

SAFETY DATA SHEET (SDS)	
TITLE:	ETOXAZOLE 110 SC

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Identification on the label / Trade name : AG ETOXAZOLE 110 SC
 Common Name : Etoxazole 110 g/L SC
 Index Number : N/A
 REACH registration No. : N/A

1.2 Relevant identified uses of the substance and uses advised against:

Insecticide

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier AGROMEC SARL
 P.O.Box: 462
 Jounieh, Lebanon
 Tel +961 9 226874
 E-mail agromec@agromec-international.com
 Webpage www.agromec-international.com

1.4 Emergency Phone Number (24 hours)

+961 3 980599

2.0 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards None
 Health hazards None
 Environmental hazards Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410

2.2. Label elements



Pictogram

Signal word

Warning

Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P391 Collect spillage.

Supplemental label information

P501 (UK) Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

P501 (IE) Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple-rinsed empty containers which can be disposed of as non-hazardous waste.

EUH208 Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Special risks and safety precautions (Commission Regulation (EU) 547/2011):

SP1 Do not contaminate water with the product or its container. (Do not clean application equipment near surface water.)

General provisions

Special risks and safety precautions (Commission Regulation (EU) 547/2011):

SPe3 To protect aquatic organisms respect an unsprayed buffer zone of (as indicated on the label) to surface water bodies.

Specific safety precautions

2.3. Other hazards

None known.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Classification according to
Regl 1272/2008

3.2 Mixtures

Classification according to
Regl 1272/2008

(RS)-5-tert-butyl-2-[2-(2,6-difluorophenyl)-4,5-dihydro-1,3-oxazol-4-yl] phenetole

11%

CAS number: 153233-91-1

M factor (Acute) = 100

M factor (Chronic) = 100

Classification

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

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

≥ 0.005 - < 0.1%

CAS number: 2634-33-5

EC number: 220-120-9

M factor (Acute) = 1

Classification

Acute Tox. 4 - H302

Skin Irrit. 2 - H315

Eye Dam. 1 – H318

Skin Sens. 1 – H317

Aquatic Acute 1 - H400

Aquatic Chronic 3 - H412

The full text for all hazard statements is displayed in Section 16.

Composition comments

All percentages displayed expressed as weight/weight.

Other information

Code ID : PHIL 98/03

4.0 FIRST AID MEASURES

4.1. Description of first aid measures

General information

If in doubt, get medical attention promptly.

Inhalation

Move affected person to fresh air at once. If symptoms persist, seek medical advice.

Ingestion

Rinse mouth. Never induce vomiting in unconscious or confused persons. Get medical attention

Skin contact

Remove contaminated clothing and rinse skin thoroughly with water.

Eye contact

Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

4.2. Most important symptoms and effects, both acute and delayed

General information

No typical symptoms and effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor

No specific recommendations.

5.0 FIRE – FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Dry chemical powder. Carbon dioxide (CO₂). Sand. Water.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire: No known hazardous decomposition products.

5.3. Advice for firefighters

Protective actions during

Water used to extinguish a fire should not be allowed to enter the drainage system

firefighting

Special protective equipment
for firefighters

or watercourses.

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6.0 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

Wear protective gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area.

For emergency responders

Wear protective nitrile gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area or consult an expert.

6.2. Environmental precautions

Environmental precautions

Do not allow escape into sewage system or watercourses. Do not wash residues into drains or other waterways.

6.3. Methods and material for containment and cleaning up

Containment of a spill

Do not allow escape into sewage system or watercourses.

Methods for cleaning up

In case of spill (liquid) soak it up immediately with suitable absorbent such as sawdust or granular absorbent clay. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

6.4. Reference to other sections

Reference to other sections

For personal protection see section 8.

7.0 HANDLING AND STORAGE

7.1. Precautions for safe handling

Fire and explosion prevention

No specific recommendations.

Usage precautions

Follow precautions for safe handling described in this safety data sheet. Avoid spilling. Do not allow to escape into sewage system or water courses.

Advice on general occupational
hygiene

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

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs.

Other information

Do not mix with water (except for the normal preparation). Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s)

See label on the container.

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

There is no national exposure limit for this product.

No chemical safety report is required for this kind of product.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Wear safety goggles or face shield.

