according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

1.1 Product identifier

Product name VENZAR® 500 SC

Other means of identification

Product code 50000071

Unique Formula Identifier

(UFI)

944X-Y2FJ-AN4D-5G8S

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

Use of the Sub- : Herbicide

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 Agricultural Solutions A/S

Thyborønvej 78 DK-7673 Harboøre

Denmark

Telephone: +45 9690 9690 Telefax: +45 9690 9691

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

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:

Ireland: 353-19014670 (CHEMTREC)

Medical emergency:

Ireland (Republic): +352 1 809 2166

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Carcinogenicity, Category 2 H351: Suspected of causing cancer.

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





Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.

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.P272 Contaminated work clothing should not be allowed out

of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container as hazardous waste in

accordance with local regulations.

Hazardous components which must be listed on the label:

lenacil (ISO)

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.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
lenacil (ISO)	2164-08-1 218-499-0 613-320-00-6	Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 30 - < 50
Tristyrylphenol ethoxylates	99734-09-5	Aquatic Chronic 3; H412	>= 1 - < 2.5
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 2; H330 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0.0025 - < 0.025

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			specific concentration limit Skin Sens. 1A; H317 >= 0.036 %		
			Acute toxicity estimate		
			Acute oral toxicity: 450 mg/kg Acute inhalation toxicity (dust/mist): 0.21		

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 [Descri	ption	of	first	aid	measures
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General advice : Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

Consult a physician.

Never give anything by mouth to an unconscious person.

mg/l

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambu-

lance.

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

If on skin, rinse well with water.

Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and

persists.

Wash contaminated clothing before reuse.

In case of eye contact : Remove contact lenses.

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

for at least 15 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Rinse mouth with water.

If swallowed, DO NOT induce vomiting unless directed to do

so by medical personnel.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Obtain medical attention.

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 : Immediate medical attention is required in case of ingestion.

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

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

Fire may produce irritating, corrosive and/or toxic gases.

Nitrogen oxides (NOx)

Carbon oxides

Oxides of phosphorus

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.
Use a water spray to cool fully closed containers.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Dispose of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Do not touch or walk through the spilled material.

If it can be safely done, stop the leak. Use personal protective equipment.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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 further leakage or spillage if safe to do so.

Do not let product enter drains.

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 : Collect as much of the spill as possible with a suitable absor-

bent material.

Pick up and transfer to properly labelled containers. Never return spills in original containers for re-use.

Clean contaminated surface thoroughly. Clean up promptly by sweeping or vacuum.

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

tainer 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 : Use only according to our recommendations.

All processes must be supervised by specialists or authorised

personnel.

Plan first aid action before beginning work with this product. Use only in area provided with appropriate exhaust ventilation.

Handle with extreme care.

Wear personal protective equipment.

Never return unused material to storage receptacle.

Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against :

fire and explosion

Keep away from heat and sources of ignition.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. This product should be used only by all personnel thoroughly trained to handle it. Avoid contact with skin, eyes and clothing. Remove contaminated clothing and protective

equipment before entering eating areas.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep containers tightly closed in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Ob-

serve label precautions.

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. A warning sign reading "POISON" is recommended. 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.

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
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
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/face protection : Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Tightly fitting safety goggles

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Wear face-shield and protective suit for abnormal processing

problems.

Ensure that eyewash stations and safety showers are close

to the workstation location.

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 : Wear appropriate chemical resistant clothing to prevent skin

contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of excessive or prolonged exposure, coveralls of barrier laminate may be

required.

Remove and wash contaminated clothing before re-use.

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.

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 : white
Odour : odourless
Odour Threshold : not determined
Melting point/ range : not determined

Boiling point/boiling range : 98 °C

Upper explosion limit / Upper

flammability limit

: not determined

not determined

Lower explosion limit / Lower

flammability limit

Flash point : > 98 °C

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Auto-ignition temperature : No data available
Decomposition temperature : not determined
pH : 5.9 - 6.2 (20 °C)

Concentration: 10 g/l 1 %

Viscosity

Viscosity, dynamic : Not applicable Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : No data available Solubility in other solvents : No data available

Partition coefficient: n- : Not available for this mixture.

octanol/water

Vapour pressure : Not available for this mixture.

