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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Exirel(R) 100SE

Other means of identification

Product code 50000082

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Insecticide

stance/Mixture

Recommended restrictions

on use

: Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

<u>Supplier Address</u> FMC Chemicals (Pty) Ltd

Company Registration Number: 1988/001451/07

West End Office Park, Building C Cnr. West Ave & Hall Street

Centurion, 0014

E-mail address: SDS-Info@fmc.com (E-Mail General Infor-

mation)

1.4 Emergency telephone

For leak, fire, spill or accident emergencies, call: South Africa: 0-800-983-611 (CHEMTREC)

Medical emergency:

For any emergency or poisoning contact: Griffon Poison Infor-

mation Centre (24 hrs) - +27-(0)-82-446-8946

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315: Causes skin irritation.

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

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Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.

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.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.

P280 Wear protective gloves.

Response:

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

advice/ attention.
P391 Collect spillage.

Hazardous ingredients which must be listed on the label:

1,2-benzisothiazol-3(2H)-one

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Cyantraniliprole	736994-63-1	Aquatic Acute 1;	>= 10 - < 20

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		H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	
Benzenesulfonic acid, 4-C10-13-sec- alkyl derivs., calcium salts	84989-14-0 284-903-7	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411	>= 1 - < 2.5
methyl decanoate	110-42-9 203-766-6	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 0.1 - < 0.25
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 10	>= 0.0025 - < 0.025

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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. Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Avoid inhalation, ingestion and contact with skin and eyes. Immediate medical attention is required in case of ingestion. A specific antidote against this substance is not known. Gastric lavage and/or administration of activated charcoal can be

considered.

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If inhaled : If unconscious, place in recovery position and seek medical

advice.

Remove person to fresh air. If signs/symptoms continue, get

medical attention.

If breathing has stopped, apply artificial respiration.

Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off with soap and water.

Call a physician if irritation develops or persists. Wash contaminated clothing before reuse.

If skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Protect unharmed eye.

Remove contact lenses.

Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Seek medical advice.

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 : Keep respiratory tract clear.

Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physi-

cian or poison control center. Rinse mouth with water.

Do not give milk or alcoholic beverages.

Obtain medical attention.

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.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.

Causes skin irritation.

May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

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Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

Carbon oxides

Halogenated compounds Nitrogen oxides (NOx)

Sulfur oxides

Hazardous combustion products

5.3 Advice for firefighters

Special protective equipment :

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

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

SO.

Use a water spray to cool fully closed containers.

Further information : Standard procedure for chemical fires.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Evacuate personnel to safe areas. If it can be safely done, stop the leak.

Do not touch or walk through the spilled material.

Ensure adequate ventilation.

Treat recovered material as described in the section "Disposal

considerations".

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Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Never return spills in original containers for re-use.

For disposal considerations see section 13.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust). Clean contaminated surface thoroughly.

Sweep up or vacuum up spillage and collect in suitable con-

tainer for disposal.

Pick up and transfer to properly labeled containers.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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 ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms.

Dispose of rinse water in accordance with local and national

regulations.

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

used.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

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

should be used only by all personnel thoroughly trained to handle it. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not

be allowed out of the workplace.

General industrial hygiene practice. Do not inhale aerosol.

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When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a place accessible by authorized persons only. Store

in original container.

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 stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label

approved by country-specific regulatory authorities.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
Fatty acids, C16-18 and C18-unsatd., Me esters	Workers	Inhalation	Long-term systemic effects	6.96 mg/m3
	Workers	Dermal	Long-term systemic effects	10 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	5 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	23 mg/m3
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Workers	Inhalation	Long-term local ef- fects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Inhalation	Long-term local ef- fects	10 mg/m3
methyl decanoate	Workers	Inhalation	Long-term systemic effects	61.4 mg/m3
	Workers	Dermal	Long-term systemic effects	121.8 mg/kg
	Consumers	Inhalation	Long-term systemic	15.13 mg/m3

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			effects	
	Consumers	Dermal	Long-term systemic effects	60.9 mg/kg
	Consumers	Oral	Long-term systemic effects	6.09 mg/kg
1,2-benzisothiazol- 3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m3
	Workers	Dermal	Long-term systemic effects	0.966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.345 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Fatty acids, C16-18 and C18-	Fresh water	2.504 mg/l
unsatd., Me esters	The state of the s	g,.
	Sea water	0.25 mg/l
	Intermittent use (freshwater)	25.04 mg/l
	Sewage treatment plant	520 mg/l
propane-1,2-diol	Fresh water	260 mg/l
	Intermittent use/release	183 mg/l
	Sea water	26 mg/l
	Sewage treatment plant	20 g/l
	Fresh water sediment	572 mg/kg
	Sea sediment	57.2 mg/kg
	Soil	50 mg/kg
Benzenesulfonic acid, 4-C10-13-	Fresh water	270 μg/l
sec-alkyl derivs., calcium salts	1 Toon Water	2. 5 µg/.
See any deriver, carefain care	Intermittent use/release	2.7 mg/l
	Sea water	270 μg/l
	Intermittent use/release	2.7 mg/l
	Sewage treatment plant	5.5 mg/l
	Fresh water sediment	23.8 mg/kg dry
	The state of the s	weight (d.w.)
	Sea sediment	23.8 mg/kg dry
		weight (d.w.)
	Soil	35 mg/kg dry
		weight (d.w.)
methyl decanoate	Fresh water	0.0011 mg/l
,	Sea water	110 ng/l
	Intermittent use/release	0.0011 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	0.0469 mg/kg dry
		weight (d.w.)
	Sea sediment	0.0047 mg/kg dry
		weight (d.w.)
	Soil	10 mg/kg dry
		weight (d.w.)
1,2-benzisothiazol-3(2H)-one	Fresh water	0.00403 mg/l
	Sea water	0.000403 mg/l
	Sewage treatment plant	1.03 mg/l
	Fresh water sediment	0.0499 mg/l

