

SAFETY DATA SHEET



Exirel™ Insect Control

Version 1.0 Revision Date: 21.07.2023 SDS Number: 50000098 Date of last issue: -
Date of first issue: 21.07.2023

Section 1: Identification

Product name : Exirel™ Insect Control

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as insecticide only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC 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

Skin corrosion/irritation : Skin Irrit. 2

Skin sensitisation : Skin Sens.1

Specific target organ toxicity - repeated exposure : STOT RE2 (Liver, Thyroid)

Hazardous to the aquatic environment - acute hazard : Aquatic Acute1

Hazardous to the aquatic environment - chronic hazard : Aquatic Chronic1

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Ecotoxic to terrestrial invertebrates

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs (Liver, Thyroid) through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H442 Toxic to terrestrial invertebrates.

Precautionary statements : **Prevention:**
P260 Do not breathe mist or vapours.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
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.
P391 Collect spillage.
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

Chemical name	CAS-No.	Concentration (% w/w)
Cyantraniliprole	736994-63-1	10.2
Fatty acids, soya, Me esters	68919-53-9	>= 30 -< 50
propane-1,2-diol	57-55-6	>= 1 -< 10

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Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts	84989-14-0	>= 1 -< 2.5
Alcohols, C12-15, ethoxylated	68131-39-5	>= 0.25 -< 1
5-chloro-2-methyl-2H-isothiazol-3-one	26172-55-4	>= 0.0005 -< 0.0025

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 : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : 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.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
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.
- Most important symptoms and effects, both acute and delayed : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause 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.
It may be helpful to show this safety data sheet to physician.

Section 5: Fire-fighting measures

- Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.
- 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 products : Halogenated compounds
Nitrogen oxides (NO_x)

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Carbon oxides
Sulphur oxides
Hazardous combustion products

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.
Standard procedure for chemical fires.
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 : Ensure adequate ventilation.
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.

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 absorbent material.
Pick up and transfer to properly labelled containers.

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 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.

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

Hygiene measures : General industrial hygiene practice.
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.
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 storage stability : No decomposition if stored and applied as directed.

Section 8: Exposure controls/personal protection

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	WES-TWA (particulate)	10 mg/m ³	NZ OEL
		WES-TWA (Vapour and particulates)	150 ppm 474 mg/m ³	NZ OEL

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 con-

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centration of the dangerous substance at the work place.
Protective measures : Plan first aid action before beginning work with this product.

Section 9: Physical and chemical properties

Physical state : liquid

Form : Viscous aqueous suspension

Colour : off-white

Odour : mild, phenol-like

Odour Threshold : not determined

pH : 5.6
Concentration: 10 g/l
(as a dispersion)

Melting point/range : No data available

Boiling point/boiling range : 97 °C

Flash point : No flash up to boiling point.
No data available

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable.

Self-ignition : 358 °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 : 0.982

Density : No data available

Solubility(ies)
Water solubility : dispersible

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Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 454 mPa.s
50 rpm

Viscosity, kinematic : 661 mm²/s
25 rpm

462 mm²/s
50 rpm

335 mm²/s
100 rpm

Explosive properties : Not explosive

Oxidizing properties : The product is not oxidizing.

Molecular weight : Not applicable

Particle size : 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 : No decomposition if stored and applied as directed.

Conditions to avoid : Avoid extreme temperatures
Avoid formation of aerosol.

Incompatible materials : Avoid strong acids, bases, and oxidizers

Hazardous decomposition products : Nitrogen oxides (NO_x)
Carbon oxides
Sulphur oxides

Section 11: Toxicological information

Acute toxicity

Product:

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

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Method: OECD Test Guideline 425
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 2.4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

Cyantraniliprole:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 425
Assessment: The substance or mixture has no acute oral toxicity

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

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

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

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg

Acute inhalation toxicity : LC0 (Rabbit): 31.7 mg/l
Exposure time: 2 h
Test atmosphere: vapour
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

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Acute oral toxicity : LD50 (Rat, male and female): 1,080 - 1,630 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

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

Alcohols, C12-15, ethoxylated:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg
Method: Expert judgement

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Skin corrosion/irritation

Causes skin irritation.

Product:

Species : Rabbit
Assessment : Irritating to skin.
Method : OECD Test Guideline 404
Result : Skin irritation
GLP : yes

Components:

Cyantraniliprole:

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

Fatty acids, soya, Me esters:

Result : slight irritation

propane-1,2-diol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

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Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Species : reconstructed human epidermis (RhE)
Method : OECD Test Guideline 439
Result : Skin irritation

Alcohols, C12-15, ethoxylated:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Product:

Species : Rabbit
Result : No eye irritation
Remarks : Minimal effects that do not meet the threshold for classification.

