

SAFETY DATA SHEET

Steward® eVo insecticide



Version 1.2 Revision Date: 03.08.2023 SDS Number: 50000122 Date of last issue: - Date of first issue: 03.01.2018

Section 1: Identification

Product name : Steward® eVo insecticide

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC New Zealand Ltd

Address : IRD number: 101-200-019
6 Clayton Street, Newmarket
1023 Auckland
New Zealand

Telephone : +640800658080

Telefax : (09)-271-2961

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

Emergency telephone number : For leak, fire, spill or accident emergencies, call:
0800 734 607 (Ixom)

Medical emergency:
0800 764 766 (NZ Poisons Information Centre)
0800 111174 (24 hour Medical Emergency)
0800 387668 (Transport Emergency)

Section 2: Hazard identification

GHS Classification

Acute toxicity (Oral) : Acute Tox.4

Skin sensitisation : Skin Sens.1

Specific target organ toxicity - repeated exposure : STOT RE1 (Blood, Nervous system)

Hazardous to terrestrial vertebrates

Hazardous to terrestrial invertebrates

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GHS label elements

Hazard pictograms :



Signal word :

Danger

Hazard statements :

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H372 Causes damage to organs (Blood, Nervous system) through prolonged or repeated exposure.
- H433 Harmful to terrestrial vertebrates.
- H443 Harmful to terrestrial invertebrates.

Precautionary statements :

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe mist or vapours.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P314 Get medical advice/ attention 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.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

- P403 Store in a well-ventilated place.

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

Components

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Chemical name	CAS-No.	Concentration (% w/w)
indoxacarb (ISO)	173584-44-6	15.84
calcium dodecylbenzenesulphonate	26264-06-2	>= 3 -< 10
Fatty acids, soya, Me esters	68919-53-9	>= 1 -< 10
2-ethylhexan-1-ol	104-76-7	>= 1 -< 10
Fatty acids, C6-10, Me esters	68937-83-7	>= 1 -< 10

Section 4: First-aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.
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 : Exposure may result in loss of coordination and tremors.
Harmful if swallowed.
May cause an allergic skin reaction.
May cause damage to organs.
Causes damage to organs through prolonged or repeated exposure.
- Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.
- Notes to physician : Treat symptomatically.

Section 5: Fire-fighting measures

- Suitable extinguishing media : Dry chemical
Carbon dioxide (CO₂)
Water spray
Regular foam

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Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Fire may produce irritating, corrosive and/or toxic gases. Chlorinated compounds Fluorinated compounds Nitrogen oxides (NOx) Carbon oxides Hydrogen cyanide Hydrogen chloride Hydrogen fluoride Sulphur oxides
Specific extinguishing methods	: 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 circumstances 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 firefighters	: Firefighters should wear protective clothing and self-contained breathing apparatus.
Hazchem Code	: 3Z

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	: Evacuate personnel to safe areas. Use personal protective equipment. If it can be safely done, stop the leak. Do not touch or walk through the spilled material. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Immediately evacuate personnel to safe areas. Ensure adequate ventilation. 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. For disposal considerations see section 13.
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	: Never return spills in original containers for re-use. Collect as much of the spill as possible with a suitable absor-

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bent material.
Pick up and transfer to properly labelled containers.
Keep in suitable, closed containers for disposal.

Section 7: Handling and storage

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol. 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 application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
- 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 tightly closed in a dry, cool and well-ventilated place. Observe label precautions. Keep container closed when not in use. Keep locked up or in an area accessible only to qualified or authorised persons. Keep in properly labelled containers. No smoking. Electrical installations / working materials must comply with the technological safety standards.
- Recommended storage temperature : > 0 °C
- Further information on storage stability : Do not freeze.
- 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 parame- ters / Permissible concentration	Basis
2-ethylhexan-1-ol	104-76-7	TWA	5 ppm	ACGIH

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Personal protective equipment

- Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal 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.
- Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
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 instructions for use.