Hand protection	Wear protective nitrile gloves.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash contaminated clothing before reuse.
Respiratory protection	The usual precautions for handling chemicals should be observed.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Name	Etioazole, 110 g/l suspension concentrate (Code ID: PHIL 98/03)
Appearance	Opaque liquid (visual inspection)
Colour	White (visual inspection)
Odour	Faint chemical (Olfactory assessment)
Odour threshold	Not determined
pH	pH (diluted solution): 7.7 (1%) @ 24°C (CIPAC MT 75.2 handbook F)
Melting point	-4.3°C (freezing point)
Initial boiling point and range	Not determined
Flash point	> 70°C Abel-Pensky
Evaporation rate	Not applicable
Flammability (solid, gas)	Not flammable
Vapour pressure	Not determined
Vapour density	Not applicable
Relative density	1.03 g/ml @ 20°C (CIPAC MT 3.3.2 handbook F) (density bottle)
Bulk density	Not applicable
Solubility(ies)	Dispersible in water. (Etioazole : Solubility : 0.0704 mg/l water @ 20°C (column elution method) (EEC A.6))
Solubility in other solvents	Not applicable
Partition coefficient	Not applicable. (Etioazole : log Pow: 5.5 @ 20°C (EEC A.8))
Auto-ignition temperature	Not auto-flammable up to 600°C (EEC A.15)
Decomposition temperature	Not determined. (Etioazole : The substance decomposed during the boiling point test, with onset at 293°C (EEC A.2))

10.0 STABILITY AND RELIABILITY

10.1. Reactivity

Reactivity Stable under recommended storage and handling conditions. See also section 7.

10.2. Chemical stability

Stability Stable for a minimum of 2 years under recommended storage and handling conditions. See section 7.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid Avoid high temperature, light, humidity.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products In case of fire: No known hazardous decomposition products. See also section 5.

11.0 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological effects No experimental toxicological data are available on the preparation as such.

Name Etoxazole, 110 g/l suspension concentrate (Code ID: TN02) (Close formulation)

Acute toxicity - oral

Acute toxicity - oral LD₅₀ rat: >5000 mg/kg (EEC B.1)

Acute toxicity - dermal

Acute toxicity - dermal LD₅₀ rat: >2000 mg/kg (EEC B.3)

Acute toxicity - inhalation

Acute toxicity - inhalation LC₅₀ rat (4 hours): > 1.09 mg/l, maximum feasible concentration, whole body (OECD 403)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating (EEC B.4)

Serious eye damage/irritation

Serious eye damage/irritation Mildly irritating (EEC B.5)

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. (EEC B.6)

Toxicological information on ingredients

Name Active substance; Etoxazole, technical grade

Acute toxicity - oral

Acute toxicity - oral LD₅₀ rat: >5000 mg/kg (OECD 401)

Acute toxicity - dermal

Acute toxicity - dermal	LD ₅₀ rat: >2000 mg/kg (OECD 402)
<u>Acute toxicity - inhalation</u>	
Acute toxicity - inhalation	LC ₅₀ rat (4 hours): > 1.09 mg/l, maximum feasible concentration, whole body (OECD 403)
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating. (OECD 404)
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating. (OECD 405)
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. (EEC B.6)
<u>Germ cell mutagenicity</u>	
Genotoxicity – in vitro	Negative
Genotoxicity – in vivo	Negative
<u>Carcinogenicity</u>	
Carcinogenicity	(rats, mice): No carcinogenic effect. (OECD 451, 453)
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Multigeneration study, Rat: Negative. (OECD 416)
Reproductive toxicity - development	Teratogenicity: Negative. (OECD 414)
Acute neurotoxicity	NOAEL = 2000 mg/kg, Oral, Rat (OECD 424)
Acute phototoxicity	Negative. (in vitro) (OECD 432)
90d neurotoxicity	NOAEL = 858 mg/kg bw/day, Oral, Rat (OECD 424)
General information	Based on the available data, no classification criteria are met for any of these hazard classes.
Route of exposure	This product is for agricultural use; therefore, the most probable routes of exposure are via skin or inhalation.

12.0 ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity	No experimental ecological data are available on the preparation as such.
Name	Etoxazole, 110 g/l suspension concentrate (Code ID: TN02) (Close formulation)
<u>Acute aquatic toxicity</u>	
Acute toxicity - aquatic invertebrates	EC ₅₀ 48 hours: 0.019 mg/l <i>Daphnia magna</i> (OECD 202)
Acute toxicity - terrestrial	LD ₅₀ , 48 hours, oral: >100 µg/bee <i>Apis mellifera</i> (Honeybee) LD ₅₀ , 48 hours, contact: >100 µg/bee <i>Apis mellifera</i> (Honeybee). (EPPO 170)

