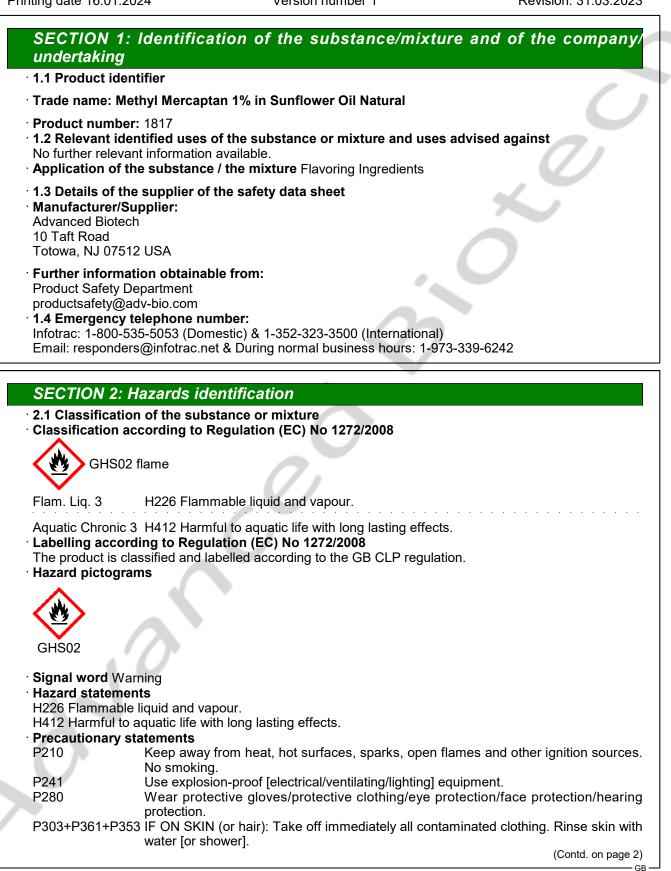


Printing date 16.01.2024

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

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P403+P235 P501 Store in a well-ventilated place. Keep cool.

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: 74-93-1	Methanethiol	≥0.25-<2.5%	
EINECS: 200-822-1	 ♦ Flam. Gas 1A, H220; Flam. Liq. 1, H224; ♦ Acute Tox. 3, H331; ♦ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Press. Gas (Comp.), H280 ATE: LC50/4 h inhalative: 675 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.
- 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.
- · 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.

- 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.

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

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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 product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. 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:** 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.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 74-93-1 Methanethiol

WEL Long-term value: 1.0 mg/m³, 0.5 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: Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.

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GE



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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

9.1 Information on basic physical and	chemical properties
General Information	
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 an	d boiling
ange	Undetermined.
lammability	Flammable.
ower and upper explosion limit	
_ower:	Not determined.
Jpper:	Not determined.
Flash point:	25.7 °C (CAS: 8001-21-6 Sunflower oil)
Decomposition temperature:	Not determined.
DH	Not determined.
/iscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (le	og value) Not determined.
Vapour pressure:	Not determined.



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Trade name: Methyl Mercaptan 1% in Sunflower Oil Natural (Contd. of page 4) Density and/or relative density · Density: Not determined. · 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 is not explosive. However, formation of explosive air/vapour mixtures are possible. · Solvent content: · Organic solvents: 1.0 % 1.00 % · VOC (EC) · Solids content: 0.0 % · Change in condition · Evaporation rate Not determined. · Information with regard to physical hazard classes Void · Explosives Void · Flammable gases · Aerosols Void · Oxidising gases Void · Gases under pressure Void Flammable liquids 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.

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GB



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(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.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative LC50/4 h 300 mg/l

- 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
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

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.

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· Uncleaned packaging:

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

14.1 UN number or ID number ADR, IMDG, IATA	UN3336
14.2 UN proper shipping name ADR	3336 MERCAPTANS, LIQUID, FLAMMABLE, N.(
IMDG, IATA	(METHYL MERCAPTAN) MERCAPTANS, LIQUID, FLAMMABLE, N.C (METHYL MERCAPTAN)
14.3 Transport hazard class(es)	
ADR	
Class Label	3 (F1) Flammable liquids. 3
IMDG, IATA	
Class Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	111
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemler code)	
EMS Number: Stowage Category	F-E,S-D B
Stowage Category Segregation Code	B SG50 Segregation from foodstuffs as in 7.3.4.2
	7.6.3.1.2 or 7.7.3.6.
	SG57 Stow "separated from" odour-absorbing carg
14.7 Maritime transport in bulk according to	
IMO instruments	Not applicable.
	(Contd. on pa



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	(Contd. of page 7)
· 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 	3
Tunnel restriction code	D/E
·IMDG	
· 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
UN "Model Regulation":	UN 3336 MERCAPTANS, LIQUID, FLAMMABLE,
	N.O.S. (METHYL MERCAPTAN), 3, III
· UN "Model Regulation":	UN 3336 MERCAPTANS, LIQUID, FLAMMAB N.O.S. (METHYL MERCAPTAN), 3, III

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



· Signal word Warning

· Hazard statements

H226 Flammable liquid and vapour.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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Trade name: Methyl Mercaptan 1% in Sunflower Oil Natural (Contd. of page 8) P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. 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 · Named dangerous substances - ANNEX I None of the ingredients is listed. Seveso category P5c FLAMMABLE LIQUIDS · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t • Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 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. · 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

H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour.

- H280 Contains gas under pressure; may explode if heated.
- H331 Toxic if inhaled.
- H400 Verv toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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

Product Safety Department

productsafety@adv-bio.com

Date of previous version: 07.02.2023

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

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Trade name: Methyl Mercaptan 1% in Sunflower Oil Natural

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 concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative ATE: Acute toxicity estimate values Flam. Gas 1A: Flammable gases – Category 1A Press. Gas (Comp.): Gases under pressure – Compressed gas Flam. Liq. 1: Flammable liquids – Category 1		(Contd. of page 9)
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Flam. Liq. 1: Flammable liquids – Category 1		
	Flam. Lig. 3: Flammable liquids – Category 3	
Acute Tox. 3: Acute toxicity – Category 3		
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1		egory 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1		
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3	Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard	- Category 3