Section 9: Physical and chemical properties

- Physical state : liquid
- Colour : amber
- Odour : faint burn smell
- Odour Threshold : No data available
- pH : 6.6 (20 - 25 °C)
Concentration: 10 g/l
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : 69 °C

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Evaporation rate	: No data available
Flammability (liquids)	: Not highly flammable
Self-ignition	: 255 °C
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies) Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity Viscosity, dynamic	: 5.6 mPa,s (25 °C)
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Non-oxidizing
Molecular weight	: Not applicable

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	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Avoid extreme temperatures Avoid formation of aerosol. Heat, flames and sparks.
Incompatible materials	: Avoid strong acids, bases, and oxidizers

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Hazardous decomposition products : Stable under recommended storage conditions.

Section 11: Toxicological information

Exposure routes : Skin contact

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : LD50 (Rat, female): 977 mg/kg
Method: OECD Test Guideline 425
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Components:

indoxacarb (ISO):

Acute oral toxicity : LD50 (Rat, female): 179 mg/kg
Method: OECD Test Guideline 401
Target Organs: Nervous system
Symptoms: hypoactivity, Tremors, ataxia, Fatality
GLP: yes

LD50 (Rat): 407 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat): > 5.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

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calcium dodecylbenzenesulphonate:

- Acute oral toxicity : LD50 (Rat, male and female): 1,300 mg/kg
Remarks: Based on data from similar materials
- Acute inhalation toxicity : Remarks: Not classified
- Acute dermal toxicity : LD50 (Rat, male and female): > 2000 milligram per kilogram
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Fatty acids, soya, Me esters:

- Acute oral toxicity : LD50 (Rat): 5,000 - 15,000 mg/kg
- Acute dermal toxicity : LD50 (Rabbit): 2,000 - 20,000 mg/kg

2-ethylhexan-1-ol:

- Acute oral toxicity : LD50 (Rat, male): 2,047 mg/kg
- Acute inhalation toxicity : LC50 (Rat): 4.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
- Acute dermal toxicity : LD50 (Rat, male and female): > 3,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Fatty acids, C6-10, Me esters:

- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

- Species : Rabbit
- Method : OECD Test Guideline 404
- Result : Mild skin irritation
- Remarks : May cause skin irritation and/or dermatitis.

Components:

indoxacarb (ISO):

- Species : Rabbit
- Method : OECD Test Guideline 404
- Result : No skin irritation
- GLP : yes
- Remarks : May cause skin irritation and/or dermatitis.

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calcium dodecylbenzenesulphonate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Fatty acids, soya, Me esters:

Result : slight irritation

2-ethylhexan-1-ol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Fatty acids, C6-10, Me esters:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

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

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

Components:

indoxacarb (ISO):

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

Remarks : Product dust may be irritating to eyes, skin and respiratory system.

calcium dodecylbenzenesulphonate:

Species : Rabbit
Result : Irreversible effects on the eye
Method : OECD Test Guideline 405
Remarks : Based on data from similar materials

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

Fatty acids, soya, Me esters:

Result : Irritation to eyes, reversing within 7 days

2-ethylhexan-1-ol:

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

Fatty acids, C6-10, Me esters:

Species : Rabbit
Result : slight irritation
Method : OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Result : May cause sensitisation by skin contact.

Components:

indoxacarb (ISO):

Species : Guinea pig
Result : May cause sensitisation by skin contact.

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.
GLP : yes

Test Type : Maximisation Test
Species : Guinea pig
Assessment : May cause sensitisation by skin contact.
Method : US EPA Test Guideline OPPTS 870.2600
Result : May cause sensitisation by skin contact.
GLP : yes

Remarks : Causes sensitisation.

calcium dodecylbenzenesulphonate:

Test Type : Maximisation Test

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Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.
Remarks	:	Based on data from similar materials

Fatty acids, soya, Me esters:

Result : Does not cause skin sensitisation.

Fatty acids, C6-10, Me esters:

Exposure routes	:	Skin contact
Species	:	Guinea pig
Result	:	Not a skin sensitizer.

