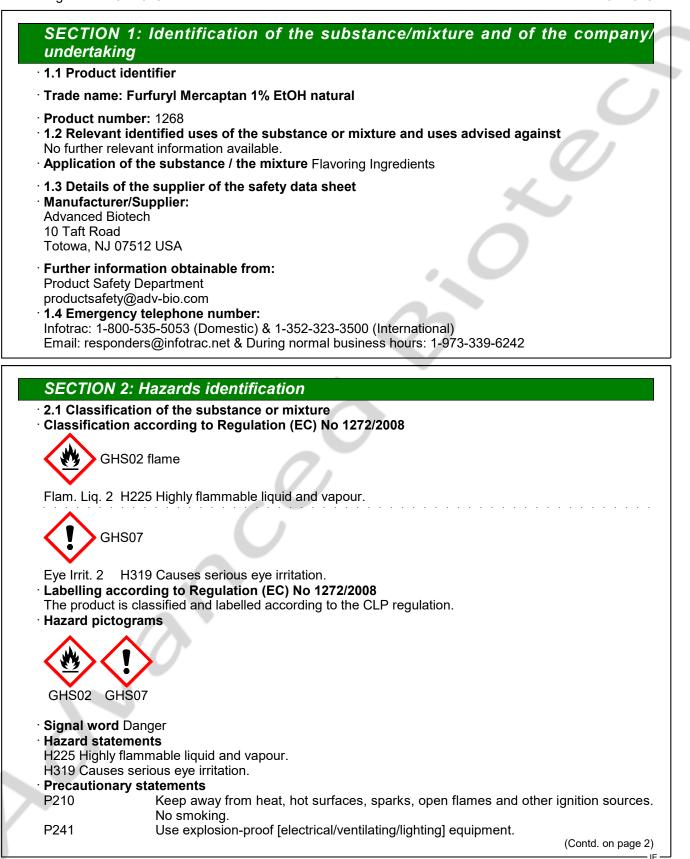


according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025



Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

(Contd. of page 1) P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P235 Store in a well-ventilated place. Keep cool. 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.

· Dangerous components:		
CAS: 64-17-5	Ethanol	50-100%
EINECS: 200-578-6	substance with a Community workplace exposure limit	
	Furfuryl mercaptan	≤2.5%
EINECS: 202-628-2	🚸 Flam. Liq. 3, H226	
 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.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.

• After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• 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 water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents: Water with full jet
- 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.

(Contd. on page 3)

^{. 16 .}



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

(Contd. of page 2) 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). 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 No special precautions are necessary if used correctly.

- Information about fire and explosion protection:
- Keep ignition sources away Do not smoke. Protect against electrostatic charges.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep container tightly sealed.

- Store in cool, dry conditions in well sealed receptacles.
- 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:

CAS: 64-17-5 Ethanol

OEL Short-term value: 1000 ppm

• 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.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- Respiratory protection: Not required.

(Contd. on page 4)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

(Contd. of page 3)

· Hand protection	
Protective gloves	
The glove material has to be impermeable and r	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 bas	ed on consideration of the penetration times, rates of
diffusion and the degradation	
· Material of gloves	
	nly depend on the material, but also on further marks of
	ufacturer. As the product is a preparation of several
	al can not be calculated in advance and has therefore to
be checked prior to the application.	
Penetration time of glove material	wined by the menufactures of the protective player and
	nined by the manufacturer of the protective gloves and
has to be observed.	
· Eye/face protection	
Tightly sealed goggles	
Highling boalou goggioo	
SECTION 9: Physical and chemical p	roperties
· 9.1 Information on basic physical and chemi	cal properties
· General Information	
· Physical state	Liquid
· Physical state · Colour:	Liquid According to product specification
· Colour:	According to product specification
· Colour: · Odour:	According to product specification According to product specification
 Colour: Odour: Odour threshold: 	According to product specification According to product specification Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: 	According to product specification According to product specification Not determined. -114.5 °C
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling 	According to product specification According to product specification Not determined. -114.5 °C ng
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability 	According to product specification According to product specification Not determined. -114.5 °C ng
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol %
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol %
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C Not determined.
 Colour: Odour threshold: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boilin range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: pH 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C
 Colour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: pH Viscosity: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: pH Viscosity: Kinematic viscosity 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined. Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: pH Viscosity: Kinematic viscosity Dynamic: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: pH Viscosity: Kinematic viscosity Dynamic: Solubility 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined. Not determined. Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: pH Viscosity: Kinematic viscosity Dynamic: Solubility water at 20 °C: 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined. Not determined. Not determined.
 Colour: Odour: Odour threshold: Melting point/freezing point: Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit Lower: Upper: Flash point: Auto-ignition temperature: Decomposition temperature: pH Viscosity: Kinematic viscosity Dynamic: Solubility 	According to product specification According to product specification Not determined. -114.5 °C ng 78 °C Highly flammable. 3.5 Vol % 15 Vol % 17 °C 425 °C Not determined. Not determined. Not determined. Not determined.



