VERIMARK® (BEPUMAPK®)



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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : VERIMARK® (BEPИMAPK®)

Manufacturer or supplier's details

Company : FMC Corporation

Address : 2929 WALNUT ST

PHILADELPHIA PA 19104

USA

Telephone : +12152996000

Emergency telephone number : +44 20 3885 0382 (CHEMTREC's European Regional Toll-Free

Number)

1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

Medical Emergency Number : All other countries: +1 651 / 632-6793 (Collect)

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

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Use as recommended by the label.

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 5

Short-term (acute) aquatic

hazard

Category 1

Long-term (chronic) aquatic

hazard

Category 1

GHS-Labelling

Hazard pictograms

¥2>

Signal word : Warning

Hazard statements : H333 May be harmful if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

Prevention:

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P273 Avoid release to the environment.

Response:

P304 + P312 IF INHALED: Call a POISON CENTER/ doctor if

you feel unwell.

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

Pure substance/mixture : Mixture

Components

Chemical name	CAS-No.	Classification	MAC value mg/m3 / TSEL value	Concentration (% w/w)
Cyantraniliprole	736994-63-1	Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	18,7
propane-1,2-diol	57-55-6		MPC-STEL: 7 mg/m3 Class 3 - Moder- ately dangerous Data Source: RU OEL	>= 1 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5	Acute Tox.4; H302 Eye Dam.1; H318 Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic2; H411	No data available	>= 0,0025 - < 0,025

For explanation of abbreviations see section 16.

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.

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If inhaled : Remove to fresh air.

Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

Wash off with soap and plenty of water.

Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.

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

May be harmful if inhaled.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

Flammable properties

Flash point : > 98 °C

Flammability (liquids) : Not expected to be ignitable

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

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire-

fighting

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

courses.

Hazardous combustion prod: :

ucts

Thermal decomposition can lead to release of irritating gases

and vapours.

Nitrogen oxides (NOx) Chlorine compounds Hydrogen cyanide Carbon oxides Bromine compounds

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

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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.

Wear self-contained breathing apparatus for firefighting if nec-

essary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer-

gency procedures

Use personal protective equipment.

If it can be safely done, stop the leak.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

Prevent product from entering drains. **Environmental precautions**

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

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.

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.

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 stor-

The product is stable under normal conditions of warehouse

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age conditions storage.

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.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

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	MPC-STEL (mixture of vapour and aerosol)	7 mg/m3	RU OEL
	Further information: Class 3 - Moderately dangerous			

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable per-

sonal 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

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

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-

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 instruc-

tions for use.

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

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : off-white

Odour : odourless

pH : 6-8

Concentration: 10 g/l 1 %

(as a dispersion)

Melting point/freezing point : not determined

Flash point : > 98 °C

Flammability (liquids) : Not expected to be ignitable

Relative vapour density : not determined

Relative density : 1,072 (20 °C)

Solubility(ies)

Water solubility : dispersible

Solubility in other solvents : 6,54 g/l (20 °C)

Solvent: Acetone

1,96 g/l (20 °C) Solvent: ethyl acetate

4,73 g/l (20 °C) Solvent: Methanol

5,05 g/l (20 °C)

Solvent: dichloromethane

0,29 g/l (20 °C) Solvent: xylene

0,067 mg/l (20 °C) Solvent: hexane

0,79 g/l (20 °C) Solvent: n-Octanol

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2,45 g/l (20 °C) Solvent: Acetonitrile

Viscosity

Viscosity, dynamic : 474,3 mPa,s

50 rpm

Explosive properties : Not explosive

Oxidizing properties : The product is not oxidizing.

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 reac-

tions

No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

Incompatible materials : Avoid strong acids, bases, and oxidizers

Hazardous decomposition

products

Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

May be harmful if inhaled.

Product:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 425

GLP: yes

Remarks: (Data on the product itself)
Information source: Internal study report

Acute inhalation toxicity : LC50 (Rat): > 3,7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Assessment: The component/mixture is minimally toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Remarks: (Data on the product itself)

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Information source: Internal study report

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 tox-

icity

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

Assessment: The substance or mixture has no acute dermal

toxicity

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

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

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

Method: OECD Test Guideline 401

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

Not classified based on available information.

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Remarks : (Data on the product itself)

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Information source: Internal study report

Components:

Cyantraniliprole:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

propane-1,2-diol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

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

Result : No eye irritation

Method : OECD Test Guideline 405

GLP : yes

Remarks : (Data on the product itself)

Information source: Internal study report

Components:

Cyantraniliprole:

Species : Rabbit

Result : No eye irritation
Assessment : No eye irritation

Method : OECD Test Guideline 405

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

tion.

propane-1,2-diol:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

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

Species : Bovine cornea Result : No eye irritation

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Method : OECD Test Guideline 437

Species : Rabbit

Result : Irreversible effects on the eye

Method : EPA OPP 81-4

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Product:

Test Type : Local lymph node test

Species : Mouse

Method : OECD Test Guideline 429

Result : Animal test did not cause sensitization by skin contact.

GLP : yes

Remarks : (Data on the product itself)

: Information source: Internal study report

Components:

Cyantraniliprole:

Test Type : Local lymph node test Method : OECD Test Guideline 429

Result : Does not cause skin sensitisation.

propane-1,2-diol:

Test Type : Maximisation Test

Species : Guinea pig Result : negative

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

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

Species : Guinea pig Method : FIFRA 81.06

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Remarks: The product contains no ingredients known to be

mutagenic.

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Components:

Cyantraniliprole:

Germ cell mutagenicity -

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

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

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

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

Carcinogenicity

Not classified based on available information.