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity - Assessment : Test on bacterial cultures did not show mutagenic effects., Animal testing did not show any mutagenic effects.

Components:

indoxacarb (ISO):

Genotoxicity in vitro	:	Test Type: reverse mutation assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Method: OECD Test Guideline 474 Result: negative
Germ cell mutagenicity - Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

calcium dodecylbenzenesulphonate:

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: chromosome aberration assay
Species: Rat (male and female)
Application Route: Oral
Exposure time: 90 d
Result: negative
Remarks: Based on data from similar materials

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

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Assessment cell mutagen.

2-ethylhexan-1-ol:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Fatty acids, C6-10, Me esters:

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

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects

Carcinogenicity

Not classified based on available information.

Product:

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

Components:

indoxacarb (ISO):

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

calcium dodecylbenzenesulphonate:

Species : Rat, male and female
Application Route : Oral
Exposure time : 720 d
NOAEL : 250 mg/kg body weight
Result : negative
Remarks : Based on data from similar materials

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

Fatty acids, soya, Me esters:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

2-ethylhexan-1-ol:

Species : Rat
Application Route : Oral

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Exposure time : 24 month(s)
Result : negative

Reproductive toxicity

Not classified based on available information.

Product:

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

Components:

indoxacarb (ISO):

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
Animal testing did not show any effects on foetal development.

calcium dodecylbenzenesulphonate:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat, male and female
Application Route: Ingestion
General Toxicity - Parent: NOAEL: 400 mg/kg body weight
Method: OECD Test Guideline 422
Result: negative

Effects on foetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Ingestion
General Toxicity Maternal: NOAEL: 300 mg/kg body weight
Developmental Toxicity: NOAEL: 600 mg/kg body weight
Method: OECD Test Guideline 422
Result: negative

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

2-ethylhexan-1-ol:

Effects on foetal development : Test Type: Embryo-foetal development
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 414
Result: negative

STOT - single exposure

May cause damage to organs (Central nervous system).

Product:

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

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Components:

indoxacarb (ISO):

Target Organs : Central nervous system
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 2.

2-ethylhexan-1-ol:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

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

Components:

indoxacarb (ISO):

Target Organs : Blood, Nervous system
Assessment : Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

indoxacarb (ISO):

Species : Rat, female
NOAEL : 3.28 mg/kg
LOAEL : 7.53 mg/kg
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 408
GLP : yes
Target Organs : Blood

calcium dodecylbenzenesulphonate:

Species : Rat, male and female
NOAEL : 85 mg/kg
LOAEL : 145 mg/kg
Application Route : Oral
Exposure time : 9 Months
Remarks : Based on data from similar materials

Species : Rat, male
LOAEL : 286 mg/kg
Application Route : Skin contact
Exposure time : 15 Days
Remarks : Based on data from similar materials

Species : Rat, male and female
NOAEL : 100 mg/kg bw/day
LOAEL : 200 mg/kg bw/day
Application Route : Oral - gavage
Exposure time : 28 - 54 days

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Method : OECD Test Guideline 422
Remarks : Based on data from similar materials

2-ethylhexan-1-ol:

Species : Rat
: 250 mg/kg
Application Route : Oral
Exposure time : 13 weeks
Method : OECD Test Guideline 408

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information

Product:

Remarks : No data available

Components:

indoxacarb (ISO):

Remarks : No data available

Section 12: Ecological information

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 7.0 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.67 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 16 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

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Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Components:

indoxacarb (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.65 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.6 mg/l
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.15 mg/l
Exposure time: 90 d
Test Type: Early Life-Stage
Method: OECD Test Guideline 210
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.09 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 202
GLP: yes

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,250 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207
GLP: yes

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): 0.216 µg/bee
End point: Acute oral toxicity

LD50 (Colinus virginianus (Bobwhite quail)): 152 mg/kg

LD50 (Apis mellifera (bees)): 0.094 µg/bee
End point: Acute contact toxicity

LD50 (Colinus virginianus (Bobwhite quail)): 98 mg/kg

calcium dodecylbenzenesulphonate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 10 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

