

# SAFETY DATA SHEET



## Exirel® 100 SE Insecticide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2024/10/02	50000098	Date of first issue: 2024/10/02

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Exirel® 100 SE 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 Corporation

Address : 2929 Walnut Street  
Philadelphia PA 19104  
USA

Telephone : (215) 299-6000

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

Emergency telephone : For leak, fire, spill or accident emergencies, call:  
001-803-017-9114 (CHEMTREC)  
1 703 / 741-5970 (CHEMTREC - International)

Medical emergency:  
0800 140 1447

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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin sensitization : Category 1

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

#### GHS label elements

Hazard pictograms :



Signal Word : WARNING

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Hazard Statements : H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**  
P261 Avoid breathing mist or vapors.  
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.  
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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Cyantraniliprole	736994-63-1	>= 10 -< 25
calcium dodecylbenzenesulphonate	26264-06-2	>= 1 -< 3

## 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Show this material safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : Remove to fresh air.  
If unconscious, place in recovery position and seek medical advice.  
If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.

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|---|---|
| In case of skin contact                                     | : Take off all contaminated clothing immediately.<br>If on clothes, remove clothes.<br>If on skin, rinse well with water.<br>Wash off immediately with soap and plenty of water.<br>Get medical attention immediately if irritation develops and persists.<br>Wash contaminated clothing before re-use. |
| In case of eye contact                                      | : Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.   |
| If swallowed  | : Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Do not induce vomiting without medical advice.   |
| Most important symptoms and effects, both acute and delayed | : May cause an allergic skin reaction.  |
| Protection of first-aiders                                  | : Avoid inhalation, ingestion and contact with skin and eyes.   |
| Notes to physician  | : Treat symptomatically.<br>Immediate medical attention is required in case of ingestion.   |

### 5. FIRE-FIGHTING MEASURES

- |                                       |   |
|---------------------------------------|---|
| Suitable extinguishing media          | : Dry chemical, CO <sub>2</sub> , 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         | : Fire may produce irritating, corrosive and/or toxic gases.<br>Bromine compounds<br>Nitrogen oxides (NO <sub>x</sub> )<br>Carbon oxides<br>Hydrogen cyanide<br>Sulfur oxides<br>Chlorine compounds   |
| Specific extinguishing methods        | : Remove undamaged containers from fire area if it is safe to do so.<br>Use a water spray to cool fully closed containers.<br>Standard procedure for chemical fires.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

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Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters : Firefighters should wear protective clothing and self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Do not touch or walk through the spilled material.  
If it can be safely done, stop the leak.  
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.

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 labeled containers.  
  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### 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

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- 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.  
Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : The product is stable under normal conditions of warehouse storage.  
Protect from frost and extreme heat.  
Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.
- Recommended storage temperature : > 0 - 30 °C
- Further information on storage stability : No decomposition if stored and applied as directed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### 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 in-

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structions.  
Wear suitable protective equipment.  
When using do not eat, drink or smoke.  
In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

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.  
Remove and wash contaminated clothing and gloves, including the inside, before re-use.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: off-white
Odor	: mild, phenol-like
Odor Threshold	: not determined
pH	: 5,6 Concentration: 10 g/l 1 % (as a dispersion)
Melting point/ range	: No data available
Boiling point/boiling range	: 97 °C
Flash point	: > 97 °C  Method: closed cup No flash up to boiling point.
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

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Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not available for this mixture.
Relative vapor density	:	No data available
Relative density	:	0,982 Method: Regulation (EC) No. 440/2008, Annex, A.3
Density	:	No data available
Solubility(ies)		
Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Autoignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	649,5 mPa.s ( 24,7 °C) Method: CIPAC MT 192 25 rpm  454,3 mPa.s ( 24,7 °C) Method: CIPAC MT 192 50 rpm  329,9 mPa.s ( 24,7 °C) Method: CIPAC MT 192 100 rpm
Explosive properties	:	Not explosive
Oxidizing properties	:	The product is not oxidizing.
Surface tension	:	25,9 mN/m, 22 °C, Regulation (EC) No. 440/2008, Annex, A.5
Molecular weight	:	Not applicable
Particle size	:	Not applicable

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### 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.