Relative density : 1.13 (20 °C)

Density : No data available

Bulk density : No data available

Relative vapour density : not determined

Particle characteristics

Particle size : Not applicable Particle Size Distribution : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The product is not oxidizing.

Flammability (liquids) : Not highly flammable, may be ignitable, Based on available

information, the classification criteria for flammability hazard

are not met.

Self-ignition : 530 °C

Evaporation rate : Not available for this mixture.

Miscibility with water : dispersible

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Protect from frost, heat and sunlight.

Heating of the mixture may evolve harmful and irritant va-

pours.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

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

Product:

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

Method: OECD Test Guideline 423

GLP: yes

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

Acute inhalation toxicity : Remarks: No data is available on the product itself.

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

Method: OECD Test Guideline 402

GLP: yes

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

Components:

lenacil (ISO):

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

Method: OECD Test Guideline 423

Remarks: Information source: Internal study report

Acute inhalation toxicity : LC50 (Rat): > 5.12 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

Remarks: Information source: Internal study report

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

Method: OECD Test Guideline 402

Remarks: Information source: Internal study report

Tristyrylphenol ethoxylates:

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

Method: OECD Test Guideline 401

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

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: 450 mg/kg

Method: Acute toxicity estimate according to Regulation (EC)

No. 1272/2008

Remarks: Based on EU Harmonised classification - Annex VI

of Regulation (EC) No 1272/2008 (CLP Regulation)

Acute inhalation toxicity : Acute toxicity estimate: 0.21 mg/l

Test atmosphere: dust/mist

Method: Acute toxicity estimate according to Regulation (EC)

No. 1272/2008

Remarks: Based on EU Harmonised classification - Annex VI

of Regulation (EC) No 1272/2008 (CLP Regulation)

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

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

Product:

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Remarks : (Data on the product itself)

Information source: Internal study report

Components:

lenacil (ISO):

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Information source: Internal study report

Tristyrylphenol ethoxylates:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

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

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:

lenacil (ISO):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

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

tion.

Information source: Internal study report

Tristyrylphenol ethoxylates:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

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

Respiratory or skin sensitisation

Skin sensitisation

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

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Respiratory sensitisation

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

Product:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Not a skin sensitizer.

Method : OECD Test Guideline 406

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

GLP : yes

Remarks : (Data on the product itself)

Information source: Internal study report

Components:

lenacil (ISO):

Exposure routes : Skin contact Species : Guinea pig

Assessment : Not a skin sensitizer.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.
Remarks : Information source: Internal study report

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

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

Components:

lenacil (ISO):

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects., Animal testing did not show any mutagenic

effects.

Tristyrylphenol ethoxylates:

Genotoxicity in vitro : Test Type: reverse mutation assay

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

Suspected of causing cancer.

Components:

lenacil (ISO):

Species : Rat

Method : OECD Test Guideline 453

Symptoms : mammary tumors

Species : Mouse

Method : OECD Test Guideline 451

Symptoms : Lung alveolar tumour, Hepatocellular adenoma

Carcinogenicity - Assess-

ment

: Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Components:

lenacil (ISO):

Reproductive toxicity - As-

sessment

Animal testing did not show any effects on fertility.

Animal testing did not show any effects on foetal develop-

ment.

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

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

STOT - repeated exposure

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

Components:

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:

lenacil (ISO):

Species : Rat Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408

Symptoms : Liver effects

Species : Mouse Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408 Symptoms : increased liver weight

Species : Dog Application Route : Oral Exposure time : 90 d

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Method : OECD Test Guideline 408 Symptoms : Liver effects, Bladder effects

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

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

Components:

lenacil (ISO):

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.

