FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name FENTROL®

Other means of identification

Product code 50001284

Product Registration Num-

ber

RSCO-INAC-0103L-303-394-006

Recommended use of the chemical and restrictions on use

Recommended use

Restrictions on useUse as recommended by the label.

Manufacturer or supplier's details

Manufacturer FMC AGROQUÍMICA DE MÉXICO,

S. DE R.L. DE C.V AV. VALLARTA NO. 6503, LOCAL A1-6, COL. CD. GRANJA, 45010 ZAPOPAN, JALISCO, MÉXICO TEL.: 800 FMC AGRO (362 2476) CONTACTOMEXICO@FMC.COM

SDS-Info@fmc.com

Emergency telephone

For leak, fire, spill or accident emergencies, call:

800-681-9531 (CHEMTREC - Mexico)

1 703 / 741-5970 (CHEMTREC - International)

Medical emergency:

911

SINTOX (Toxicological Information Service): 800 009 2800; 55 5611 2634 and 55 5598 6659, service 24 hours a day, 365

days a year.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 5

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 5

Skin sensitization : Sub-category 1B

Specific target organ toxicity

- repeated exposure

Category 2

1/22

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

GHS label elements

Hazard pictograms :





Signal Word : WARNING

Hazard Statements : H303 + H313 May be harmful if swallowed or in contact with

skin.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or re-

peated exposure.

Precautionary Statements : Prevention:

P260 Do not breathe mist or vapors.

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.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of 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. P312 Call a POISON CENTER or doctor/ physician if you feel

unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
GAMMA-CYHALOTHRIN	76703-62-3	>= 5 -< 10	
Solvent naphtha (petroleum), heavy arom.;	64742-94-5	>= 1 -< 5	
Kerosine — unspecified			

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this material safety data sheet to the doctor in attend-

ance.

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.

If symptoms persist, call a physician. Wash contaminated clothing before re-use.

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

May be harmful if swallowed or in contact with skin.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause damage to organs through prolonged or repeated

exposure.

Exposure to skin may result in mild symptoms include itching, hives or rash, and skin redness. More severe symptoms include sneezing, itchy watery eyes, and difficulty breathing. Gamma-cyhalothrin can cause feelings of burning, tingling or

numbness in exposed areas (paraesthesia).

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

Notes to physician : Treat symptomatically.

In case of poisoning, call the emergency numbers SINTOX (control center of intoxications): 800-00-928-00; (55) 5611 2634 and (55) 5598 6659, 24-hour service on 365 days of the

year. For emergencies: 911.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Use extinguishing measures that are appropriate to local cir-

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

cumstances and the surrounding environment.

Unsuitable extinguishing

media

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 prod: :

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Nitrogen oxides (NOx) Fluorinated compounds Halogenated compounds

Carbon oxides Hydrogen cyanide Chlorinated compounds

Specific extinguishing meth-

ods

Remove undamaged containers from fire area if it is safe to do

SO

Use a water spray to cool fully closed containers.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

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

Firefighters should wear protective clothing and self-contained

breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Ensure adequate ventilation.

If it can be safely done, stop the leak.

Do not touch or walk through the spilled material. Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

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

For further cleaning instructions call CHEMTREC, 800-681-

9531.

Never return spills in original containers for re-use.

Collect as much of the spill as possible with a suitable absor-

bent material.

Pick up and transfer to properly labeled containers.

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

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 : For incompatible materials see section 10.

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 ap-

plication 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.

For incompatible materials see section 10.

Hygiene measures : Avoid contact with skin, eyes and clothing.

Do not inhale aerosol.

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.

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

The product is stable under normal conditions of warehouse

storage.

Protect from frost and extreme heat.

The product should not be allowed to dry out.

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present.

A hand wash station should be available.

Further information on stor-

age stability

No decomposition if stored and applied as directed.





Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

SECTION 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.; Kerosine — un- specified	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH

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 : Protective gloves

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

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 : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Color : off-white

Odor : aromatic

Odor Threshold : not determined

pH : 5.64 (23.6 °C)

Concentration: 10 g/l 1 %

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Melting point/freezing point : < 0 °C

Boiling point/boiling range : Decomposition

Flash point : > 93 °C

Evaporation rate : not determined

Self-ignition : > 400 °C

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapor pressure : Not available for this mixture.

Relative vapor density : not determined

Relative density : not determined

Density : 1.034 g/cm3 (20 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Not available for this mixture.

Autoignition temperature : No data available

Decomposition temperature : Decomposes on heating.

Viscosity

Viscosity, dynamic : Non-newtonian fluid: viscosity is dependent on shear rate.

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Surface tension : 41 mN/m, 25 °C

43 mN/m, 40 °C

Molecular weight : Not applicable

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Metal corrosion rate : Not corrosive to metals.

Particle size : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Gamma-cyhalothrin decomposes on heating. Direct local

heating such as electric heating or by steam must be avoided.

Possibility of hazardous reac-

tions

No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

Heating of the product will produce harmful and irritant va-

pours.

Avoid extreme temperatures. Avoid formation of aerosol.

Incompatible materials : Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

May be harmful if swallowed or in contact with skin.

Harmful if inhaled.

Product:

Acute oral toxicity : LD50 Oral (Rat, female): 2,646 mg/kg

LD50 Oral (Rat, male): 2,250 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.54 - 2.72 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Symptoms: incoordination

GLP: yes

Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 5,000 mg/kg

Method: OECD Test Guideline 402

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

GLP: yes

Components:

GAMMA-CYHALOTHRIN:

Acute oral toxicity : LD50 (Rat, female): ca. 55 mg/kg

Method: OECD Test Guideline 401

Symptoms: Tremors

GLP: yes

LD50 (Rat, male): > 50 mg/kg Method: OECD Test Guideline 401

Symptoms: Tremors

GLP: yes

Acute inhalation toxicity : LC50 (Rat, female): 0.0282 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Symptoms: Tremors

GLP: yes

LC50 (Rat, male): 0.0402 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Symptoms: Tremors

GLP: yes

Acute dermal toxicity : LD50 (Rat, female): 1,650 mg/kg

Method: OECD Test Guideline 402

Symptoms: Tremors

GLP: yes

LD50 (Rat, male): > 1,500 mg/kg Method: OECD Test Guideline 402

Symptoms: Tremors

GLP: yes

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

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): > 4.688 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Method: OECD Test Guideline 402

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

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

Product:

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404

Result : slight irritation

Components:

GAMMA-CYHALOTHRIN:

Species : Rabbit

Assessment : Irritating to skin.

Method : OECD Test Guideline 404

Result : irritating GLP : yes

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit

Assessment : Repeated exposure may cause skin dryness or cracking.

Result : No skin irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Based on data from similar materials

Serious eye damage/eye irritation

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

Product:

Species : Rabbit

Result : slight irritation

Assessment : Not classified as irritant
Method : OECD Test Guideline 405

Components:

GAMMA-CYHALOTHRIN:

Species : Rabbit
Result : Eye irritation
Assessment : Irritating to eyes.

Method : OECD Test Guideline 405

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit

Assessment : No eye irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

tion.

Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

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

Product:

Routes of exposure : Dermal Species : Guinea pig

Method : OECD Test Guideline 406

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

Remarks : Based on data from a similar product.

Remarks : Causes sensitization.

Components:

GAMMA-CYHALOTHRIN:

Routes of exposure : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitization by skin contact.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Test Type : Maximization Test Species : Guinea pig

Result : Not a skin sensitizer.

Remarks : Based on data from similar materials

Germ cell mutagenicity

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

Product:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse Result: negative

Components:

GAMMA-CYHALOTHRIN:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Result: negative

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse Result: negative GLP: yes

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration.

