negative

Remarks: Based on data from similar materials

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Reproductive toxicity - As-

Weight of evidence does not support classification for repro-

sessment

ductive toxicity

STOT - single exposure

Not classified based on available information.

Components:

bifenthrin (ISO):

Remarks : No significant adverse effects were reported

STOT - repeated exposure

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

Components:

Alcohols, C12-14. ethoxylated:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

bifenthrin (ISO):

Target Organs : Nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 1.

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated middle:

Species : Rat

NOAEL : >= 1.71 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 13 weeks

Remarks : Based on data from similar materials

Alcohols, C12-14. ethoxylated:

Species : Rat, male and female

NOAEL : 110 mg/kg
Application Route : Oral
Exposure time : 2160 h

bifenthrin (ISO):

Species : Rat

LOAEL : 7 - 9 mg/kg

Application Route : Oral

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Exposure time : 90 d

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Species : Rat, male and female

NOAEL : 85 mg/kg
LOAEL : 145 mg/kg
Application Route : Oral
Exposure time : 9 months
Target Organs : Kidney, Liver

Remarks : Based on data from similar materials

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

Distillates (petroleum), hydrotreated middle:

May be fatal if swallowed and enters airways.

bifenthrin (ISO):

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

Further information

Product:

Remarks : Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Distillates (petroleum), hydrotreated middle:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 24 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 24 h
Test Type: static test

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 10 mg/l

Exposure time: 72 h

Test Type: static test

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

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Toxicity to microorganisms : EL50 (Tetrahymena pyriformis): > 1,000 mg/l

Exposure time: 40 h

Remarks: The value is given based on a SAR/AAR approach

using OECD Toolbox, DEREK, VEGA QSAR models

(CAESAR models), etc.

Alcohols, C12-14. ethoxylated:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.1 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.7 mg/l

Exposure time: 48 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): 0.87 mg/l

Exposure time: 72 h Test Type: static test

Toxicity to fish (Chronic tox-

icity)

EC10 (Pimephales promelas (fathead minnow)): 0.96 mg/l

Exposure time: 30 d

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

EC10 (Daphnia magna (Water flea)): 0.53 mg/l

Exposure time: 21 d

Toxicity to microorganisms : EC50 (Pseudomonas putida): 1,000 g/l

Exposure time: 3 h

Toxicity to soil dwelling or-

ganisms

NOEC (Eisenia fetida (earthworms)): 220 mg/kg

Method: OECD Test Guideline 222

Plant toxicity : NOEC: >= 100 mg/l

Exposure time: 456 h

bifenthrin (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.15

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.11

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (algae): 0.822 mg/l

Exposure time: 72 h

M-Factor (Acute aquatic tox-

icity)

10,000

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.12

Exposure time: 21 d

Toxicity to daphnia and other : NOEC (Crustaceans): 0.0013

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aquatic invertebrates (Chron-

ic toxicity)

Exposure time: 21 d

M-Factor (Chronic aquatic

toxicity)

100,000

Toxicity to soil dwelling or-

ganisms

(Eisenia fetida (earthworms)): > 18.9 mg/kg

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): 1,800 mg/kg

LD50 (Apis mellifera (bees)): 0.015 μg/Bee

Remarks: Contact

LD50 (Apis mellifera (bees)): 0.1 µg/Bee

Remarks: Oral

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Toxicity to fish : LC50: 1.7 - 7.7 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 5.7 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: water accommodated fractions (WAF)

Based on data from similar materials

Toxicity to algae/aquatic

plants

NOELR (Pseudokirchneriella subcapitata (green algae)): 10

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: water accommodated fractions (WAF)

Based on data from similar materials

EL50 (Pseudokirchneriella subcapitata (algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: water accommodated fractions (WAF)

Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.23 mg/l

Exposure time: 72 d

Test Type: flow-through test

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 1.18 mg/l

Exposure time: 21 d

Test Type: flow-through test

Toxicity to microorganisms : EC50 (activated sludge): 162 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

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1.1 31.07.2021 50001561 Date of first issue: 30.07.2021

Remarks: Based on data from similar materials

Persistence and degradability

Components:

Distillates (petroleum), hydrotreated middle:

Biodegradability : Result: Readily biodegradable.

Biodegradation: > 60 % Exposure time: 28 d

Alcohols, C12-14. ethoxylated:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 78 % Exposure time: 28 d

Method: OECD Test Guideline 301B

bifenthrin (ISO):

Biodegradability : Result: Not readily biodegradable.

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Distillates (petroleum), hydrotreated middle:

Partition coefficient: n-

: $\log Pow: > 4$

octanol/water

Alcohols, C12-14. ethoxylated:

Bioaccumulation : Bioconcentration factor (BCF): < 800

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 5.12 - 5.32 (25 °C)

bifenthrin (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 1,414

Remarks: Due to the distribution coefficient n-octanol/water,

accumulation in organisms is possible.

See section 9 for octanol-water partition coefficient.

Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts:

Partition coefficient: n- : log Pow: 4.3 - 5.8 (25 °C)

octanol/water pH: 7

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Method: OECD Test Guideline 117

Mobility in soil

Components:

Alcohols, C12-14. ethoxylated:

Distribution among environ-

mental compartments

Koc: 13226.76 - 16423.03

bifenthrin (ISO):

Distribution among environ-

mental compartments

Remarks: immobile

Stability in soil Dissipation time: 86 d

Other adverse effects

Product:

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 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 chemi-

cal or used container.

Send to a licensed waste management company.

Empty remaining contents. Contaminated packaging

Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN 3082 **UN** number

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Bifenthrin)

Class 9 Ш Packing group Labels 9

IATA-DGR

UN/ID No. UN 3082





Version **Revision Date:** SDS Number: Date of last issue: 30.07.2021 31.07.2021 50001561 Date of first issue: 30.07.2021 1.1

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

(Bifenthrin)

964

9 Class Packing group Ш

Miscellaneous Labels

Packing instruction (cargo

aircraft)

Packing instruction (passen-964

ger aircraft)

Environmentally hazardous yes

IMDG-Code

UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Bifenthrin)

Class 9 Packing group Ш 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.

National Regulations

ADG

UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Bifenthrin)

9 Class Ш Packing group Labels 9 Hazchem Code •3Z

Not subject to the ADG Code when transported by Road or Remarks

Rail in Australia, in packages 500kg(L) or less

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.

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform

Scheduling of Medicines and

Poisons

Schedule 6

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APVMA number: 59269

Prohibition/Licensing Requirements : There is no applicable prohibition,

authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regula-

tions.

The components of this product are reported in the following inventories:

TCSI : Not 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

Fatty acid di-ester

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

SECTION 16. OTHER INFORMATION

Revision Date : 31.07.2021

Date format : dd.mm.yyyy

Full text of other abbreviations

AU OEL : Australia. Workplace Exposure Standards for Airborne Con-

taminants.

AU OEL / TWA : Exposure standard - time weighted average

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

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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; 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

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AU / 6N