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Sea sediment 0.00499 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Wear a faceshield or other full face protection if there is a

potential for direct contact to the face with dusts, mists, or

aerosols.

Eye wash bottle with pure water Tightly fitting safety goggles

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Long sleeved clothing. Impervious clothing

Footwear protecting against chemicals

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Color : off-white

Odor : mild, phenol-like

Odor Threshold : No data available

pH : 5.4 - 5.6

Concentration: 10 g/l

Melting point/range : No data available

Boiling point/boiling range : 97 °C

Flash point : > 97 °C

Method: closed cup

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

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Density : 0.982 g/cm3 (20 °C)

No data available

Solubility(ies)

Water solubility : emulsifiable

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 454 mPa.s

50 rpm

Viscosity, kinematic : No data available

Explosive properties : Not explosive

9.2 Other information

Self-ignition : 358 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal

use.

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Avoid extreme temperatures Avoid formation of aerosol.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers.

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10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

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

Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 2.4 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The component/mixture is minimally toxic after

short term inhalation. Remarks: no mortality

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

Components:

Cyantraniliprole:

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

Method: OECD Test Guideline 425

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 inhala-

tion toxicity

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

Method: OECD Test Guideline 402

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

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 toxicity estimate: 1,080 mg/kg

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Method: Calculation method

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

Remarks: Based on data from similar materials

methyl decanoate:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC0 (Rat, male and female): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

Remarks: Based on data from similar materials

no mortality

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg

Method: OECD Test Guideline 401

Acute toxicity estimate: 490 mg/kg

Method: Calculation method

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

Skin corrosion/irritation

Causes skin irritation.

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Irritating to skin.

GLP : yes

Remarks : May cause skin irritation and/or dermatitis.

Components:

Cyantraniliprole:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

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

Species : reconstructed human epidermis (RhE)

Method : OECD Test Guideline 439

Result : Skin irritation

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1,2-benzisothiazol-3(2H)-one:

Species : Rabbit Exposure time : 72 h

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

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

tion

Remarks : Vapors may cause irritation to the eyes, respiratory system

and the skin.

Components:

Cyantraniliprole:

Species : Rabbit

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

Result : No eye irritation

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

tion.

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

Species : Bovine cornea

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

methyl decanoate:

Species : Rabbit

Result : No eye irritation

Remarks : Based on data from similar materials

1,2-benzisothiazol-3(2H)-one:

Species : Bovine cornea

Method : OECD Test Guideline 437

Result : No eye irritation

Species : Rabbit

Method : EPA OPP 81-4

Result : Irreversible effects on the eye

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Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Product:

Test Type : Buehler Test Species : Guinea pig

Assessment : May cause sensitization by skin contact.

Method : OECD Test Guideline 406
Result : Causes sensitization.

GLP : yes

Remarks : Causes sensitization.

Components:

Cyantraniliprole:

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

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

Test Type : Maximization Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitization.
Remarks : Based on data from similar materials

methyl decanoate:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitization.
Remarks : Based on data from similar materials

1,2-benzisothiazol-3(2H)-one:

Test Type : Maximization Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitization by skin contact.

Species : Guinea pig Method : FIFRA 81.06

Result : May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

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Components:

Cyantraniliprole:

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

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- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

methyl decanoate:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Chromosome aberration test in vitro

Species: Chinese hamster (male and female)

Application Route: Oral

Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay

Species: Rat (male)
Cell type: Liver cells

Application Route: Ingestion

Exposure time: 4 h

Method: OECD Test Guideline 486

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Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

Not classified based on available information.

Components:

Cyantraniliprole:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Reproductive toxicity

Not classified based on available information.

Components:

Cyantraniliprole:

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

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 fetal 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

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

methyl decanoate:

Effects on fertility : Test Type: reproductive and developmental toxicity study

Species: Rat, male and female

Application Route: Oral

Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

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Effects on fetal development : Test Type: reproductive and developmental toxicity study

Species: Rat

Application Route: Oral

Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male

Application Route: Ingestion

General Toxicity Parent: NOAEL: 18.5 mg/kg body weight General Toxicity F1: NOAEL: 48 mg/kg body weight

Fertility: NOAEL: 112 mg/kg wet weight

Symptoms: No effects on reproduction parameters.

Method: OPPTS 870.3800

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

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

Not classified based on available information.

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.

