

## Safety data sheet

gemäß 1907/2006/EG, Artikel 31

Printing date 14.11.2013

Version 32

Revision: 14.11.2013

### 1. Identification of the substance/mixture and of the company/undertaking

◊ **Product identifier**

- ◊ Trade name: **Terpineol II (MU) 01-06372-00**
- ◊ Article number: S0400648
- ◊ CAS Number:  
8000-41-7
- ◊ EC number:  
232-268-1
- ◊ Registration number -
- ◊ 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

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

### 2. Hazards identification

◊ **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.
- 
- ◊ Classification according to Directive 67/548/EEC or Directive 1999/45/EC  
Xi; Irritant  
R36/38: Irritating to eyes and skin.
- ◊ Information concerning particular hazards for human and environment: Not applicable.
- 

◊ **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  
P280 Wear protective gloves/protective clothing/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.  
P321 Specific treatment (see on this label).  
P362 Take off contaminated clothing and wash before reuse.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.
- ◊ **Other hazards**
- ◊ Results of PBT and vPvB assessment
- ◊ PBT: Not applicable.
- ◊ vPvB: Not applicable.

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### 3. Composition/information on ingredients

- ◊ **Chemical characterization: Substances**
- ◊ CAS No. Description  
8000-41-7 Terpineol
- ◊ Identification number(s)
- ◊ EC number: 232-268-1

### 4. First aid measures

- ◊ **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.
- ◊ **Information for doctor:**
- ◊ **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- ◊ **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### 5. Firefighting measures

- ◊ **Extinguishing media**
- ◊ **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- ◊ **For safety reasons unsuitable extinguishing agents:** Water
- ◊ **Special hazards arising from the substance or mixture** No further relevant information available.
- ◊ **Advice for firefighters**
- ◊ **Protective equipment:** No special measures required.

### 6. Accidental release measures

- ◊ **Personal precautions, protective equipment and emergency procedures** Not required.
- ◊ **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- ◊ **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 item 13.  
Ensure adequate ventilation.
- ◊ **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.

### 7. Handling and storage

- ◊ **Handling:**
- ◊ **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- ◊ **Information about fire - and explosion protection:** No special measures required.
- ◊ **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.

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◊ **Specific end use(s)** No further relevant information available.

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### 8. Exposure controls/personal protection

- ◊ **Additional information about design of technical facilities:** No further data; see item 7.
- ◊ **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.
- ◊ **Exposure controls**
- ◊ **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.
- ◊ **Protection of hands:**  
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**  
The multichemical-resistant glove Barrier 02-100 is recommended.  
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 protection:** Tightly sealed goggles

### 9. Physical and chemical properties

- ◊ **Information on basic physical and chemical properties**
- ◊ **General Information**
- ◊ **Appearance:**
- Form: Fluid
- Colour: Not determined.
- ◊ **Odour:** Characteristic
- ◊ **Odour threshold:** Not determined.
- ◊ **pH-value:** Not determined.
- ◊ **Melting point/Melting range:** Undetermined.
- ◊ **Flash point:** 92 °C
- ◊ **Flammability (solid, gaseous):** Not applicable.
- ◊ **Ignition temperature:**
- Decomposition temperature: Not determined.
- ◊ **Self-igniting:** Not determined.
- ◊ **Danger of explosion:** Not determined.
- ◊ **Explosion limits:**
- Lower: Not determined.
- Upper: Not determined.
- ◊ **Density at 20 °C:** 0,934 g/cm<sup>3</sup>
- ◊ **Relative density** Not determined.
- ◊ **Vapour density** Not determined.

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- ◊ **Evaporation rate** Not determined.
- ◊ **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- ◊ **Partition coefficient (n-octanol/water):** Not determined.
- ◊ **Other information** No further relevant information available.

### 10. Stability and reactivity

- ◊ **Reactivity**
- ◊ **Chemical stability**
- ◊ **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- ◊ **Possibility of hazardous reactions** No dangerous reactions known.
- ◊ **Conditions to avoid** No further relevant information available.
- ◊ **Incompatible materials:** No further relevant information available.
- ◊ **Hazardous decomposition products:** No dangerous decomposition products known.

### 11. Toxicological information

- ◊ **Information on toxicological effects**
- ◊ **Acute toxicity:**
- ◊ **Primary irritant effect:**
- ◊ **on the skin:** Irritant to skin and mucous membranes.
- ◊ **on the eye:** Irritating effect.
- ◊ **Sensitization:** No sensitizing effects known.
- ◊ **Additional toxicological information:**
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.*
- Corrosive**
- In addition to local irritant manifestations, there is a narcotic effect when inhaling high concentrations, with high danger of central respiratory arrest.*
- In addition to local irritant manifestations, there is a narcotic effect when inhaling high concentrations, with the danger of central respiratory arrest.*
- Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.*

### 12. Ecological information

- ◊ **Toxicity**
- ◊ **Aquatic toxicity:** No further relevant information available.
- ◊ **Persistence and degradability** No further relevant information available.
- ◊ **Behaviour in environmental systems:**
- ◊ **Bioaccumulative potential** No further relevant information available.
- ◊ **Mobility in soil** No further relevant information available.
- ◊ **Ecotoxicological effects:**
- ◊ **Remark:** Harmless to fish up to the tested concentration
- ◊ **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.*
- ◊ **Results of PBT and vPvB assessment**
- ◊ **PBT:** Not applicable.
- ◊ **vPvB:** Not applicable.

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◊ **Other adverse effects** No further relevant information available.

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### 13. Disposal considerations

- ◊ **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. Transport information

- ◊ **UN-Number**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ **UN proper shipping name**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ **Transport hazard class(es)**
  - ◊ ADR, ADN, IMDG, IATA
  - ◊ **Class**
  - ◊ **Packing group**
  - ◊ ADR, IMDG, IATA
  - ◊ **Environmental hazards:**
  - ◊ Marine pollutant:
  - ◊ **Special precautions for user**
  - ◊ **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - ◊ **UN "Model Regulation":**
- Void
- Void
- Void
- Void
- Void
- No
- Not applicable.
- Not applicable.
- 

### 15. Regulatory information

- ◊ **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- ◊ 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**
- P280 Wear protective gloves/protective clothing/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.
- P321 Specific treatment (see on this label).
- P362 Take off contaminated clothing and wash before reuse.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- ◊ **National regulations:**
- ◊ **Classification according to VbF: A III**
- ◊ **Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.**

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◇ **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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### 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 MSDS:** Regulatory Affairs

◇ **Contact:** Dr. Maja Zippel

◇ **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 Organization*

*ADR: Accord européen sur le transport 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 Harmonized 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)*

*GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)*

*VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)*

◇ \* **Data compared to the previous version altered.**