Ecological information on ingredients

Name	Active substance; Etoxazole, technical grade
<u>Acute aquatic toxicity</u>	
LE(C) ₅₀	0.001 < LE(C) ₅₀ ≤ 0.01
M factor (Acute)	100
Acute toxicity - fish	LC ₅₀ , 96 hours: 2.8 mg/l, <i>Onchorhynchus mykiss</i> (Rainbow trout) (OECD 203) LC ₅₀ , 96 hours: 1.4 mg/l, <i>Lepomis macrochirus</i> (Bluegill) (OECD 203)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.0071 mg/l, <i>Daphnia magna</i> (OECD 202) LC ₅₀ , 10 days: >56 mg/kg, <i>Chironomus riparius</i> (Sediment dwelling midge) (ASTM Guideline E 1706-95b)
Acute toxicity - algae	ECb ₅₀ , EC _{r50} , 72 hours: >10 mg/l, <i>Selenastrum capricornutum</i> NOEC, 72 hours: >10 mg/l, <i>Selenastrum capricornutum</i> (OECD 201)

Acute toxicity - microorganisms

Acute toxicity - terrestrial

EC₅₀, 3 hours: >1000 mg/l, Activated sludge (OECD 209)

LD₅₀, single dose oral: >2000 mg/kg, *Anas platyrhynchos* (Mallard duck) (FIFRA 71-1)

LD₅₀, 48 hours, oral: >200 µg/bee *Apis mellifera* (Honeybee)

LD₅₀, 48 hours, contact: >200 µg/bee *Apis mellifera* (Honeybee) (FIFRA 141-1, EPPO 170)

LC₅₀, 14 days, oral: >1000 mg/kg soil, *Eisenia fetida* (Earthworm) (OECD 207)

No significant impact on carbon mineralization or nitrogen transformation at up to 0.35 mg as/kg dw soil, Soil microorganisms (SETAC - procedures for assessing the environmental fate and ecotoxicity of pesticides)

Chronic aquatic toxicity

NOEC

0.0001 < NOEC ≤ 0.001

Degradability

Non-rapidly degradable

M factor (Chronic)

100

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 0.0002 mg/l, *Daphnia magna* (OECD 202)

NOEC, 21 days: 0.00013 mg/l, *Daphnia magna* (OPPTS Draft Guideline 850.1300)

12.2. Persistence and degradability

Ecological information on ingredients

Name

Active substance; Etoxazole, technical grade

Stability (hydrolysis)

pH 5: DT₅₀: 9.6 days @ 20°C

pH 7: DT₅₀: 147-161 days @ 20°C

pH 9: DT₅₀: 165-217 days @ 20°C (OECD 111)

Biodegradation

Not readily biodegradable (OECD 301D) (closed bottle test)

12.3. Bioaccumulative potential

Name

Etoxazole, 110 g/l suspension concentrate (Code ID: PHIL 98/03)

Partition coefficient

Not applicable. (Etoxazole : log Pow: 5.5 @ 20°C (EEC A.8))

Ecological information on ingredients

Name

Active substance; Etoxazole, technical grade

Bioaccumulative potential

BCF: exposure 30 days 2500-3300, *Onchorhynchus mykiss* (Rainbow trout)

CT50, depuration time: 3-6 days, whole fish, *Onchorhynchus mykiss* (Rainbow trout) (OECD 305E)

Partition coefficient

log Pow: 5.5 @ 20°C (EEC A.8)

12.4. Mobility in soil

Name

Etoxazole, 110 g/l suspension concentrate (Code ID: PHIL 98/03)

Surface tension

42 mN/m @ 20°C (Concentration: 0.166 ml/l) (EEC A.5)

Ecological information on ingredients

Name

Active substance; Etoxazole, technical grade

Mobility

Low mobility

Adsorption/desorption coefficient

Soil – Adsorption, K_{oc}: 4910 – 11000 ml/g @ 20°C

Soil – Desorption, K_{oc}: 11850 – 40750 ml/g @ 20°C (OECD 106)

Surface tension

Not applicable

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients

Name

Active substance; Etoxazole, technical grade

Results of PBT and vPvB assessment

Not required (no chemical safety report required).

12.6. Other adverse effects

Ecological information on ingredients

Name	Active substance; Etoxazole, technical grade
Other adverse effects	No other known adverse effects on the environment.

13.0 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal methods	According to local regulations. For further advice, contact manufacturer.
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14.0 TRANSPORT INFORMATION

14.1. UN Number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (etoxazole)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (etoxazole)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (etoxazole)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID label	9
IMDG class	9
ICAO class/division	9

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

No other special precaution required.

EmS	F-A, S-F
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code

Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code	Not applicable
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15.0 REGULATORY INFORMATION

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

EU legislation	There is no specific regulation/legislation for this mixture.
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15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

16.0 OTHER INFORMATION

The information contained herein relates only to the specified material identified. AGROMEC believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. AGROMEC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.