

Printing date 16.01.2024 Version number 1 Revision: 16.01.2024

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

- · 1.1 Product identifier
- · Trade name: 2-Methyl-3-Furanthiol 5% OS Natural
- · Product number: 1337
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Flavoring Ingredients
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Advanced Biotech 10 Taft Road Totowa, NJ 07512 USA

· Further information obtainable from:

Product Safety Department productsafety@adv-bio.com

1.4 Emergency telephone number:

Infotrac: 1-800-535-5053 (Domestic) & 1-352-323-3500 (International)

Email: responders@infotrac.net & During normal business hours: 1-973-339-6242

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS05 GHS06

- · Signal word Danger
- · Hazard-determining components of labelling:

2-Methyl-3-furanthiol

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≥3-≤10%

#### · Hazard statements

H302 Harmful if swallowed.

H331 Toxic if inhaled.

H318 Causes serious eye damage.

#### · Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth. P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 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.

<ul> <li>Dangerous c</li> </ul>	omponents:
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ATE: LD50 oral: 100 mg/kg LC50/4 h inhalative: 0.21 mg/l

· 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
- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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• 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: Mouth respiratory protective device.
- · 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

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: 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).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about fire and explosion protection: Keep respiratory protective device available.
- · 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: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

GB



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## 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:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

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



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Physical state Fluid

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Colour: According to product specificationOdour: According to product specification

Odour threshold:
Not determined.
Melting point/freezing point:
Undetermined.

Boiling point or initial boiling point and boiling

range Undetermined. • Flammability Not applicable.

· Lower and upper explosion limit

· Lower: Not determined.
· Upper: Not determined.
· Flash point: >100 °C

Decomposition temperature: Not determined.pH Not determined.

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

Solubility

· water: Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value) Not determined.
 Vapour pressure: Not determined.

Density and/or relative density

Density at 20 °C: 0.96 g/cm³
Relative density Not determined.

· Refractive Index

· Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Liquid

Important information on protection of health

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 % · Solids content: 0.0 %

· Change in condition

Evaporation rate Not determined.

Information with regard to physical hazard

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

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Void	
Void	
	Void Void Void Void 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.

### SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

Harmful if swallowed.

Toxic if inhaled.

· LD/LC50 v	values rele	evant for classification:
ATE (Acu	te Toxicity	/ Estimates)
Oral	LD50	2,000 mg/kg (ATE)
Inhalative	LC50/4 h	4.2 mg/l (ATE)
CAS: 28588-74-1 2-Methyl-3-furanthiol		
Oral	LD50	100 mg/kg (ATE)
		100 mg/kg (mouse)
Inhalative	LC50/4 h	0.21 mg/l (ATE)
	4 (	0.21 mg/l (rat)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye damage.
- · 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.

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· 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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

### 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.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number	
ADR, IMDG, IATA	UN2810
14.2 UN proper shipping name	
ADR	2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-Methylfuranthiol)
IMDG, IATA	TOXIC LIQUID, ORGANIC, N.O.S. (2-Methyl-furanthiol)



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(Contd. of page 7) · 14.3 Transport hazard class(es) · ADR · Class 6.1 (T1) Toxic substances. · Label 6.1 · IMDG, IATA · Class 6.1 Toxic substances · Label 6.1 14.4 Packing group · ADR, IMDG, IATA Ш · 14.5 Environmental hazards: Not applicable. · 14.6 Special precautions for user Warning: Toxic substances. · Hazard identification number (Kemler code): 60 · EMS Number: F-A,S-A Stowage Category · Stowage Code SW2 Clear of living quarters. · 14.7 Maritime transport in bulk according to **IMO** instruments Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml · Transport category 2 Tunnel restriction code Ε · IMDG · Limited quantities (LQ) 5L Code: E1 Excepted quantities (EQ) Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-· UN "Model Regulation": METHYL-3-FURANTHIOL), 6.1, III



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### SECTION 15: Regulatory information

- · 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

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS05 GHS06

- · Signal word Danger
- · Hazard-determining components of labelling:

2-Methyl-3-furanthiol

Hazard statements

H302 Harmful if swallowed.

H331 Toxic if inhaled.

H318 Causes serious eye damage.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth. P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category H2 ACUTE TOXIC
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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.

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

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· REGULATION (EU) 2019/1148

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 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

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

· Department issuing SDS: Product safety department

· Contact:

Product Safety Department productsafety@adv-bio.com

Date of previous version: 10.01.2023

· 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

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 3: Acute toxicity - Category 3

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 1: Acute toxicity – Category 1

Eye Dam. 1: Serious eye damage/eye irritation – Category 1