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

according to Regulation (EC) NO 1907.

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

	(Contd. of page 4
Vapour pressure at 20 °C:	59 hPa
Density and/or relative density	
Density at 20 °C:	0.81 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	ealth
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
Solvent content:	
Organic solvents:	99.0 %
VOC (EC)	99.00 %
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	Highly flammable liquid and vapour.
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.

(Contd. on page 6)

IE



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

(Contd. of page 5) • **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.
- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- · 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.

Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

(Contd. on page 7)



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

(Contd. of page 6)

Trade name: Furfuryl Mercaptan 1% EtOH natural

SECTION 14: Transport information · 14.1 UN number or ID number · ADR, IMDG, IATA UN1170 · 14.2 UN proper shipping name · ADR 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) ·IMDG ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) ·IATA ETHANOL SOLUTION · 14.3 Transport hazard class(es) · ADR · Class 3 (F1) Flammable liquids. · Label 3 · IMDG, IATA · Class 3 Flammable liquids. · Label 3 · 14.4 Packing group · ADR, IMDG, IATA Ш · 14.5 Environmental hazards: • Marine pollutant: No · 14.6 Special precautions for user Warning: Flammable liquids. Hazard identification number (Kemler code): 33 · EMS Number: F-E,S-D Stowage Category А · 14.7 Maritime transport in bulk according to **IMO** instruments Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 1L Code: E2 Excepted quantities (EQ) Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml Transport category 2 Tunnel restriction code D/E (Contd. on page 8)



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

	(Contd. of page 7)
 IMDG Limited quantities (LQ) Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

SECTION 15	5: Regulatory information
	ealth and environmental regulations/legislation specific for the substance or
mixture	
	ording to Regulation (EC) No 1272/2008
	classified and labelled according to the CLP regulation.
· Hazard pictog	rams
she 1	
<u>(</u>	
GHS02 GHS	07
GHSUZ GHS	
· Signal word Da	ander
· Hazard statem	
	mmable liquid and vapour.
	serious eye irritation.
Precautionary	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
	No smoking.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P303+P361+P3	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with
	water [or shower].
P305+P351+P3	338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
· Directive 2012	/18/EU
	rous substances - ANNEX I None of the ingredients is listed.
	Dry P5c FLAMMABLE LIQUIDS
	antity (tonnes) for the application of lower-tier requirements 5,000 t
	antity (tonnes) for the application of upper-tier requirements 50,000 t
· REGULATION	(EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
· DIRECTIVE 2	011/65/EU on the restriction of the use of certain hazardous substances in
electrical and	electronic equipment – Annex II
None of the ing	redients is listed.
	(Contd. on page 9)
	· · · · · · · · · · · · · · · · · · ·



according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.01.2025

Version number 1

Revision: 24.01.2025

Trade name: Furfuryl Mercaptan 1% EtOH natural

· REGULATION (EU) 2019/1148

(Contd. of page 8)

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.
- Department issuing SDS: Product safety department
- · Contact:

Product Safety Department productsafety@adv-bio.com

Date of previous version: 09.01.2025

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)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2