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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1,2-benzisothiazol-3(2H)-one:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

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.

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 months
Target Organs : Kidney, Liver

Remarks : Based on data from similar materials

methyl decanoate:

Species : Rat, male and female

NOAEL : 1,000 mg/kg

Application Route : Oral Exposure time : 14 - 45 d

Method : OECD Test Guideline 422

Remarks : Based on data from similar materials

1,2-benzisothiazol-3(2H)-one:

Species : Rat, male and female

NOAEL : 15 mg/kg Application Route : Ingestion Exposure time : 28 d

Method : OECD Test Guideline 407

Symptoms : Irritation

Species : Rat, male and female

NOAEL : 69 mg/kg Application Route : Ingestion Exposure time : 90 d

Symptoms : Irritation, Reduced body weight

Aspiration toxicity

Not classified based on available information.

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Product:

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

Components:

methyl decanoate:

The substance or mixture causes concern owing to the assumption that it causes a human aspiration toxicity hazard.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 130 mg/l

Exposure time: 96 h

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

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.00969 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

GLP: yes

Components:

Cyantraniliprole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 12.6 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)): > 12.1 mg/l

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

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Toxicity to fish (Chronic tox-

icity)

NOEC: 2.9 mg/l

Exposure time: 28 d

Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.00656 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic

toxicity)

10

Toxicity to soil dwelling or-

ganisms

LC50: > 1,000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organ-

isms

LD50: > 0.0934 µg/bee Exposure time: 48 h

End point: Acute contact toxicity Species: Apis mellifera (bees)

LD50: > $0.1055 \mu g/bee$ Exposure time: 48 h

End point: Acute oral toxicity Species: Apis mellifera (bees)

LD50: 2,250 mg/kg

Species: Colinus virginianus (Bobwhite quail)

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

Toxicity to fish : LC50 : 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

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methyl decanoate:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 170 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1.1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): >

0.055 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to microorganisms : NOEC (activated sludge): >= 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.081 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

M-Factor (Chronic aquatic

toxicity)

10

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 16.7

mg/l

Exposure time: 96 h Test Type: static test

LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2.9 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0.070

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.04

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mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

EC50 (activated sludge): 12.8 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

Remarks: Estimation based on data obtained on active ingre-

dient.

Components:

Cyantraniliprole:

Biodegradability : Remarks: Not readily biodegradable.

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

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301F

methyl decanoate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 78 % Exposure time: 28 d

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

Estimation based on data obtained on active ingredient.

Components:

Cyantraniliprole:

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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

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

Partition coefficient: n- : log Pow: 4.3 - 5.8 (25 °C)

octanol/water pH: 7

Method: OECD Test Guideline 117

methyl decanoate:

Partition coefficient: n-

octanol/water

log Pow: 4.42

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 56 d

Bioconcentration factor (BCF): 6.62 Method: OECD Test Guideline 305

Remarks: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

Partition coefficient: n-

octanol/water

log Pow: 0.7 (20 °C)

pH: 7

log Pow: 0.99 (20 °C)

pH: 5

12.4 Mobility in soil

Product:

Distribution among environ-

mental compartments

Remarks: The product is not expected to be mobile in soils.

Components:

Cyantraniliprole:

Distribution among environ-

mental compartments

Remarks: The product is not expected to be mobile in soils.

1,2-benzisothiazol-3(2H)-one:

Distribution among environ-

mental compartments

Koc: 9.33, log Koc: 0.97

Method: OECD Test Guideline 121

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12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains no substance considered to be persis-

tent, bioaccumulating and toxic (PBT).. This mixture contains no substance considered to be very persistent and very bio-

accumulating (vPvB).

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or

very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting poten-

tial

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to

REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

No other ecological effects to be specially mentioned.

See product label for additional application instructions relat-

ing to environmental precautions.

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

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

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 han-

dling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

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IMDG : UN 3082 IATA : UN 3082

14.2 UN proper shipping name

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

(, Decanoic acid, methyl ester)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(Cyantraniliprole)

(Cyantraniliprole, Decanoic acid, methyl ester)

14.3 Transport hazard class(es)

IMDG : 9 **IATA** : 9

14.4 Packing group

IMDG

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 964

aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 964

ger aircraft)

Packing instruction (LQ) : Y964
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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SECTION 15: Regulatory information

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

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

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

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

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of H-Statements

H400

Harmful if swallowed. H302 H315 Causes skin irritation.

H317 May cause an allergic skin reaction. Causes serious eye damage. H318 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects. H410 Toxic to aquatic life with long lasting effects. H411

Full text of other abbreviations

Acute Tox. Acute toxicity

Aquatic Acute Short-term (acute) aquatic hazard Aquatic Chronic Long-term (chronic) aquatic hazard

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Eye Dam.Skin Irrit.Skin irritationSkin sensitization

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; 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

Other information :

Classification of the mixture: Classification procedure:

Skin Irrit. 2	H315	Based on product data or assessment
Skin Sens. 1	H317	Based on product data or assessment
Aquatic Acute 1	H400	Based on product data or assessment
Aquatic Chronic 1	H410	Based on product data or assessment

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