

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

Printing date 15.08.2024

Version 102 (replaces version 101)

Revision: 15.08.2024

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

◊ **1.1 Product identifier**

◊ Trade name: **L-Menthol ind. EuAB (WHO-GMP zertifiziert)**

◊ Article number: S0100796

◊ CAS Number:

2216-51-5

◊ EC number:

218-690-9

◊ Registration number 01-2119458866-21-0022

◊ **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 Flavour/Fragrance

◊ **1.3 Details of the supplier of the safety data sheet**

◊ Manufacturer/Supplier:

Frey & Lau GmbH

Immenhacken 12, D-24558 Henstedt-Ulzburg

Tel: ++49-4193-9953 Fax: +49-4193-9955-80

◊ Further information obtainable from:

Sachkundige Person Frey + Lau

info@freylau.com

◊ **1.4 Emergency telephone number:** ++49-40-54.77.99.56 WAKO

**. SECTION 2: Hazards identification**

◊ **2.1 Classification of the substance or mixture**

◊ Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

◊ **2.2 Label elements**

◊ Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation.

◊ Hazard pictograms



GHS07

◊ Signal word Warning

◊ Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

◊ Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

◊ **2.3 Other hazards**

◊ Results of PBT and vPvB assessment

◊ PBT: Not applicable.

◊ vPvB: Not applicable.

**. SECTION 3: Composition/information on ingredients**

◊ **3.1 Substances**

◊ CAS No. Description

2216-51-5 L-Menthol

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- ◊ Identification number(s)
- ◊ EC number: 218-690-9

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**. SECTION 4: First aid measures**

- ◊ **4.1 Description of first aid measures**
- ◊ General information: Immediately remove any clothing soiled by the product.
- ◊ After inhalation: 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. If symptoms persist, consult a doctor.
- ◊ After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- ◊ **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:  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.  
Use fire extinguishing methods suitable to surrounding conditions.
- ◊ 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.

**. 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:**  
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** Thorough dedusting.
- ◊ 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.
- ◊ Information about storage in one common storage facility: Not required.
- ◊ Further information about storage conditions: Keep container tightly sealed.
- ◊ Storage class: 11
- ◊ **7.3 Specific end use(s)** No further relevant information available.

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**. SECTION 8: Exposure controls/personal protection**

◊ **8.1 Control parameters**

- ◊ *Ingredients with limit values that require monitoring at the workplace: Not required.*
- ◊ *Additional information: The lists valid during the making were used as 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 and skin.*
- ◊ *Respiratory protection: Not required.*
- ◊ *Hand protection*  
*Protective gloves*  
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*  
*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- ◊ *Material of gloves*  
*Multichemical-resistant gloves, Category III acc. to Regulation (EC) 2016/425*  
*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.*
- ◊ *Penetration time of glove material*  
*The exact break through time has to be found out 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* *Solid*
- ◊ *Colour:* *Not determined.*
- ◊ *Odour:* *Characteristic*
- ◊ *Odour threshold:* *Not determined.*
- ◊ *Melting point/freezing point:* *42,1-43,4 °C*
- ◊ *Flammability* *Product is not flammable.*
- ◊ *Lower and upper explosion limit*
- ◊ *Lower:* *0,8 Vol % (2216-51-5 L-Menthol)*
- ◊ *Upper:* *7 Vol % (2216-51-5 L-Menthol)*
- ◊ *Flash point:* *>100 °C*
- ◊ *Auto-ignition temperature:* *405 °C (2216-51-5 L-Menthol)*
- ◊ *Decomposition temperature:* *Not determined.*
- ◊ *pH* *Mixture is non-polar/aprotic.*
- ◊ *Solubility*
- ◊ *water at 20 °C:* *0,431 g/l*
- ◊ *Partition coefficient n-octanol/water (log value)* *Not miscible or difficult to mix.*
- ◊ *Density and/or relative density* *Not determined.*
- ◊ *Density at 20 °C:* *1 g/cm³*
- ◊ *Relative density* *Not determined.*
- ◊ *Vapour density* *Not applicable.*
- ◊ *Particle characteristics*
- ◊ *See section 3.*

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◇ Appearance:	
◇ Form:	Solid
◇ Important information on protection of health and environment, and on safety.	
◇ Ignition temperature:	Not determined.
◇ Explosive properties:	Not determined.
◇ VOC (EC)	0,00 %
◇ Evaporation rate	Not applicable.

◇ 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

- ◇ **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.

- ◊ *Skin corrosion/irritation Causes skin irritation.*
- ◊ *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.*

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- ◊ 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:  
**2216-51-5 L-Menthol**  
LC50/96 h 22 mg/l (fish)
- ◊ **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: Harmless to fish up to the tested concentration
- ◊ 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.

. SECTION 14: Transport information

- ◊ **14.1 UN number or ID number**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ **14.2 UN proper shipping name**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ **14.3 Transport hazard class(es)**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ Class
  - ◊ **14.4 Packing group**
  - ◊ ADR, IMDG, IATA
  - ◊ **14.5 Environmental hazards:**
  - ◊ Marine pollutant:
  - ◊ **14.6 Special precautions for user**
  - ◊ **14.7 Maritime transport in bulk according to IMO instruments**
  - ◊ UN "Model Regulation":
- Void

Void

Void

Void

Not applicable.

Not applicable.

Void

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**. SECTION 15: Regulatory information**

- ◊ **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
822.115, Jugendarbeitsschutzverordnung - ArbZ 5 und 822.115.2, Verordnung des WBF über gefährliche Arbeiten für Jugendliche sind nicht zutreffend.  
ArbZ 1 und 822.111.52, Verordnung des WBF über gefährliche und beschwerliche Arbeiten bei Schwangerschaft und Mutterschaft sind nicht zutreffend.
- ◊ Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation.
- ◊ Hazard pictograms  
  
GHS07
- ◊ Signal word Warning
- ◊ Hazard statements  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.
- ◊ Precautionary statements  
P264 Wash thoroughly after handling.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- ◊ Directive 2012/18/EU
- ◊ Named dangerous substances - ANNEX I Substance is not listed.
- ◊ DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II  
Substance is not listed.
- ◊ REGULATION (EU) 2019/1148
- ◊ Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))  
Substance is not listed.
- ◊ 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.
- ◊ National regulations:
- ◊ Waterhazard class: Klasse B (Self-assessment)
- ◊ **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: Regulatory Affairs
  - ◊ Contact: Dr. Maja Zippel
  - ◊ Date of previous version: 14.08.2024
  - ◊ Version number of previous version: 101
  - ◊ Abbreviations and acronyms:  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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ICAO: International Civil Aviation Organisation  
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)  
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  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
◊ \* Data compared to the previous version altered.