Components:

Cyantraniliprole:

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

Fatty acids, soya, Me esters:

Result : Irritation to eyes, reversing within 7 days

propane-1,2-diol:

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

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

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

Alcohols, C12-15, ethoxylated:

Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

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Product:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitisation by skin contact.
GLP : yes
Remarks : (Data on the product itself)
: Information source: Internal study report

Remarks : Causes sensitisation.

Components:

Cyantraniliprole:

Test Type : Local lymph node test
Method : OECD Test Guideline 429
Result : Does not cause skin sensitisation.

Fatty acids, soya, Me esters:

Result : Does not cause skin sensitisation.

propane-1,2-diol:

Test Type : Maximisation Test
Species : Guinea pig
Result : negative

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Test Type : Maximisation Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.
Remarks : Based on data from similar materials

Alcohols, C12-15, ethoxylated:

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

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Components:

Cyantraniliprole:

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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propane-1,2-diol:

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Result: negative

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 475
Result: negative
Remarks: Based on data from similar materials

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

Alcohols, C12-15, ethoxylated:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

Test Type: Ames test
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
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

Test Type: Bone marrow chromosome aberration
Species: Rat (male and female)
Method: OECD Test Guideline 475
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

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Components:**Cyantraniliprole:**

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

propane-1,2-diol:

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

Reproductive toxicity

Not classified based on available information.

Components:**Cyantraniliprole:**

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

propane-1,2-diol:

Effects on fertility : Test Type: reproductive and developmental toxicity study
 Species: Mouse
 Application Route: Oral
 Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
 Species: Mouse
 Application Route: Oral
 Method: OECD Test Guideline 414
 Result: Animal testing did not show any effects on fertility.
 Remarks: Based on data from similar materials

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Effects on fertility : Test Type: Two-generation study
 General Toxicity - Parent: NOAEL: > 350 mg/kg body weight
 General Toxicity F1: NOAEL: > 350 mg/kg body weight
 Method: OECD Test Guideline 416
 Result: negative
 Remarks: Based on data from similar materials

Effects on foetal development : Test Type: reproductive and developmental toxicity study
 Species: Rat
 Developmental Toxicity: NOAEL: > 350 mg/kg body weight
 Result: negative
 Remarks: Based on data from similar materials

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

Alcohols, C12-15, ethoxylated:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Dermal
General Toxicity - Parent: NOAEL: 250 mg/kg body weight
Fertility: NOAEC Mating/Fertility: 250 mg/kg body weight
Method: OECD Test Guideline 416
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Dermal
General Toxicity Maternal: NOEL: 100 mg/kg body weight
Embryo-foetal toxicity: NOAEL: > 250 mg/kg body weight
Method: OECD Test Guideline 416
Result: negative
Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

Product:

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

Components:

Cyantraniliprole:

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

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Components:

Cyantraniliprole:

Target Organs : Liver, Thyroid
Assessment : May cause damage to organs through prolonged or repeated exposure.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

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

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Repeated dose toxicity

Components:

Cyantraniliprole:

Species : Rat
NOAEL : > 1,000 mg/kg
Application Route : Oral
Exposure time : 28 d
Method : OECD Test Guideline 407
Symptoms : increased liver weight
Remarks : Based on available data, the classification criteria are not met.

propane-1,2-diol:

Species : Rat, male and female
NOAEL : 1,700 mg/kg
Application Route : Oral
Exposure time : 2 Years

Species : Rat, male and female
NOAEL : 1,000 mg/kg
LOAEL : 160 mg/kg
Application Route : Inhalation
Exposure time : 90 Days

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

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

Alcohols, C12-15, ethoxylated:

Species : Rat, male and female
NOAEL : 500 mg/kg
Application Route : Oral
Exposure time : 90d
Method : OECD Test Guideline 408
Remarks : Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Components:

Cyantraniliprole:

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

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Further information

Product:

Remarks : No data available

Components:

Cyantraniliprole:

Remarks : No data available

Section 12: Ecological information

Ecotoxicity

Product:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.232 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes
Remarks: (Data on the product itself)
Information source: Internal study report

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 3.39 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes
Remarks: (Data on the product itself)
Information source: Internal study report

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.00969 mg/l
Exposure time: 21 d

Ecotoxicology Assessment

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

Components:

Cyantraniliprole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 12.6 mg/l
Exposure time: 96 h

LC50 (Ictalurus punctatus (channel catfish)): > 10 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0204 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 13

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plants mg/l
Exposure time: 72 h