Product:

Remarks : The product contains no ingredients known to be carcinogen-

ic.

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Components:

Cyantraniliprole:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

propane-1,2-diol:

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

Reproductive toxicity

Not classified based on available information.

Product:

Effects on fertility : Remarks: The product contains no ingredients found to have

adverse effects on reproduction.

Components:

Cyantraniliprole:

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive 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 develop-

ment

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

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 bw/day

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

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STOT - single exposure

Not classified based on available information.

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.

Components:

Cyantraniliprole:

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

organ toxicant, repeated exposure.

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.

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

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

Species : Rat, male and female

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

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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.

Components:

Cyantraniliprole:

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

Further information

Product:

Remarks : No data available

Components:

Cyantraniliprole:

Remarks : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 99 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Remarks: (Data on the product itself)
Information source: Internal study report

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,0421 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)): > 66,3

mg/l

Exposure time: 72 h

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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 (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0,00656 mg/l

Exposure time: 21 d

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 1.000 mg/kg

Exposure time: 14 d

Method: OECD Test Guideline 207

GLP: yes

Remarks: (Data on the product itself)
Information source: Internal study report

Toxicity to terrestrial organ-

isms

LD50 (Apis mellifera (bees)): 0,00218 mg/kg

Exposure time: 96 h

End point: Acute oral toxicity Method: OECD Test Guideline 213

GLP: yes

Remarks: (Data on the product itself)
Information source: Internal study report

LD50 (Apis mellifera (bees)): 0,00355 mg/kg

Exposure time: 96 h

End point: Acute contact toxicity Method: OECD Test Guideline 213

GLP: yes

Remarks: (Data on the product itself)
Information source: Internal study report

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

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

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Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC (Cyprinodon variegatus (sheepshead minnow)): 2,9

Exposure time: 28 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 0,11 mg/l

Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic 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 or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 1.000 mg/kg

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

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

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 (Chron-

ic toxicity)

NOEC: 13.020 mg/l Exposure time: 7 d

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Toxicity to microorganisms : EC50 (Pseudomonas putida): > 20.000 mg/l

Exposure time: 18 h

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

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

Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

Remarks: Estimation based on data obtained on active ingre-

dient.

Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water

treatment plants.

Components:

Cyantraniliprole:

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Biodegradability : Remarks: Not readily biodegradable.

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 23,6 % Exposure time: 64 d

Method: OECD Test Guideline 306

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

Biodegradability : Result: rapidly biodegradable

Method: OECD Test Guideline 301C

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

Estimation based on data obtained on active ingredient.

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

propane-1,2-diol:

Partition coefficient: n-

octanol/water

log Pow: -1,07

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

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 6,62

Exposure time: 56 d

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

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log Pow: 0,99 (20 °C)

pH: 5

Mobility in soil

Components:

Cyantraniliprole:

Distribution among environ: Koc: 241 ml/g, log Koc: 2,38 mental compartments Remarks: Mobile in soils

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

Distribution among environmental compartments

Koc: 9,33 ml/g, log Koc: 0,97 Method: OECD Test Guideline 121 Remarks: Highly mobile in soils

Other adverse effects

Product:

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

Hygienic standards:

(Allowable concentration in air, water, including fishery waters, soil)

Components	Air	Water	Soil	Data Source
propane-1,2-diol 57-55-6	TSEL value: 0,03 mg/m3	Maximum Permissible Concentration 0,5 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 4 Maximum Permissible Concentration 0,3 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 4 Maximum Allowable Concentration: 0,6 mg/l Limiting health hazard indicator: general sanitary Hazard class: Class 3 - moderately dangerous		List 5

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List 5: Order of the Russian Federal Fisheries Agency "Standards of maximum permissible concentrations of harmful substances in fishery water bodies"

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging Empty remaining contents.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADR

UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

Class 9 Packing group Ш Labels 9 Hazard Identification Number 90 Tunnel restriction code (-)Environmentally hazardous yes

IATA-DGR

UN/ID No. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

(Cyantraniliprole)

9 Class Packing group Ш

Miscellaneous Labels

Packing instruction (cargo

aircraft)

964

964

Packing instruction (passen-

ger aircraft)

Environmentally hazardous

yes

IMDG-Code

UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

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9 Class Ш Packing group Labels 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

PICCS

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

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

TCSI On the inventory, or in compliance with the inventory

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

AIIC Not in compliance with the inventory

DSL This product contains the following components that are not

on the Canadian DSL nor NDSL.

3-BROMO-1-(3-CHLORO-2-PYRIDYL)-4'-CYAN-2'-METHYL-

6'-(METHYLCARBAMOYL)-1H-PYRAZOLE-5-

CARBOXANILIDE

ACTI-GEL 208 (ACTIVE MINERALS)

ENCS Not in compliance with the inventory

ISHL Not in compliance with the inventory

KECI Not in compliance with the inventory

Not in compliance with the inventory

IECSC Not in compliance with the inventory

NZIoC Not in compliance with the inventory

TECI Not in compliance with the inventory

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16. OTHER INFORMATION

Full text of H-Statements

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.

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

Full text of other abbreviations

Acute Tox. : Acute toxicity

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

Eye Dam. : Serious eye damage Skin Sens. : Skin sensitisation

RU OEL : SanPiN 1.2.3685-21 Table 2.1, Table 2.8, Table 2.16 & Table

2.17 Maximum permissible concentrations (MPC) in the air of

the working area

RU OEL / MPC-STEL : Maximum Permissible Concentration - Short Term Exposure

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; 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; 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; 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

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