

SAFETY DATA SHEET



Zeta-cypermethrin (F2700)/Bifenthrin 1:4 SFR MUP Insecticide/Miticide LO

| | | | |
|----------------|------------------------------|-------------------------|--|
| Version 1.2 | Revision Date: 10/19/2022 | SDS Number: 50000432 | Date of last issue: - Date of first issue: 05/26/2016 |
|----------------|------------------------------|-------------------------|--|

SECTION 1. IDENTIFICATION

Product identifier

Product name Zeta-cypermethrin (F2700)/Bifenthrin 1:4 SFR MUP Insecticide/Miticide LO

Other means of identification

Product code 50000432

Chemical nature Mixture

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.

Details of the supplier of the safety data sheet

Manufacturer FMC Corporation
2929 WALNUT ST
PHILADELPHIA PA 19104
USA
(215) 299-6000 (General Information)
SDS-Info@fmc.com

Emergency telephone

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

Medical emergency:
U.S.A. & Canada: +1 800 / 331-3148
All other countries: +1 651 / 632-6793 (Collect)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------------|---------------|
| Acute toxicity (Oral) | : Category 4 |
| Acute toxicity (Inhalation) | : Category 4 |
| Eye irritation | : Category 2A |
| Respiratory sensitization | : Category 1 |
| Skin sensitization | : Category 1 |

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Carcinogenicity : Category 2

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

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

Aspiration hazard : Category 1

GHS label elements

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.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351 Suspected of causing cancer.
H370 Causes damage to organs (Blood, Central nervous system).
H372 Causes damage to organs (Central nervous system, Blood) through prolonged or repeated exposure.

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 dust/ fume/ gas/ mist/ vapors/ 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 must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation wear respiratory protection.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water and soap.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

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

P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

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

P337 + P313 If eye irritation persists: Get medical advice/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

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|------------|-----------------------|
| Bifenthrin | 82657-04-3 | 12 |
| cypermethrin (ISO) | 52315-07-8 | 3 |
| Distillates (petroleum), hydrotreated light | 64742-47-8 | >= 5 - < 10 |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
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 : Call a physician or poison control center immediately.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

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- If swallowed : 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 irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
- Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry chemical, CO2, water spray or regular 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 : No hazardous combustion products are known
- Further information : 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency 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.

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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 : Avoid formation of aerosol.
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.
Provide sufficient air exchange and/or exhaust in work rooms.
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.

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|------------|----------------------------------|--|-------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | TWA | 200 mg/m ³ (total hydrocarbon vapor) | ACGIH |

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|-----------------------|
| Appearance | : liquid |
| Color | : amber |
| Odor | : hydrocarbon-like |
| Odor Threshold | : No data available |
| pH | : 6 - 7 |
| Melting point/freezing point | : No data available |
| Initial boiling point and boiling range | : No data available |
| Flash point | : > 230 °F / > 110 °C |
| Evaporation rate | : No data available |
| Upper explosion limit / Upper flammability limit | : No data available |
| Lower explosion limit / Lower flammability limit | : No data available |
| Vapor pressure | : No data available |
| Relative density | : 0.917 |

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| | |
|--|---------------------------|
| Density | : 0.917 g/cm ³ |
| Solubility(ies) Water solubility | : negligible |
| Partition coefficient: n-octanol/water | : No data available |
| Viscosity Viscosity, dynamic | : 60 mPa.s |
| Viscosity, kinematic | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

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 reactions | : No decomposition if stored and applied as directed. |
| Conditions to avoid | : No data available |
| Incompatible materials | : No data available |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

| | |
|---------------------------|---|
| Acute oral toxicity | : LD50 (Rat): 727 mg/kg |
| Acute inhalation toxicity | : LC50 (Rat): > 2.11 mg/l Exposure time: 4 h Test atmosphere: dust/mist |
| Acute dermal toxicity | : LD50 (Rat): > 5,000 mg/kg |

Skin corrosion/irritation

Not classified based on available information.

Product:

| | |
|---------|---------------------|
| Species | : Rabbit |
| Result | : slight irritation |

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Remarks : May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

| | |
|---------|---------------------------|
| Species | : Rabbit |
| Result | : Moderate eye irritation |

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Product:

| | |
|--------|--|
| Result | : May cause sensitization by skin contact. |
|--------|--|

Remarks : Causes sensitization.

Germ cell mutagenicity

Not classified based on available information.

