

SAFETY DATA SHEET



TIZCA® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	15.02.2022	50000004	Date of first issue: 19.02.2022

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

1.1 Product identifier

Product name TIZCA® 500 SC

Other means of identification

Product code 50000004

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

Use of the Sub-stance/Mixture : Fungicide

Recommended restrictions on use : Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address

FMC Chemicals (Pty) Ltd
Company Registration Number: 1988/001451/07
West End Office Park, Building C
Cnr. West Ave & Hall Street
Centurion, 0014

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

1.4 Emergency telephone

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

Medical emergency:
For any emergency or poisoning contact: Griffon Poison Information Centre (24 hrs) - +27-(0)-82-446-8946

SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**

Classification (REGULATION (EC) No 1272/2008)

Skin sensitization, Sub-category 1B H317: May cause an allergic skin reaction.

Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Short-term (acute) aquatic hazard, Category 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Category 1

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

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Warning

Hazard Statements :
H317 May cause an allergic skin reaction.
H361d Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :
Prevention:
P201 Obtain special instructions before use.
P261 Avoid breathing mist or vapors.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.

Hazardous ingredients which must be listed on the label:

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

2.3 Other hazards

This mixture contains substances considered to be very persistent and very bioaccumulating (vPvB).

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

fluazinam (ISO)	79622-59-6 612-287-00-5	Acute Tox. 4; H332 Eye Dam. 1; H318 Skin Sens. 1A; H317 Repr. 2; H361d Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 30 - < 50
Alcohols, C13-15, branched and linear, ethoxylated	157627-86-6 500-337-8	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 1 - < 2.5
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	>= 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.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- 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 : Induce vomiting immediately and call a physician.
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.
Take victim immediately to hospital.

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.
Suspected of damaging the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing media : Do not spread spilled material with high-pressure water streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Ammonia

5.3 Advice for firefighters

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

Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.
Use a water spray to cool fully closed containers.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 : Evacuate personnel to safe areas.
Use personal protective equipment.
If it can be safely done, stop the leak.
Do not touch or walk through the spilled material.
Never return spills in original containers for re-use.
For disposal considerations see section 13.

TIZCA® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	15.02.2022	50000004	Date of first issue: 19.02.2022

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 : Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Do not inhale aerosol.

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

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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
 Date of first issue: 19.02.2022

Specific use(s) : Agricultural compounds

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.
 Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
urea	Workers	Inhalation	Long-term systemic effects	292 mg/m ³
	Workers	Inhalation	Acute systemic effects	292 mg/m ³
	Workers	Dermal	Long-term systemic effects	580 mg/kg bw/day
	Workers	Dermal	Acute systemic effects	580 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	125 mg/m ³
	Consumers	Inhalation	Acute systemic effects	125 mg/m ³
	Consumers	Dermal	Long-term systemic effects	580 mg/kg bw/day
	Consumers	Dermal	Acute systemic effects	580 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	42 mg/kg bw/day
	Consumers	Oral	Acute systemic effects	42 mg/kg bw/day
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m ³
	Workers	Dermal	Long-term systemic effects	0.966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m ³
	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
fluazinam (ISO)	Water	530 ng/l
urea	Fresh water	0.47 mg/l
	Sea water	0.047 mg/l
1,2-benzisothiazol-3(2H)-one	Fresh water	0.00403 mg/l
	Sea water	0.000403 mg/l
	Sewage treatment plant	1.03 mg/l
	Fresh water sediment	0.0499 mg/l
	Sea sediment	0.00499 mg/l

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

8.2 Exposure controls

Personal protective equipment

- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Hand protection
Material : Protective gloves
- Remarks : The suitability for a specific workplace should be discussed
with the producers of the protective gloves.
- Skin and body protection : Protective suit
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.
-

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Color : beige, yellowish-brown, red brown
- Odor : odorless
- Odor Threshold : No data available
- pH : 7.5 - 8.3
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : > 103 °C
Method: Pensky-Martens closed cup - PMCC
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available
- Vapor pressure : 0.0011 Pa (20 °C)
- Relative density : 1.2547 (20 °C)
- Density : 1.2547 g/cm³
- Solubility(ies)

SAFETY DATA SHEET



TIZCA® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	15.02.2022	50000004	Date of first issue: 19.02.2022

Water solubility	:	Miscible
Solubility in other solvents	:	partly miscible
		Solvent: Methanol
		partly miscible
		Solvent: hexane
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	15.5 mPa.s (20 °C)
Viscosity, kinematic	:	1094 - 1406 mm ² /s
Explosive properties	:	Not explosive

9.2 Other information

Flammability (liquids)	:	Will not burn
Self-ignition	:	No data available

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.
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10.4 Conditions to avoid

Conditions to avoid	:	Avoid extreme temperatures
		Avoid formation of aerosol.