SECTION 12: Ecological information

12.1 Toxicity

Product:

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

plants 0.00918 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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ErC50 (Lemna gibba (duckweed)): 0.0200 mg/l

Exposure time: 7 d Test Type: semi-static test

Method: OECD Test Guideline 221

GLP: yes

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

Toxicity to terrestrial organ-

isms

LD50: > 110 µg/bee Exposure time: 48 h

End point: Acute oral toxicity
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214
Remarks: (Data on the product itself)
Information source: Internal study report

LD50: > 100 μ g/bee Exposure time: 48 h

End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213 Remarks: (Data on the product itself) Information source: Internal study report

Components:

lenacil (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 2 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Remarks: Information source: Internal study report

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 8.4 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Remarks: Information source: Internal study report

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.016

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Information source: Internal study report

ErC50 (Navicula pelliculosa (Diatom)): 0.096 mg/l

Exposure time: 72 h

ErC50 (Lemna gibba (gibbous duckweed)): 0.029 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Remarks: Information source: Internal study report

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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NOEC (Lemna gibba (duckweed)): 0.0088 mg/l

Exposure time: 7 d

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC: 0.16 mg/l Exposure time: 90 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 210

Remarks: Information source: Internal study report

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.48 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Remarks: Information source: Internal study report

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) Method: OECD Test Guideline 207

Remarks: Information source: Internal study report

Toxicity to terrestrial organ-

isms

LD50: 25 µg/bee

Exposure time: 48 h

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

Method: US EPA Test Guideline OPP 141-1 Remarks: Information source: Internal study report

LD50: > 2.000 mg/kg

Species: Anas platyrhynchos (Mallard duck) Method: US EPA Test Guideline OPP 71-1

Remarks: Information source: Internal study report

LC50: > 5,000 mg/kg Exposure time: 5 d

Species: Colinus virginianus (Bobwhite quail) Method: US EPA Test Guideline OPP 71-2

Remarks: Information source: Internal study report

Tristyrylphenol ethoxylates:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 21 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to microorganisms

Remarks: No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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)

1

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

M-Factor (Chronic aquatic

toxicity)

1

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

Components:

lenacil (ISO):

Biodegradability : Result: Not readily biodegradable.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Remarks: Substance/product is moderately persistent in the

environment.

Tristyrylphenol ethoxylates:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 8 % Exposure time: 28 d

Method: OECD Test Guideline 301

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

Biodegradability : Result: rapidly biodegradable

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Components:

lenacil (ISO):

Bioaccumulation : Remarks: Low potential for bioaccumulation

Partition coefficient: n-

octanol/water

log Pow: 1.70 (25 °C)

Tristyrylphenol ethoxylates:

Partition coefficient: n-

octanol/water

Remarks: No data available

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: Substance is not persistent, bioaccumulative, 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: Remarks: No data is available on the product itself.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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mental compartments

Components:

lenacil (ISO):

Distribution among environ-

mental compartments

Remarks: Moderately 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

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

See product label for additional application instructions relat-

ing to environmental precautions.

No other ecological effects to be specially mentioned.

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.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Lenacil)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Lenacil)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Lenacil)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Lenacil)

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

(Lenacil)

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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

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.

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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) on substances that deplete the ozone

layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

ENVIRONMENTAL HAZARDS

Other regulations:

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

E1

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

TCSI : Not 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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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on the Canadian DSL nor NDSL.

Ethanol, 2,2',2"-nitrilotris-, compd. with .alpha.-[2,4,6-tris(1-phenylethyl)phenyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl)

phosphate lenacil (ISO)

KORASILON DEFOAMER GD (OBERMEIER)

MONOETHYLENE GLYCOL (CVM)

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

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.

H330 : Fatal if inhaled.

H351 : Suspected of causing cancer. H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.
 H412 : Harmful 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

Carc. : Carcinogenicity
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 Test-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

Further information

Classification of the mixture: Classification procedure:

Carc. 2 H351 Calculation method

Aquatic Acute 1 H400 Based on product data or assessment

Aquatic Chronic 1 H410 Calculation method

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