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 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 |
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Result: negative

cypermethrin (ISO):

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Test Type: unscheduled DNA synthesis assay
Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: Chinese hamster
Cell type: Bone marrow
Application Route: Oral
Result: negative

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

Distillates (petroleum), hydrotreated light:

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: Micronucleus test
Species: Mouse (male and female)
Application Route: Intraperitoneal injection
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Suspected of causing cancer.

Product:

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

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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.

cypermethrin (ISO):

Effects on fertility : Test Type: Two-generation study
Species: Rat
Application Route: Oral
General Toxicity F1: NOAEL: 22 mg/kg bw/day
Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
General Toxicity Maternal: NOAEL: 12.5 mg/kg bw/day
Developmental Toxicity: NOAEL: 35 mg/kg bw/day
Method: OECD Test Guideline 426
Result: negative

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

Distillates (petroleum), hydrotreated light:

Effects on fertility : Test Type: Fertility
Species: Rat, male and female
Application Route: inhalation (vapor)
Duration of Single Treatment: 14 Weeks
General Toxicity Parent: NOAEC: 2.2 mg/l
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

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Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 500 mg/kg body weight
Teratogenicity: NOAEL: 2,000 mg/kg body weight
Remarks: Developmental effects are a consequence of maternal toxicity.

STOT-single exposure

Causes damage to organs (Blood, Central nervous system).

Product:

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

STOT-repeated exposure

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

Product:

Target Organs : Central nervous system, Blood
Assessment : Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

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

cypermethrin (ISO):

Species : Dog
NOAEL : 6 mg/kg bw/day
LOAEL : 18 mg/kg bw/day
Application Route : Oral
Exposure time : 90 Days
Remarks : Based on data from similar materials

Species : Rat

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| NOAEL | : | 16.7 mg/kg bw/day |
| LOAEL | : | 33.7 mg/kg bw/day |
| Application Route | : | Oral |
| Exposure time | : | 90 Days |
| Target Organs | : | Nervous system |

Distillates (petroleum), hydrotreated light:

| | | |
|-------------------|---|--------------------------------------|
| Species | : | Rat |
| NOAEL | : | >= 200 ppm |
| Application Route | : | inhalation (vapor) |
| Exposure time | : | 13 weeks |
| Remarks | : | Based on data from similar materials |

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

Bifenthrin:

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

cypermethrin (ISO):

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

Distillates (petroleum), hydrotreated light:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Experience with human exposure

Components:

cypermethrin (ISO):

| | | |
|---------------------|---|----------------------------------|
| General Information | : | Symptoms: May cause paraesthesia |
|---------------------|---|----------------------------------|

Further information

Product:

| | | |
|---------|---|---------------------------------|
| Remarks | : | Solvents may degrease the skin. |
|---------|---|---------------------------------|

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Bifenthrin:

- | | | |
|--|---|--|
| Toxicity to fish | : | LC50 (<i>Salmo gairdneri</i>): 0.15 µg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (<i>Daphnia magna</i> (Water flea)): 0.11 µg/l Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (algae): 0.822 mg/l Exposure time: 72 h |
| 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 |
| 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>Apis mellifera</i> (bees)): 0.044 - 0.11 µg/bee End point: Acute contact toxicity |
| | | LD50 (<i>Apis mellifera</i> (bees)): 0.1 µg/bee End point: Acute oral toxicity |
| | | LD50 (<i>Anas platyrhynchos</i> (Mallard duck)): > 2,150 mg/kg |

cypermethrin (ISO):

- | | | |
|---|---|--|
| Toxicity to fish | : | LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 0.69 µg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (<i>Daphnia magna</i> (Water flea)): 0.141 µg/l Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (algae): > 1 mg/l Exposure time: 72 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Fish): 0.015 µg/l Exposure time: 21 d |

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Crustaceans): 0.01 µg/l
Exposure time: 21 d

Toxicity to soil dwelling organisms : (worms): > 100 mg/kg
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): > 2,025 mg/kg

NOEC (Colinus virginianus (Bobwhite quail)): 150 mg/kg
End point: Reproduction Test

LD50 (Apis mellifera (bees)): 0.059 µg/bee

LC50 (Apis mellifera (bees)): 0.033 µg/bee

Distillates (petroleum), hydrotreated light:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Remarks: water accommodated fractions (WAF)

Toxicity to daphnia and other aquatic invertebrates : LL50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Test Type: static test
Remarks: water accommodated fractions (WAF)