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Carcinogenicity

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

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rat, male and female
Application Route : inhalation (vapor)
Exposure time : 12 month(s)
NOAEC : 1.8 mg/l
Result : negative

Remarks : Based on data from similar materials

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

Reproductive toxicity

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

Components:

GAMMA-CYHALOTHRIN:

Effects on fetal development : Species: Rat

Dose: 1, 2.5, 5, 10 or 15 mg/kg bw/day

Embryo-fetal toxicity.: NOEL: 2.5 mg/kg bw/day

STOT-single exposure

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Product:

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Components:

GAMMA-CYHALOTHRIN:

Target Organs : Nervous system

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

toxicant, repeated exposure, category 1.

Repeated dose toxicity

Components:

GAMMA-CYHALOTHRIN:

Species : Rat, male and female

NOAEL : 50 ppm
Application Route : Oral - feed
Exposure time : 13 weeks

Species : Rat, male and female NOAEL : 4.19 - 4.49 mg/kg LOAEL : 8.81 - 10.24 mg/kg

Application Route : Oral - feed Exposure time : 13 weeks

Method : OECD Test Guideline 407

Target Organs : Nervous system Symptoms : decrease in appetite

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rat, male and female

NOAEC : 0.9 - 1.8 mg/l
Application Route : inhalation (vapor)
Exposure time : 12 Months

Aspiration toxicity

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

Components:

GAMMA-CYHALOTHRIN:

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

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

May be fatal if swallowed and enters airways.

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Experience with human exposure

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Skin contact : Symptoms: Repeated exposure may cause skin dryness or

cracking.

Further information

Product:

Remarks : On contact, the active ingredient can cause feelings of burn-

ing, tingling or numbness in exposed areas (paraesthesia), which is harmless at low exposure, but can be quite painful, especially in the eye. The effect may result from splash, aerosol or transfer from contaminated gloves. The effect is transient, lasting up to 24 hours, but may in exceptional cases last longer. It may be considered as a warning that overexposure has occurred and that work practice should be reviewed.

Remarks : No data available

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Remarks : Vapour concentrations above recommended exposure levels

are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 0.021 - 0.038 mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.00919 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna Straus (Water flea)): 0.00245 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic : EbC50 (Selenastrum capricornutum (green algae)): 137 mg/l

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

plants Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to soil dwelling or-

ganisms

Method: OECD Test Guideline 216

Remarks: No significant adverse effect on Nitrogen minerali-

zation.

Method: OECD Test Guideline 217

Remarks: No significant adverse effect on Carbon mineraliza-

tion.

LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg

Exposure time: 14 d

Method: OECD Test Guideline 207

Toxicity to terrestrial organ-

isms

LD50 (Apis mellifera (bees)): 0.03 µg/bee

End point: Acute contact toxicity
Method: OECD Test Guideline 214

LD50 (Apis mellifera (bees)): 1.259 µg/bee

Exposure time: 48 h

End point: Acute oral toxicity Method: OECD Test Guideline 213

LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg

Method: EPA OPP 71-1

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

GAMMA-CYHALOTHRIN:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.07 μg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.1 μg/l

Exposure time: 48 h

Test Type: Static renewal test Method: OECD Test Guideline 202

(Hyalella azteca (Amphipod)): 0.000086 µg/l

Exposure time: 96 h

Test Type: flow-through test Method: OPPTS 850.1010

Toxicity to algae/aquatic

plants

EC50 (algae): > 2.85 mg/l

Exposure time: 72 h

NOEC (Lemna gibba (duckweed)): 0.5 μg/l

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Exposure time: 7 d

Method: OECD Test Guideline 221

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.016 µg/l

End point: mortality Exposure time: 7 d

Test Type: Early Life-Stage

GLP: yes

LOEC (Pimephales promelas (fathead minnow)): 0.04 µg/l

End point: mortality Exposure time: 7 d

Test Type: Early Life-Stage

GLP: yes

NOEC (Pimephales promelas (fathead minnow)): 0.0379 µg/l

End point: Hatching success

Exposure time: 35 d

Test Type: flow-through test

GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0019 µg/l

End point: reproduction Exposure time: 21 d

Test Type: flow-through test Method: OECD Test Guideline 211

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 1300 mg/kg dry weight

(d.w.)

