1.4 Emergency telephone number: For Chemical Emergencies: CHEMTREC: +1 703 741 5970


classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
Aquatic Chronic 2 H411 Toxic 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

GHS02 GHS07 GHS09

Signal word Danger

Hazard-determining components of labelling:
Hydrocarbons, C10, aromatics, <1% naphthalene
Propan-2-ol

Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.01.2020
Version number 1
Revision: 24.06.2019

Trade name: LUBA-print® 897/PM (ND)

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: None.
vPvB: None.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>EC number:</th>
<th>CAS:</th>
<th>EINECS:</th>
<th>50-75%</th>
<th>20-50%</th>
<th>≤1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>918-811-1</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>50-75%</td>
<td>20-50%</td>
<td>≤1%</td>
</tr>
<tr>
<td>Reg.nr.: 01-2119463583-34</td>
<td>01-2119457558-25</td>
<td>Propan-2-ol</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</td>
<td>naphthalene</td>
<td>Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302</td>
</tr>
</tbody>
</table>

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:
Take affected persons into fresh air and keep quiet.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
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: Do not induce vomiting; call for medical help 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:
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
Can form explosive gas-air mixtures.

5.3 Advice for firefighters
Protective equipment: Do not inhale explosion gases or combustion gases.

Additional information
Cool endangered receptacles with water spray.

(Contd. on page 3)
Trade name: LUBA-print® 897/PM (ND)

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Ensure adequate ventilation.
  - Keep away from ignition sources.
  - Wear protective clothing.
  - Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**
  - Do not allow to penetrate the ground/soil.
  - 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).
  - Ensure adequate ventilation.
  - Do not flush with water or aqueous cleansing agents.

- **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**
  - Store in cool, dry place in tightly closed receptacles.
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.

- **Information about fire - and explosion protection:**
  - Keep ignition sources away - Do not smoke.
  - Protect from heat.
  - 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: Store away from oxidising agents.
  - **Further information about storage conditions:** 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

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

  - **Ingredients with limit values that require monitoring at the workplace:**
    - **CAS: 67-63-0 Propan-2-ol**
    - **WEL:**
      - Short-term value: 1250 mg/m³, 500 ppm
      - Long-term value: 999 mg/m³, 400 ppm

(Contd. on page 4)
Recommended thickness of the material:

- PNECs

**GB**

Dermal worker, long-term exposure, systemic effects 888 mg/kg bw/day (human)

Inhalative worker, long-term exposure, systemic effects 151 mg/m³ (human)

32 mg/m³ (human)

**CAS: 67-63-0 Propan-2-ol**

- Oral consumer, long-term exposure, systemic effects 26 mg/kg bw/day (human)

Dermal worker, long-term exposure, systemic effects 888 mg/kg bw/day (human)

Inhalative worker, long-term exposure, systemic effects 319 mg/kg bw/day (human)

500 mg/m³ (human)

89 mg/m³ (human)

**PNECs**

**CAS: 67-63-0 Propan-2-ol**

- Fresh water 140.9 mg/l (not specified)

- Marine water 140.9 mg/l (not specified)

- Soil 28 mg/kg (not specified)

- Sediment (fresh water) 552 mg/kg (not specified)

- Sediment (marine water) 552 mg/kg (not specified)

**Additional information:** The lists valid during the making were used as basis.

8.2 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:**
  
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **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**

  Butyl rubber, BR

  Recommended thickness of the material: ≥ 0.5 mm

  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**

  For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).

  The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
  · **General Information**
  · **Appearance:**
    - **Form:** Fluid
    - **Colour:** Yellowish
  · **Odour:** Specific type
  · **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**
  · **Melting point/freezing point:** Undetermined.
  · **Initial boiling point and boiling range:** ≈ 82 °C (propan-2-ol)

· **Flash point:** ≈ 13 °C (DIN EN ISO 2719)

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** ≈ 425 °C (propan-2-ol)

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**
  - **Lower:** ≈ 0.6 Vol % (solvent naphtha (heavy))
  - **Upper:** ≈ 12 Vol % (propan-2-ol)

· **Oxidising properties:** None

· **Vapour pressure:** Not determined.

· **Density at 20 °C:** ≈ 0.86 g/cm³ (DIN EN ISO 2811-1)

· **Relative density:** Not determined.

· **Vapour density:** Not determined.

· **Evaporation rate:** Not determined.

· **Solubility in / Miscibility with water:** Insoluble.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**
  - **Dynamic at 23 °C:** ≈ 730 mPas (DIN EN ISO 3219)
  - **Kinematic at 40 °C:** ≈ 55 mm²/s (DIN EN ISO 51562)

· **Solvent separation test:** Not determined

· **9.2 Other information**
  · No further relevant information available.