LC50 (Pimephales promelas (fathead minnow)): 4.6 mg/l

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Exposure time: 96 h
Remarks: Based on data from similar materials

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.5 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials
- Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): 7.9 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50 (Pseudokirchneriella subcapitata (green algae)): 65.4 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.65 mg/l
Exposure time: 21 d
Remarks: Based on data from similar materials
- Toxicity to microorganisms : NOEC (Daphnia magna (Water flea)): 1.18 mg/l
Exposure time: 21 d
Remarks: Based on data from similar materials
- Toxicity to soil dwelling organisms : EC50 (activated sludge): 500 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
- Toxicity to terrestrial organisms : LC50 (Eisenia fetida (earthworms)): 1,000 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207
- Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): 1,356 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 223

Fatty acids, soya, Me esters:

- Toxicity to fish : LC50 (Fish): > 1,000 mg/l
Exposure time: 96 h
- LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l
Exposure time: 48 h
Method: ISO 7346/2
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Crustaceans): 800 - 5,243 mg/l
Exposure time: 48 h

2-ethylhexan-1-ol:

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 - 28.2 mg/l
Exposure time: 96 h

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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC10 (Desmodesmus subspicatus (green algae)): 3.2 mg/l Exposure time: 72 h
		EC50 (Desmodesmus subspicatus (green algae)): 11.5 mg/l Exposure time: 72 h
Toxicity to microorganisms	:	EC50 (Anabaena flos-aquae (cyanobacterium)): 16.6 mg/l Exposure time: 72 h

Fatty acids, C6-10, Me esters:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 95 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Gammarus fasciatus (freshwater shrimp)): 14.7 mg/l Remarks: Based on data from similar materials

Persistence and degradability

Components:

indoxacarb (ISO):

Biodegradability : Result: Not readily biodegradable.

calcium dodecylbenzenesulphonate:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301E

Fatty acids, soya, Me esters:

Biodegradability : Result: Readily biodegradable.

2-ethylhexan-1-ol:

Biodegradability : Result: Readily biodegradable.

Fatty acids, C6-10, Me esters:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.
Estimation based on data obtained on active ingredient.

Remarks: No data available

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Components:

indoxacarb (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 77.3
Exposure time: 21 d
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : log Pow: 0.57 (20 °C)

calcium dodecylbenzenesulphonate:

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 70.79
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: 4.77 (25 °C)

Fatty acids, soya, Me esters:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

2-ethylhexan-1-ol:

Partition coefficient: n-octanol/water : log Pow: 2.9 (25 °C)

Mobility in soil

Components:

indoxacarb (ISO):

Distribution among environmental compartments : Koc: 4483 ml/g, log Koc: 3.65
Remarks: Low mobility in soil

Other adverse effects

Product:

Additional ecological information : See product label for additional application instructions relating to environmental precautions.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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-

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cal or used container.
Send to a licensed waste management company.

- Contaminated packaging : Empty remaining contents.
Do not re-use empty containers.
Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Dispose of contents/ container to an approved waste disposal plant.
-

Section 14: Transport information

International Regulations

UNRTDG

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

IATA-DGR

- UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Indoxacarb)
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.
(Indoxacarb)
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.

National Regulations

NZS 5433

- UN number : UN 3082

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Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Indoxacarb)
Class	:	9
Packing group	:	III
Labels	:	9
Hazchem Code	:	3Z

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

HSNO Approval Number

HSR000583

ACVM Number: P009271

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

TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL. METHYL (S)-7-CHLORO-2,3,4A,5-TETRAHYDRO-2-{(METHOXYCARBONYL)[4-(TRIFLUOROMETHOXY)PHENYL]CARBAMOYL}INDENO[1,2-E][1,3,4]OXADIAZINE-4A-CARBOXYLATE Fatty acids, C8-10, Me esters Fatty acids, C6-10, Me esters
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

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Section 16: Other information

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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, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

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