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Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Conditions to avoid : Avoid extreme temperatures.  
Avoid formation of aerosol.  
Heat, flames and sparks.  
Heating of the product will produce harmful and irritant vapours.

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

Hazardous decomposition products : Nitrogen oxides (NOx)  
Carbon oxides  
Sulfur oxides

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

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

#### Product:

Acute oral toxicity : LD50 (Rat, female): > 5.000 mg/kg  
Method: OECD Test Guideline 425  
GLP: yes  
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 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 : LD50 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 402

#### Components:

##### Cyantraniliprole:

Acute oral toxicity : LD50 (Mouse, female): > 5.000 mg/kg  
Method: OECD Test Guideline 425  
GLP: yes  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: no mortality

LD50 (Rat, female): > 5.000 mg/kg  
Method: OECD Test Guideline 425  
GLP: yes  
Assessment: The substance or mixture has no acute oral toxicity



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Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 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  
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: no mortality

### **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

### **Skin corrosion/irritation**

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

### **Product:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Mild skin irritant

### **Components:**

#### **Cyantraniliprole:**

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

#### **calcium dodecylbenzenesulphonate:**

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

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### Serious eye damage/eye irritation

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

#### Product:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Minimal effects that do not meet the threshold for classification.

#### Components:

##### **Cyantraniliprole:**

Species	:	Rabbit
Result	:	slight irritation
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 405
GLP	:	yes

##### **calcium dodecylbenzenesulphonate:**

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

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

### Respiratory or skin sensitization

#### **Skin sensitization**

May cause an allergic skin reaction.

#### **Respiratory sensitization**

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

#### Product:

Test Type	:	Buehler Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.
GLP	:	yes

Test Type	:	Local lymph node assay (LLNA)
Species	:	mice
Method	:	OECD Test Guideline 429
Result	:	The product is a skin sensitizer, sub-category 1B.
GLP	:	yes

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**Components:****Cyantraniliprole:**

Test Type	: Local lymph node test
Routes of exposure	: Dermal
Species	: Mouse
Method	: OECD Test Guideline 429
Result	: Does not cause skin sensitization.
GLP	: yes

Test Type	: Maximization Test
Routes of exposure	: Dermal
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Does not cause skin sensitization.
GLP	: yes

Test Type	: Buehler Test
Routes of exposure	: Dermal
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Does not cause skin sensitization.
GLP	: yes

**calcium dodecylbenzenesulphonate:**

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

**Germ cell mutagenicity**

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

**Components:****Cyantraniliprole:**

Genotoxicity in vitro	: Test Type: reverse mutation assay Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Test Type: reverse mutation assay Test system: Escherichia coli Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473

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Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Test system: Chinese hamster ovary cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test  
Species: Mouse  
Application Route: Oral  
Method: OECD Test Guideline 474  
Result: negative  
GLP: yes

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

**Carcinogenicity**

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

**Components:****Cyantraniliprole:**

Species : Rat, male and female  
Application Route : Ingestion  
Exposure time : 2 Years  
NOAEL : 200 - 2.000 ppm  
Method : OECD Test Guideline 453  
Result : negative

Species : Mouse, male and female  
Application Route : Ingestion  
Exposure time : 18 month(s)  
NOAEL : 7.000 ppm  
Method : OECD Test Guideline 451  
Result : negative

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

**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

**Reproductive toxicity**

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

**Components:****Cyantraniliprole:**

Effects on fetal development : Test Type: Pre-natal  
Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 1.000 mg/kg bw/day  
Embryo-fetal toxicity.: NOAEL: 1.000 mg/kg bw/day  
Method: OECD Test Guideline 414  
Result: negative

Test Type: Pre-natal  
Species: Rabbit  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 25 mg/kg bw/day  
Embryo-fetal toxicity.: NOAEL: 100 mg/kg bw/day  
Symptoms: Maternal effects.  
Method: OECD Test Guideline 414  
Result: negative

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

**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 fetal development : Test Type: reproductive and developmental toxicity study  
Species: Rat  
Application Route: Ingestion

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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

### STOT-single exposure

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

#### 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

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

#### Product:

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

#### Components:

##### **Cyantraniliprole:**

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

### Repeated dose toxicity

#### Components:

##### **Cyantraniliprole:**

Species : Dog, male and female  
NOAEL : 5,67 - 6 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 1 year  
Method : OPPTS 870.4100  
Remarks : Effects are of limited toxicological significance.