No data available

10.5 Incompatible materials

Materials to avoid	:	Avoid strong acids, bases, and oxidizers.
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Not applicable

TIZCA® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	15.02.2022	50000004	Date of first issue: 19.02.2022

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Product:**

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg
 Method: OECD Test Guideline 425
 Assessment: The component/mixture is minimally toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): > 3.56 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Method: OECD Test Guideline 403
 Assessment: The component/mixture is minimally toxic after short term inhalation.
 Remarks: No adverse effect has been observed in acute toxicity tests.

Acute dermal toxicity : LD50 Dermal (Rat): > 2,000 mg/kg
 Method: OECD Test Guideline 402
 Assessment: The component/mixture is minimally toxic after single contact with skin.

Components:**fluazinam (ISO):**

Acute oral toxicity : LD50 (Rat, male): > 4,100 mg/kg
 Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat, male): 1.68 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
 Method: OECD Test Guideline 402

Alcohols, C13-15, branched and linear, ethoxylated:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg

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

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : No skin irritation

Remarks : May cause skin irritation and/or dermatitis.

Components:

fluazinam (ISO):

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

Alcohols, C13-15, branched and linear, ethoxylated:

Result : No eye 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

Product:

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 405
Result : No eye irritation

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

Components:

fluazinam (ISO):

Result : Irreversible effects on the eye
Remarks : Based on EU Harmonised classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

Species : Rabbit
Method : OECD Test Guideline 405
Result : Moderate eye irritation

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Alcohols, C13-15, branched and linear, ethoxylated:

Result : Irreversible effects on the eye

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 sensitization

Product:

Assessment : The product is a skin sensitizer, sub-category 1B.
Method : OECD Test Guideline 429
Result : Causes skin sensitization.

Remarks : Causes sensitization.

Components:

fluazinam (ISO):

Method : OECD Test Guideline 429
Result : May cause sensitization by skin contact.

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

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

Species : Guinea pig
Method : FIFRA 81.06
Result : May cause sensitization by skin contact.

Germ cell mutagenicity

Product:

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

Components:

fluazinam (ISO):

Germ cell mutagenicity- Assessment : No genotoxic potential

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

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

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

Product:

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

Components:

fluazinam (ISO):

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Components:

fluazinam (ISO):

Effects on fetal development : Species: Rat

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Symptoms: Fetal effects., placental abnormalities, fused or incompletely ossified sternebrae, abnormalities of the head bones, not developed renal papillae and distended ureter
Result: Embryotoxic effects and adverse effects on the offspring were detected.

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.

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

Effects on fertility : Species: Rat, male
Application Route: Ingestion
General Toxicity Parent: NOAEL: 18.5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg wet weight
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

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

STOT-single exposure

Product:

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

Components:

fluazinam (ISO):

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

STOT-repeated exposure

Product:

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

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:

fluazinam (ISO):

Species : Rat

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

LOAEL : 41 mg/kg, 500 ppm
Exposure time : 90 days
Target Organs : Liver
Symptoms : Reduced body weight, increased liver weight

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

Components:

fluazinam (ISO):

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

Further information

Product:

Remarks : No data available

Components:

fluazinam (ISO):

Remarks : Irritation and allergic reactions.
In animal tests, the main symptoms after oral intake were disturbance of respiration and decreased activity.
The symptoms of the allergic effect range from mildly itchy, papular rash to painful, weeping and blistering dermatitis.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.23 mg/l
Exposure time: 48 h