Toxicity to algae/aquatic plants : NOELR (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

EL50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR (Oncorhynchus mykiss (rainbow trout)): 0.173 mg/l
Exposure time: 28 d
Method: QSAR
Remarks: No toxicity at the limit of solubility.
water accommodated fractions (WAF)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 1.22 mg/l
Exposure time: 21 d
Method: QSAR
Remarks: No toxicity at the limit of solubility.
water accommodated fractions (WAF)

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Toxicity to microorganisms : EL50 (Tetrahymena pyriformis): > 1,000 mg/l
Exposure time: 48 h
Method: QSAR

Persistence and degradability

Components:

Bifenthrin:

Biodegradability : Result: Not readily biodegradable.

cypermethrin (ISO):

Biodegradability : Result: Not readily biodegradable.

Distillates (petroleum), hydrotreated light:

Biodegradability : Concentration: 50 mg/l
Result: Readily biodegradable.
Biodegradation: 89.9 %
Exposure time: 28 d
Method: OECD Test Guideline 301

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

cypermethrin (ISO):

Bioaccumulation : Remarks: Accumulation in aquatic organisms is expected.

Partition coefficient: n-octanol/water : log Pow: 5 - 6 (75 °F / 24 °C)

Distillates (petroleum), hydrotreated light:

Bioaccumulation : Bioconcentration factor (BCF): 144.3
Method: QSAR

Mobility in soil

Components:

Bifenthrin:

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

Stability in soil :

cypermethrin (ISO):

Distribution among environmental compartments : Remarks: immobile

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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.

Components:

cypermethrin (ISO):

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.

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 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.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3082

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Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Bifenthrin, Zeta-Cypermethrin)

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, Zeta-Cypermethrin)

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, Zeta-Cypermethrin)

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

49 CFR

UN/ID/NA number : UN 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Bifenthrin, Zeta-Cypermethrin)

Class : 9

Packing group : III

Labels : CLASS 9

ERG Code : 171

Marine pollutant : yes

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.

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SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

| | |
|---|--------------------------|
| Distillates (petroleum), hydrotreated light cypermethrin (ISO) | 64742-47-8 52315-07-8 |
|---|--------------------------|

Pennsylvania Right To Know

| | |
|---|----------------------------|
| diisopropyl-1,1'-biphenyl | 69009-90-1 Not Assigned |
| Distillates (petroleum), hydrotreated light | 64742-47-8 |

Maine Chemicals of High Concern

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Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

WARNING: This product can expose you to chemicals including Distillates (petroleum), hydrotreated light, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

| | |
|---|------------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 |
|---|------------|

California Permissible Exposure Limits for Chemical Contaminants

| | |
|---|------------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 |
|---|------------|

The ingredients 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. |
| AICS | : Not in compliance with the inventory |
| DSL | : This product contains the following components that are not on the Canadian DSL nor NDSL. diisopropyl-1,1'-biphenyl cypermethrin (ISO) |

| | |
|------|--|
| ENCS | : Not in compliance with the inventory |
|------|--|

| | |
|------|--|
| ISHL | : Not in compliance with the inventory |
|------|--|

| | |
|------|--|
| KECI | : Not in compliance with the inventory |
|------|--|

| | |
|-------|--|
| PICCS | : Not in compliance with the inventory |
|-------|--|

| | |
|-------|--|
| IECSC | : Not in compliance with the inventory |
|-------|--|

| | |
|-------|--|
| NZIoC | : Not in compliance with the inventory |
|-------|--|

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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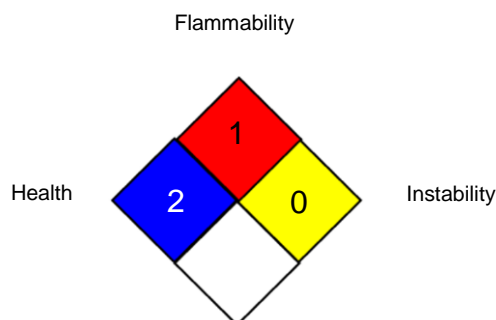
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SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



0 No health threat, 1 Slightly Hazardous, 2 Hazardous, 3 Extreme danger, 4 Deadly

HMIS® IV:

| | | |
|-----------------|---|---|
| HEALTH | * | 4 |
| FLAMMABILITY | | 1 |
| PHYSICAL HAZARD | | 0 |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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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lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECL - 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

Disclaimer

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End of Material Safety Data Sheet