Species : Mouse, male and female  
NOAEL : 768,8 - 903,8 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 18 months  
Method : OPPTS 870.4200  
Remarks : Effects are of limited toxicological significance.

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Species : Rat, male and female  
NOAEL : 8,3 - 106,6 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 2 years  
Method : OPPTS 870.4300  
Remarks : Effects are of limited toxicological significance.

Species : Dog, male and female  
NOAEL : 3,08 - 3,48 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 90 d  
Method : OPPTS 870.3150  
Remarks : Effects are of limited toxicological significance.

Species : Mouse, male and female  
NOAEL : 1091,8 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 90 d  
Method : OPPTS 870.3100  
Remarks : Effects are of limited toxicological significance.

Species : Rat, male and female  
NOAEL : 6,9 - 168 mg/kg bw/day  
Application Route : Ingestion  
Exposure time : 90 d  
Method : OPPTS 870.3100  
Remarks : Effects are of limited toxicological significance.

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

### Aspiration toxicity

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

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### Components:

#### **Cyantraniliprole:**

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

### **Neurological effects**

### Components:

#### **Cyantraniliprole:**

No neurotoxicity observed in animal studies.

### **Further information**

### Product:

Remarks : No data available

## 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

Toxicity to terrestrial organisms : LD50 (Bumblebees (Bombus terrestris L.)): > 0,47 µg ai/bee  
Exposure time: 48 h  
End point: Acute oral toxicity  
Method: OECD Test Guideline 213  
  
LD50 (Bumblebees (Bombus terrestris L.)): > 100 µg ai/bee  
Exposure time: 48 h  
End point: Acute contact toxicity  
Method: OECD Test Guideline 214



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**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 plants	: ErC50 (Pseudokirchneriella subcapitata (green 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

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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

**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

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other : EC50 (*Daphnia magna* (Water flea)): 3,5 mg/l

aquatic invertebrates

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

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 : NOEC (*Daphnia magna* (Water flea)): 1,65 mg/l

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Remarks: Based on data from similar materials

NOEC (*Daphnia magna* (Water flea)): 1,18 mg/l

Exposure time: 21 d

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): 500 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to soil dwelling 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

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Method: OECD Test Guideline 223

### Persistence and degradability

#### Components:

##### **Cyantraniliprole:**

Biodegradability : Remarks: Not readily biodegradable.

##### **calcium dodecylbenzenesulphonate:**

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

### Bioaccumulative potential

#### Components:

##### **Cyantraniliprole:**

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

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

##### **calcium dodecylbenzenesulphonate:**

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 70,79  
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: 4,77 (25 °C)

### 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

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mation unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

### 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.  
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.

### 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  
Environmentally hazardous : yes

##### 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  
Packing instruction (passenger aircraft) : 964  
Environmentally hazardous : yes

##### IMDG-Code

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

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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.

### 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.

## 15. REGULATORY INFORMATION

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

Minister of Industry Regulation No. 23/M-IND/PER/4/2013 concerning the Revision of Minister of Industry Regulation No. 87/M-IND/PER/9/2009 concerning Globally Harmonized System of Classification and Labelling of Chemicals.

### Regulation of the Minister of Health No. 472 of 1996 on the Safeguarding of Substances Hazardous to Health

Hazardous substances that must be registered : Not applicable

### Government Regulation No. 74 of 2001 on the Management of Hazardous and Toxic Substances

Hazardous substances approved for use : Not applicable

Prohibited substances : Not applicable

Restricted substances : Not applicable

### Regulation of the Ministry of Trade No. 7 of 2022 on Distribution and Control of Hazardous Materials

Type of hazardous materials subject to distribution and control, Annex I : Not applicable

Type of hazardous materials subject to distribution and control, Annex II : Not applicable

### The ingredients of this product are reported in the following inventories:

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

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

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on the Canadian DSL nor NDSL.

Cyantraniliprole  
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

### 16. OTHER INFORMATION

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#### Full text of other abbreviations

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,

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tion, 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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