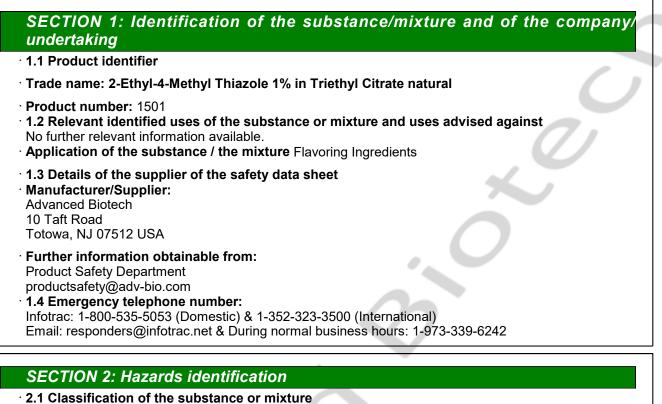


Printing date 16.01.2024

Version number 1

Revision: 10.01.2023



- Classification of the substance or mixture
 Classification according to Regulation (EC) No 1272/2008
 The product is not classified, according to the GB CLP regulation.
- Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- Additional information:
- EUH210 Safety data sheet available on request.
- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 15679-12-6	2-Ethyl-4-methylthiazole	(1) Acute Tox. 4, H302	≤2.5%
EINECS: 239-757-9		ATE: LD50 oral: 540 mg/kg	
A 1 11/1 1 1 A		<u> </u>	

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- \cdot After eye contact: Rinse opened eye for several minutes under running water.

(Contd. on page 2)



Printing date 16.01.2024

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

(Contd. of page 1)

- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or alcohol resistant foam.

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.
- Additional information
- Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Not required.

• 6.2 Environmental precautions: Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:
- No special requirements.

Please refer to the product specification and/or Certificate of Analysis for product storage requirements. Information about storage in one common storage facility: Not required.

- Further information about storage in one common storage facility: N
- 7.3 Specific end use(s) No further relevant information available.

(Contd. on page 3)

GB



Printing date 16.01.2024

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

(Contd. of page 2)

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as a basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Goggles recommended during refilling

9.1 Information on basic physical and	I chemical properties	
General Information	Molecular Weight: 276.29 g/mol	
Physical state	Fluid	
Colour:	According to product specification	
Odour:	According to product specification	
Odour threshold:	Not determined.	
Melting point/freezing point:	Undetermined.	
Boiling point or initial boiling point a	nd boiling	
range	Undetermined.	
Flammability	Not applicable.	
Lower and upper explosion limit		
Lower:	Not determined.	
Upper:	Not determined.	
Flash point:	>110 °C	
Decomposition temperature:	Not determined.	
pH	Not determined.	
Viscosity:		
Kinematic viscosity	Not determined.	
Dynamic:	Not determined.	



Printing date 16.01.2024

Safety data sheet according to 1907/2006/EC, Article 31

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

	(Contd. of page 3
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log va	alue) Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.115 g/cm ³
Relative density	Not determined.
Refractive Index	
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of he	alth
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
VOC (EC)	0.00 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical has	zard
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	
flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.

(Contd. on page 5)

GB



Printing date 16.01.2024

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

(Contd. of page 4)

• **10.5 Incompatible materials:** No further relevant information available.

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 54,000 mg/kg (ATE)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · 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.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. (Contd. on page 6)

n page 6)



Printing date 16.01.2024

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

(Contd. of page 5)

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport inform	mation
 14.1 UN number or ID number ADR, ADN, IMDG, IATA 	Void
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	Void
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	Void
 14.4 Packing group ADR, IMDG, IATA 	Void
 14.5 Environmental hazards: Marine pollutant: 	No
· 14.6 Special precautions for user	Not applicable.
 14.7 Maritime transport in bulk acco IMO instruments 	ording to Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

· Poisons Act

Regulated explosives precursors

None of the ingredients is listed.

· Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void

(Contd. on page 7)

GB -



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.01.2024

Version number 1

Revision: 10.01.2023

Trade name: 2-Ethyl-4-Methyl Thiazole 1% in Triethyl Citrate natural

(Contd. of page 6)

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

 Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases H302 Harmful if swallowed.
- · Department issuing SDS: Product safety department
- Contact:
 Product Safety Department
 productsafety@adv-bio.com
 - Date of previous version: 02.06.2022
- Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- ATE: Acute toxicity estimate values
- Acute Tox. 4: Acute toxicity Category 4