According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

1.1 Product identifier

Product name VERIMARK® 20 SC

Other means of identification

Product code 50000081

Unique Formula Identifier :

(UFI)

8Y4X-12CH-DN4A-TW3E

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.

For professional users only.

1.3 Details of the supplier of the safety data sheet

<u>Supplier Address</u> FMC Chemicals Hellas MEPE

Syngrou Avenue 348 17674 Kallithea

Greece

Telephone: +30 211 1982768 Telefax: +30 211 1138614

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

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: 1 703 / 741-5970 (CHEMTREC - International)

Medical emergency:

Cyprus: 1401

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

¥_2>

Signal word : Warning

Hazard statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

P102 Keep out of reach of children.

Prevention:

P270 Do not eat, drink or smoke when using this product.

Storage:

P405 Store locked up.

Disposal:

P501 Disposal of contents/container in accordance with na-

tional legislation.

Additional Labelling

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instruc-

tions for use.

For special phrases (SP) and safety intervals, consult the label.

2.3 Other hazards

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.

Ecological information: 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.

Toxicological information: 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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

| Chemical name | CAS-No. EC-No. Index-No. | Classification | Concentration (% w/w) |
|------------------------------|--|---|--------------------------|
| Cyantraniliprole | Registration number 736994-63-1 | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 | >= 10 - < 20 |
| 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 specific concentration limit Skin Sens. 1; H317 >= 0,05 % Acute toxicity estimate Acute oral toxicity: 500,0 mg/kg | >= 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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Immediate medical attention is required in case of ingestion.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing

media

High volume water jet

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

Thermal decomposition can lead to release of irritating gases

and vapours.

Nitrogen oxides (NOx) Chlorine compounds Hydrogen cyanide Carbon oxides

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Bromine compounds

5.3 Advice for firefighters

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.

Further information : 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.

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.

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).

Keep in suitable, closed containers for disposal.

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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

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 conditions

The product is stable under normal conditions of warehouse 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 availa-

ble.

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

Contains no substances with occupational exposure limit values.

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

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|------------------|-----------|-----------------|------------------------------|-----------|
| 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 | 50 mg/m3 |

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

| | | | effects | |
|----------------------------------|-----------|------------|----------------------------|-------------|
| | Consumers | Inhalation | Long-term local effects | 10 mg/m3 |
| 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 |
|------------------------------|---------------------------|---------------|
| propane-1,2-diol | Fresh water | 260 mg/l |
| | Intermittent use/release | 183 mg/l |
| | Marine water | 26 mg/l |
| | Sewage treatment plant | 20 g/l |
| | Fresh water sediment | 572 mg/kg |
| | Marine sediment | 57,2 mg/kg |
| | Soil | 50 mg/kg |
| 1,2-benzisothiazol-3(2H)-one | Fresh water | 0,00403 mg/l |
| | Marine water | 0,000403 mg/l |
| | Sewage treatment plant | 1,03 mg/l |
| | Fresh water sediment | 0,0499 mg/l |
| | Marine sediment | 0,00499 mg/l |

8.2 Exposure controls

Personal protective equipment

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.

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.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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

sonal respiratory protection and protective suit.

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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : off-white

Odour : odourless

Odour Threshold : not determined

Melting point/freezing point : not determined

Boiling point/boiling range : Not available for this mixture.

Upper explosion limit / Upper

flammability limit

Not available for this mixture.

Lower explosion limit / Lower

flammability limit

Not available for this mixture.

Flash point : > 98 °C

Decomposition temperature : Not available for this mixture.

pH : 6-8

Concentration: 10 g/l 1 %

(as a dispersion)

Viscosity

Viscosity, dynamic : 474,3 mPa,s

50 rpm

Viscosity, kinematic : 444 mm2/s

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n-

octanol/water

: Not available for this mixture.

Vapour pressure : Not available for this mixture.

Relative density : 1,072 (20 °C)

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Relative vapour density : not determined

Particle characteristics

Particle size : Not applicable

Particle Size Distribution : Not applicable

Shape : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The product is not oxidizing.

Flammability (liquids) : Not expected to be ignitable

Self-ignition : > 800 °C

Evaporation rate : Not available for this mixture.

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

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

GLP: yes

Remarks: (Data on the product itself)
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

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

Acute oral toxicity : Acute toxicity estimate: 500,0 mg/kg

Method: Converted acute toxicity point estimate

LD50 (Rat, male and female): 490 mg/kg Method: OECD Test Guideline 401

Acute toxicity estimate: 490 mg/kg

Method: ATE value derived from LD50/LC50 value

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

Method: OECD Test Guideline 402

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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)

Information source: Internal study report

Components:

Cyantraniliprole:

Species : Rabbit

Assessment : No skin irritation

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

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Remarks : (Data on the product itself)

Information source: Internal study report

Components:

Cyantraniliprole:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

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

tion.

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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

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.

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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Components:

Cyantraniliprole:

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

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- As-

sessment

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.

Components:

Cyantraniliprole:

Carcinogenicity - Assess-

ment

: Weight of evidence does not support classification as a car-

cinogen

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

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

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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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.

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.

Components:

Cyantraniliprole:

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

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered 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.

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Further information

Product:

Remarks : No data available

Components:

Cyantraniliprole:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

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: ves

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

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: 0,00656 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Toxicity to soil dwelling or-

ganisms

LC50: > 1.000 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Toxicity to terrestrial organ-

isms

LD50: 0,00218 mg/kg Exposure time: 96 h

End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213

GLP:yes

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

LD50: 0,00355 mg/kg Exposure time: 96 h

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

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: 2,9 mg/l

Exposure time: 28 d

Species: Cyprinodon variegatus (sheepshead minnow)

NOEC: 0,11 mg/l Exposure time: 21 d

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,00656 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0,00969 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

NOEC: 0,00447 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)

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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

12.2 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:

Biodegradability : Remarks: Not readily biodegradable.

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:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): < 1

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

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. Estimation based on data obtained on active ingredient.

Components:

Cyantraniliprole:

Distribution among environ-

mental compartments

Koc: 241 ml/g, log Koc: 2,38 Remarks: Mobile in soils

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

Distribution among environ-

mental compartments

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

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered 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.

12.7 Other adverse effects

Product:

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.

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.

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 3082
ADR : UN 3082
RID : UN 3082
IMDG : UN 3082
IATA : UN 3082

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

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

(Cyantraniliprole)

14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

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

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list 3

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

: Not applicable

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollu- : Not applicable

tants (recast)

Regulation (EC) No 649/2012 of the European Parlia: Not applicable

ment and the Council concerning the export and import

of dangerous chemicals

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the Euro- E1 ENVIRONMENTAL HAZARDS

pean Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

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

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

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed. H315 : Causes skin irritation.

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 Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

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; TRGS - Technical Rule for Hazardous Substances; TSCA

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



VERIMARK® 20 SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 06.07.2023 50000081 Date of first issue: 06.07.2023

- Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: Classification procedure:

Aquatic Acute 1 H400 Based on product data or assessment
Aquatic Chronic 1 H410 Based on product data or assessment

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to ensure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared by

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2023 FMC Corporation. All Rights Reserved.

CY / 6N