EbC50 (Pseudokirchneriella subcapitata (algae)): > 13 mg/l
Exposure time: 72 h

ErC50 (Lemna gibba (duckweed)): 0.278 mg/l
Exposure time: 7 d

EyC50 (Lemna gibba (duckweed)): 0.060 mg/l
Exposure time: 7 d

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Cyprinodon variegatus (sheepshead minnow)): 2.9 mg/l
Exposure time: 28 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.11 mg/l
Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.00656 mg/l
Exposure time: 21 d

NOEC (Daphnia magna (Water flea)): 0.00969 mg/l
Exposure time: 21 d

NOEC (Daphnia magna (Water flea)): 0.00447 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): > 0.0934 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 0.1055 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity

LD50 (Colinus virginianus (Bobwhite quail)): 2,250 mg/kg

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

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Method: ISO 7346/2

Toxicity to daphnia and other aquatic invertebrates : EC50 (Crustaceans): 800 - 5,243 mg/l
Exposure time: 48 h

propane-1,2-diol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : (Mysidopsis bahia (opossum shrimp)): 18,800 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 34,100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 13,020 mg/l
Exposure time: 7 d

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 20,000 mg/l
Exposure time: 18 h

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Toxicity to fish : LC50 (Fish): 1.7 - 7.7 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 5.7 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: water accommodated fractions (WAF)

Toxicity to algae/aquatic plants : NOELR (Pseudokirchneriella subcapitata (green algae)): 10 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: water accommodated fractions (WAF)

EL50 (Pseudokirchneriella subcapitata (algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: water accommodated fractions (WAF)

Toxicity to microorganisms : EC50 (activated sludge): 162 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Alcohols, C12-15, ethoxylated:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 2 mg/l
Exposure time: 96 h

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- Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 2 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.11 - 0.28 mg/l
Exposure time: 30 d
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.75 mg/l
End point: Immobilization
Exposure time: 21 d
Remarks: Based on data from similar materials
- NOEC (Daphnia magna (Water flea)): 0.77 mg/l
End point: reproduction
Exposure time: 21 d
Remarks: Based on data from similar materials
- Toxicity to microorganisms : EC50 (Pseudomonas putida): > 10 g/l
Exposure time: 16.9 h
Remarks: Based on data from similar materials
- Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg

Persistence and degradability

Components:

Cyantraniliprole:

Biodegradability : Remarks: Not readily biodegradable.

Fatty acids, soya, Me esters:

Biodegradability : Result: Readily biodegradable.

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 23.6 %
Exposure time: 64 d
Method: OECD Test Guideline 306

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

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

Alcohols, C12-15, ethoxylated:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301B
Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Cyantraniliprole:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): < 1
Remarks: Bioaccumulation is unlikely.

Bioconcentration factor (BCF): 15

Partition coefficient: n-octanol/water : log Pow: 1.97 (22 °C)
pH: 4

log Pow: 2.07 (22 °C)
pH: 7

log Pow: 1.74 (22 °C)
pH: 9

Fatty acids, soya, Me esters:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

propane-1,2-diol:

Partition coefficient: n-octanol/water : log Pow: -1.07

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts:

Partition coefficient: n-octanol/water : log Pow: 4.3 - 5.8 (25 °C)
pH: 7
Method: OECD Test Guideline 117

Alcohols, C12-15, ethoxylated:

Bioaccumulation : Species: Pimephales promelas (fathead minnow)
Bioconcentration factor (BCF): 237
Exposure time: 24 d
Remarks: Based on data from similar materials

Partition coefficient: n-octanol/water : log Pow: 4.91 - 6.78 (40 °C)

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Mobility in soil

Components:

Cyantraniliprole:

Distribution among environmental compartments : Koc: 241 ml/g, log Koc: 2.38
Remarks: Mobile in soils

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

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.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: Transport information

International Regulations

UNRTDG

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

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Cyantraniliprole)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964

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Packing instruction (passenger aircraft) : 964

IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cyantraniliprole)

Class : 9

Packing group : III

Labels : 9

EmS Code : F-A, S-F

Marine pollutant : yes

Remarks : Environmentally hazardous substances/Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 kg or less for solids, or having a net quantity per single or inner packaging of 5 L or less for liquids may be transported as non-dangerous goods as provided in special provision A197 of the IATA and section 2.10.2.7 of IMDG code.

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

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cyantraniliprole)

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

HSR100857

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ACVM Number: P008572

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

TCSI : On the inventory, or in compliance with the inventory

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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. 3-BROMO-1-(3-CHLORO-2-PYRIDYL)-4'-CYAN-2'-METHYL-6'-(METHYLCARBAMOYL)-1H-PYRAZOLE-5-CARBOXANILIDE Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts
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 : 21.07.2023
Date format : dd.mm.yyyy

Full text of other abbreviations

NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average

AiIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for 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 Con-

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centration 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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