

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

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

◊ **1.1 Product identifier**

◊ Trade name: **Minzöl ind. 1-fach rekt.**

◊ Article number: P0124325

◊ Registration number

-

01-2119973492-30-0003

◊ **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

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

◊ **2.2 Label elements**

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

◊ Hazard pictograms



GHS07

◊ Signal word Warning

◊ Hazard-determining components of labelling:

Menthone

l-Isopulegol

(R)-p-mentha-1,8-diene

alpha-Pinene

beta-Pinene

beta-Caryophyllene

Eucalyptol

◊ Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

◊ Precautionary statements

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

P280 Wear protective gloves / eye protection / face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

(Contd. on page 2)

CH

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 1)

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

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**

CAS-No: 90063-97-1

EINECS-No: 290-058-5

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 2216-51-5 L-Menthol >25-50%

EINECS: 218-690-9 Skin Irrit. 2, H315; Eye Irrit. 2, H319

CAS: 89-80-5 Menthone >25-50%

EINECS: 201-941-1 Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 3, H412

ATE: LD50 oral: 500 mg/kg

CAS: 2623-23-6 l-Menthyl acetate (1alpha,2beta,5alpha) >2,5-5%

EINECS: 220-076-0 Aquatic Chronic 2, H411

CAS: 5989-27-5 (R)-p-mentha-1,8-diene >2,5-5%

EINECS: 227-813-5 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400 (M=1); Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 3, H412

substance with a Community workplace exposure limit

CAS: 89-79-2 l-Isopulegol 1-2,5%

EINECS: 201-940-6 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319

ATE: LD50 oral: 500 mg/kg

CAS: 80-56-8 alpha-Pinene ≥1-<2,5%

EINECS: 201-291-9 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410

(M=1); Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1B, H317

ATE: LD50 oral: 500 mg/kg

substance with a Community workplace exposure limit

CAS: 18172-67-3 beta-Pinene ≥1-<2,5%

EINECS: 242-060-2 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410

(M=1); Skin Irrit. 2, H315; Skin Sens. 1B, H317

CAS: 87-44-5 beta-Caryophyllene ≥0,1-<1%

EINECS: 201-746-1 Asp. Tox. 1, H304; Skin Sens. 1B, H317

CAS: 470-82-6 Eucalyptol ≥0,1-<1%

EINECS: 207-431-5 Flam. Liq. 3, H226; Skin Sens. 1B, H317

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.

After inhalation:

Supply fresh air and to be sure call for a 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. If symptoms persist, consult a doctor.

(Contd. on page 3)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 2)

- ◊ After swallowing:  
Call for a doctor immediately.  
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.
- ◊ For safety reasons unsuitable extinguishing agents: Water with full jet
- ◊ **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- ◊ **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 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.  
Treat with 2 % sodium hydroxide solution.  
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** Prevent formation of aerosols.
- ◊ 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: 10
- ◊ **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:

**5989-27-5 (R)-p-mentha-1,8-diene**

MAK Short-term value: 80 mg/m<sup>3</sup>, 14 ppm

Long-term value: 40 mg/m<sup>3</sup>, 7 ppm

S SSc;

(Contd. on page 4)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 3)

**80-56-8 alpha-Pinene**

MAK Short-term value: 224 mg/m<sup>3</sup>, 40 ppm

Long-term value: 112 mg/m<sup>3</sup>, 20 ppm

H S;

◊ 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

◊ 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

Safety glasses

Tightly sealed goggles

**. SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

◊ General Information

◊ Physical state

Liquid

◊ Colour:

Colourless

◊ Odour:

Characteristic

◊ Odour threshold:

Not determined.

◊ Melting point/freezing point:

Undetermined.

◊ Flammability

Not applicable.

◊ Lower and upper explosion limit

◊ Lower:

Not determined.

◊ Upper:

Not determined.

◊ Flash point:

76 °C

◊ Decomposition temperature:

Not determined.

◊ pH

Mixture is non-polar/aprotic.

◊ Solubility

◊ water:

Not miscible or difficult to mix.

◊ Partition coefficient n-octanol/water (log value)

Not determined.

◊ Density and/or relative density

◊ Density at 20 °C:

0,896 g/cm<sup>3</sup>

◊ Relative density

Not determined.

◊ Vapour density

Not determined.

**9.2 Other information**

◊ Appearance:

◊ Form:

Fluid

◊ Important information on protection of health and environment, and on safety.

◊ Ignition temperature:

Not determined.

◊ Explosive properties:

Not determined.

(Contd. on page 5)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 4)

◊ Solvent separation test:	
◊ VOC (EC)	43,72 %
◊ 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
◊ 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.

**. SECTION 11: Toxicological information**

- ◊ **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- ◊ **Acute toxicity** Harmful if swallowed.
- ◊ **LD/LC50 values relevant for classification:**  
Oral LD50 1.240 mg/kg (rat)
- ◊ **Primary irritant effect:**
- ◊ **Skin corrosion/irritation** Causes skin irritation.
- ◊ **Serious eye damage/irritation** Causes serious eye irritation.
- ◊ **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- ◊ **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.

CH

(Contd. on page 6)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 5)

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

**. SECTION 14: Transport information**

- ◊ **14.1 UN number or ID number**
  - ◊ ADR, IMDG, IATA
  - ◊ **14.2 UN proper shipping name**
  - ◊ ADR, IMDG, IATA
  - ◊ **14.3 Transport hazard class(es)**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ Class
  - ◊ **14.4 Packing group**
  - ◊ ADR, IMDG, IATA
  - ◊ **14.5 Environmental hazards:**
  - ◊ **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.
- Not applicable.
- Void

**. SECTION 15: Regulatory information**

- ◊ **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 822.115, Jugendarbeitsschutzverordnung - ArGV 5 und 822.115.2, Verordnung des WBF über gefährliche Arbeiten für Jugendliche sind zu beachten.
- ArGV 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 product is classified and labelled according to the CLP regulation.

(Contd. on page 7)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 6)

◊ Hazard pictograms



GHS07

◊ Signal word Warning

◊ Hazard-determining components of labelling:

Menthone  
l-Isopulegol  
(R)-p-mentha-1,8-diene  
alpha-Pinene  
beta-Pinene  
beta-Caryophyllene  
Eucalyptol

◊ Hazard statements

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

◊ Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves / eye protection / face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
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.

◊ 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.

◊ National regulations:

◊ Waterhazard class: Klasse A (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.

◊ Relevant phrases

H226 Flammable liquid and vapour.

(Contd. on page 8)

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

Printing date 27.01.2026

Version 65 (replaces version 64)

Revision: 27.01.2026

**Trade name: Minzöl ind. 1-fach rekt.**

(Contd. of page 7)

H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

◇ Department issuing SDS: Regulatory Affairs

◇ Contact: Dr. Maja Zippel

◇ Date of previous version: 27.01.2026

◇ Version number of previous version: 64

◇ 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)

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

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. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

◇ \* Data compared to the previous version altered.