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 0.13 mg/l
Exposure time: 96 h
- ErC50 (Lemna gibba (duckweed)): 0.57 mg/l
Exposure time: 7 d
- NOEC (Lemna gibba (duckweed)): 0.094 mg/l
Exposure time: 7 d
- Toxicity to soil dwelling organisms : LC50: > 1,000 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
- Toxicity to terrestrial organisms : LD50: > 100
Exposure time: 48 h
Species: Apis mellifera (bees)
Remarks: Oral
- LD50: > 100
Exposure time: 48 h
Species: Apis mellifera (bees)
Remarks: Contact
- LD50: > 2,000 mg/kg
Species: Coturnix japonica (Japanese quail)

Ecotoxicology Assessment

- Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

fluazinam (ISO):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.11 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.19 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : IC50 (Selenastrum capricornutum (green algae)): > 0.2 mg/l
Exposure time: 96 h
- Toxicity to microorganisms : EC50 (activated sludge): 75 mg/l
Exposure time: 3 h
- Toxicity to fish (Chronic toxicity) : NOEC: 0.012 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: < 0.0125 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- Toxicity to soil dwelling organisms : LC50: > 1,000 mg/kg
Exposure time: 28 d

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organisms : LD50: > 4,190 mg/kg
Species: Anas platyrhynchos (Mallard duck)

LD50: 1,782 mg/kg
Species: Colinus virginianus (Bobwhite quail)

Alcohols, C13-15, branched and linear, ethoxylated:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1 - 10 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1 - 10 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): 1 - 10 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.1 - 1 mg/l

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

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

TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

Test Type: Respiration inhibition
Method: OECD Test Guideline 209

12.2 Persistence and degradability**Product:**

Biodegradability : Result: Not biodegradable

Components:**fluazinam (ISO):**

Biodegradability : Result: Not readily biodegradable.
Remarks: It undergoes degradation in the environment and in waste water treatment plants.

Alcohols, C13-15, branched and linear, ethoxylated:

Biodegradability : Result: Readily biodegradable.

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

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: This mixture contains substances considered to be very persistent and very bioaccumulating (vPvB).

Components:**fluazinam (ISO):**

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 500 - 800

Partition coefficient: n-octanol/water : log Pow: 4.67 (21 °C)
pH: 7

log Pow: 3.34 (22 °C)
pH: 9

Alcohols, C13-15, branched and linear, ethoxylated:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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).

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
Date of first issue: 19.02.2022

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 environmental compartments : Remarks: immobile

Components:

fluazinam (ISO):

Distribution among environmental compartments : Remarks: Low mobility in soil.

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

Distribution among environmental compartments : Koc: 9.33, log Koc: 0.97
Method: OECD Test Guideline 121

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains substances considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Product:

Additional ecological information : 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 chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Empty containers should be taken to an approved waste han-

TIZCA® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	15.02.2022	50000004	Date of first issue: 19.02.2022

ding site for recycling or disposal.

SECTION 14: Transport information
14.1 UN number

IMDG : UN 3082

IATA : UN 3082

14.2 UN proper shipping name

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluazinam) (, Alcohols, C13-15, branched and linear, ethoxylated)

IATA : Environmentally hazardous substance, liquid, n.o.s. (Fluazinam) (Fluazinam, Alcohols, C13-15, branched and linear, ethoxylated)

14.3 Transport hazard class(es)

IMDG : 9

IATA : 9

14.4 Packing group

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

IATA (Cargo)
Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

IATA (Passenger)
Packing instruction (passenger aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

IMDG
Marine pollutant : yes

IATA (Passenger)
Environmentally hazardous : yes

IATA (Cargo)
Environmentally hazardous : yes

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
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14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

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

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL. fluazinam (ISO) mixture of polyorganosiloxanes and fillers Alcohols, C13-15, branched and linear, ethoxylated
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H332	:	Harmful if inhaled.

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0 Revision Date: 15.02.2022 SDS Number: 50000004 Date of last issue: -
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H361d : Suspected of damaging the unborn child.
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
Repr. : Reproductive toxicity
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitization

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : see user defined free text

Classification of the mixture:

Skin Sens. 1B H317

Classification procedure:

Based on product data or assessment

SAFETY DATA SHEET



TIZCA® 500 SC

Version 2.0	Revision Date: 15.02.2022	SDS Number: 50000004	Date of last issue: - Date of first issue: 19.02.2022
Repr. 2	H361d	Based on product data or assessment	
Aquatic Acute 1	H400	Based on product data or assessment	
Aquatic Chronic 1	H410	Based on product data or assessment	

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