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 Incompatible decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>6,318 mg/kg (rat) (OECD 401)</td>
<td>&gt;2,000 mg/kg (rabbit) (OECD 402)</td>
</tr>
<tr>
<td>CAS: 67-63-0 Propan-2-ol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>5,280 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>12,800 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4h 30 mg/l (rat)</td>
<td></td>
</tr>
<tr>
<td>CAS: 91-20-3 naphthalene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 490 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 5,000 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

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.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): 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: May cause drowsiness or dizziness.
- 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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</td>
<td></td>
</tr>
<tr>
<td>LL50</td>
<td>2-5 mg/l (fish) (Oncorhynchus aquabonita / 96 h)</td>
</tr>
<tr>
<td>EL50</td>
<td>1-3 mg/l (alga) (green alga / 72 h)</td>
</tr>
<tr>
<td></td>
<td>3-10 mg/l (daphnia) (Daphnia magna / 48 h)</td>
</tr>
<tr>
<td>NOELR</td>
<td>0.771 mg/l (daphnia) (Daphnia magna / 21 days)</td>
</tr>
<tr>
<td>CAS: 67-63-0 Propan-2-ol</td>
<td></td>
</tr>
<tr>
<td>EC50</td>
<td>&gt;1,000 mg/l (alga) (Scenedesmus subspicatus / 72 h)</td>
</tr>
</tbody>
</table>
14.2 UN proper shipping name

- **ADR/RID/ADN**: 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS, special provision 640D
- **IMDG**: FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), Hydrocarbons, C10, aromatics, <1% naphthalene), MARINE POLLUTANT
- **IATA**: FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))
### 14.3 Transport hazard class(es)

- **ADR/RID/ADN, IMDG**

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>3 Flammable liquids.</td>
</tr>
</tbody>
</table>

### 14.4 Packing group

- **ADR/RID/ADN, IMDG, IATA**

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>

### 14.5 Environmental hazards:

- **Product contains environmentally hazardous substances:**
  - Hydrocarbons, C10, aromatics, <1% naphthalene

- **Marine pollutant:**
  - Symbol (fish and tree)

- **Special marking (ADR/RID/ADN):**
  - Symbol (fish and tree)

### 14.6 Special precautions for user

- **Warning:** Flammable liquids.
- **Hazard identification number (Kemler code):**
  - 33
- **EMS Number:**
  - F-E-S-E
- **Stowage Category**
  - B

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- **Not applicable.**

### Transport/Additional information:

- **ADR/RID/ADN**
  - **Limited quantities (LQ):** 1L
  - **Transport category:** 2
  - **Tunnel restriction code**
    - D/E

- **UN "Model Regulation":**
  - UN 1993 FLAMMABLE LIQUID, N.O.S., SPECIAL PROVISION 640D (ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II, ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

- **Directive 2012/18/EU**
  - Named dangerous substances - ANNEX I None of the ingredients is listed.

- **Seveso category**
  - E2 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements**
  - 200 t

- **Qualifying quantity (tonnes) for the application of upper-tier requirements**
  - 500 t
Safety data sheet  
according to 1907/2006/EC, Article 31

Printing date 21.01.2020  
Version number 1  
Revision: 24.06.2019

Trade name: LUBA-print® 897/PM (ND)

(Contd. of page 8)

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
• National regulations:

• Information about limitation of use:
  Employment restrictions concerning juveniles must be observed.
  Employment restrictions concerning pregnant and lactating women must be observed.

• Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

• Other regulations, limitations and prohibitive regulations
  The restrictions in marketing and using of nonylphenol ethoxylates mentioned in REACH, Annex XVII and the regulation 689/2008/EC concerning the export and import of dangerous chemicals have to be observed.

• 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
  H225 Highly flammable liquid and vapour.
  H302 Harmful if swallowed.
  H304 May be fatal if swallowed and enters airways.
  H319 Causes serious eye irritation.
  H336 May cause drowsiness or dizziness.
  H351 Suspected of causing cancer.
  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.

• Department issuing SDS:
  Product Safety Department
  E-Mail: msds@munzing.com

• Abbreviations and acronyms:
  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 Harmonised System of Classification and Labelling of Chemicals
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  DNEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 2: Flammable liquids – Category 2
  Acute Tox. 4: Acute toxicity - oral – Category 4
  Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  Carc. 2: Carcinogenicity – Category 2
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  Asp. Tox. 1: Aspiration hazard – Category 1
  Aquatic Acute 1: Hazards to the aquatic environment - acute aquatic hazard – Category 1
  Aquatic Chronic 1: Hazards to the aquatic environment - long-term aquatic hazard – Category 1
  Aquatic Chronic 2: Hazards to the aquatic environment - long-term aquatic hazard – Category 2