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg

LD50 (Apis mellifera (bees)): 0.005 µg/bee

Exposure time: 24 h

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): 4.2 µg/bee

Exposure time: 24 h

End point: Acute oral toxicity

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 1.4 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 1 - 3

mg/l

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Exposure time: 24 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EL50 (Daphnia magna (Water flea)): 0.89 mg/l Exposure time: 21 d

Method: OECD Test Guideline 211

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 677.9 mg/l

Exposure time: 72 h

Test Type: Growth inhibition

Persistence and degradability

Product:

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

Components:

GAMMA-CYHALOTHRIN:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 21 % Exposure time: 28 d

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 58.6 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Remarks: No data available

Components:

GAMMA-CYHALOTHRIN:

Bioaccumulation : Remarks: Can accumulate in aquatic organisms.

Partition coefficient: n-

octanol/water

log Pow: 4.96 (19 °C)

Method: OECD Test Guideline 107

log Pow: 5.65

Method: OECD Test Guideline 117

FENTROL®



Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Bioaccumulation Remarks: The product/substance has a potential to bioaccu-

Partition coefficient: n-

octanol/water

log Pow: 3.72 Method: QSAR

Mobility in soil

Product:

Distribution among environ-

mental compartments

Remarks: No data is available on the product itself.

Components:

GAMMA-CYHALOTHRIN:

Distribution among environ-

mental compartments

: Remarks: immobile

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Distribution among environ-

mental compartments

Remarks: Expected to partition to sediment and wastewater

solids. Moderately volatile.

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.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

Components:

GAMMA-CYHALOTHRIN:

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.

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Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

Appropriate personal protective equipment, as described in Sections 7 and 8, should be worn when handling materials for

waste disposal.

Contaminated packaging : Containers must be disposed of in accordance with local,

state and federal regulations. It is prohibited to reuse, bury, burn or sell containers. Washable containers: Triple wash containers smaller than 20 liters and pressure wash containers of 20 liters or more. Triple wash: Add water up to 1/4 of the container's capacity, close and shake for 30 seconds. Pour the wash water into the mixing tank, considering this volume of water within the recommended volume for mixing. Perform this procedure three times. Pressure washing: Activate the pressure washing device for 30 seconds, considering the volume of water used as part of the recommended volume for the mixture. For both procedures, make the container unusable by piercing it at the base without damaging the label. Nonwashable containers: Containers that cannot be washed, make them unusable by perforating them without damaging the label. In all cases, deliver the containers to collection points indicated by the local container collection program. For more information on the Empty Pesticide Container Manage-

ment Plan, visit http://campolimpio.org.mx/.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Gamma-cyhalothrin)

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.

964

964

(Gamma-cyhalothrin)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen:

ger aircraft)

Environmentally hazardous : yes

IMDG-Code

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Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Gamma-cyhalothrin)

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

NOM-002-SCT

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Gamma-cyhalothrin)

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 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

This document has been prepared in accordance with the Globally Harmonized System (GHS). The document consists of 16 points that cover the Official Mexican STANDARD NOM-018-STPS-2015 Harmonized system for the identification and communication of hazards and risks due to dangerous chemical substances in the workplace. 271000

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Federal Law for the control of chemical precursors, : Not applicable essential chemical products and machinery for produc-

ing capsules, tablets and pills.

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





Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

GAMMA-CYHALOTHRIN

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

SECTION 16. OTHER INFORMATION

Revision Date : 22.07.2025

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA : 8-hour, 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 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, Bioaccumu-

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Version Revision Date: SDS Number: Date of last issue: -

4.0 22.07.2025 50001284 Date of first issue: 03.10..2018

lative 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

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End of Material Safety Data Sheet