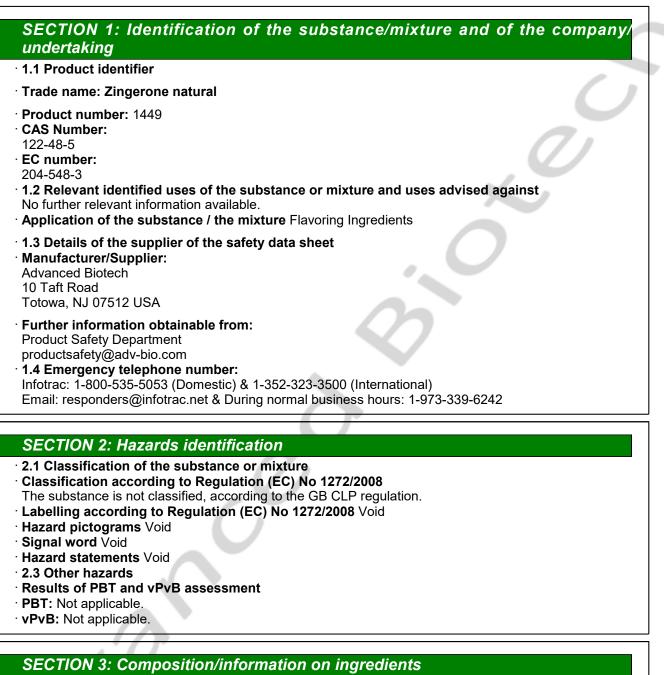


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- · 3.1 Substances
- · CAS No. Description
- CAS: 122-48-5 Zingerone
- Identification number(s)
- EC number: 204-548-3

#### SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.

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- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- $\cdot$  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: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- · 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 measures required.
- 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 conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

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Additional information: The lists valid de	
8.2 Exposure controls	
Appropriate engineering controls No fu	urther data: see section 7.
Individual protection measures, such a	
General protective and hygienic measure	
The usual precautionary measures are to	be adhered to when handling chemicals.
Respiratory protection: Not required.	
Hand protection	a and register to the product/ the substance/ the properation
	e and resistant to the product/ the substance/ the preparation. ion to the glove material can be given for the product/ the
preparation/ the chemical mixture.	ion to the glove material can be given for the product, the
	be based on consideration of the penetration times, rates of
diffusion and the degradation	
Material of gloves	
	not only depend on the material, but also on further marks of
quality and varies from manufacturer to m	nanutacturer.
Penetration time of glove material	determined by the manufacturer of the protective gloves and
has to be observed.	determined by the manufacturer of the protective gioves and
Eye/face protection Not required.	
SECTION 9: Physical and chemi	ical properties
9.1 Information on basic physical and	
9.1 Information on basic physical and General Information	chemical properties
9.1 Information on basic physical and General Information Physical state Colour:	chemical properties Molecular Weight: 194.23018 g/mol Solid According to product specification
9.1 Information on basic physical and General Information Physical state Colour: Odour:	chemical properties Molecular Weight: 194.23018 g/mol Solid According to product specification According to product specification
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9.1 Information on basic physical and o General Information Physical state Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and	chemical properties Molecular Weight: 194.23018 g/mol Solid According to product specification According to product specification Not determined. 39-43 °C d boiling
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Refractive Index	
Vapour density	Not applicable.
Particle characteristics	
See section 3.	
9.2 Other information	
Appearance:	
Form:	Solid
Important information on protection of he	alth
and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Solids content:	100.0 %
Change in condition	
Evaporation rate	Not applicable.
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.
- · 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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#### 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.
- · 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

Substance is not 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) (Assessment by list): 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 Smaller quantities can be disposed of with household waste.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

### SECTION 14: Transport information

• 14.1 UN number or ID number • ADR, ADN, IMDG, IATA

Void

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<ul> <li>14.2 UN proper shipping name</li> <li>ADR, ADN, IMDG, IATA</li> </ul>	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
<ul> <li>14.5 Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No	
· 14.6 Special precautions for user	Not applicable.	
<ul> <li>14.7 Maritime transport in bulk accordin IMO instruments</li> </ul>	i <b>ng to</b> Not applicable.	
· Transport/Additional information:	Not dangerous according to the above specifications.	
· UN "Model Regulation":	Void	

	ECTION 15: Regulatory information 5.1 Safety, health and environmental regulations/legislation specific for the substance or
	ixture
·Po	bisons Act
	egulated explosives precursors
Su	ubstance is not listed.
·Re	egulated poisons
Su	ubstance is not listed.
·Re	eportable explosives precursors
Su	ubstance is not listed.
·Re	eportable poisons
Su	ibstance is not listed.
· Ha · Sig	<b>ibelling according to Regulation (EC) No 1272/2008</b> Void azard pictograms Void gnal word Void azard statements Void
	rective 2012/18/EU amed dangerous substances - ANNEX I Substance is not listed.
	RECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in ectrical and electronic equipment – Annex II
Su	ibstance is not listed.
·RE	EGULATION (EU) 2019/1148
	nnex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose o eensing under Article 5(3))
	ubstance is not listed.



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Annex II - REPORTABLE EXPLOSIVES PRECURSORS

Substance is not listed.

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

Substance is not listed.

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

Substance is not 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.

· Department issuing SDS: Product safety department

Contact:

Product Safety Department productsafety@adv-bio.com

- Date of previous version: 13.08.2020
- 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
   CAS: Chemical Abstracts Service (division of the American Chemical Society)
   PBT: Persistent, Bioaccumulative and Toxic
   vPvB: very Persistent and very Bioaccumulative