1.4 Emergency telephone number: For Chemical Emergencies: CHEMTREC: +1 703 741 5970
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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

### Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Regnr.</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>200-661-7</td>
<td>01-2119457558-25</td>
<td>Propan-2-ol</td>
<td>75-100%</td>
</tr>
<tr>
<td>8002-74-2</td>
<td>232-315-6</td>
<td>01-2119488076-30</td>
<td>Paraffin waxes and Hydrocarbon waxes substance with a workplace exposure limit</td>
<td>10-20%</td>
</tr>
</tbody>
</table>

### Additional information:
For the wording of the listed hazard phrases refer to section 16.

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.

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
- Special hazards arising from the substance or mixture:
  - Can form explosive gas-air mixtures.
- Advice for firefighters
  - Protective equipment: Do not inhale explosion gases or combustion gases.
- Additional information
  - 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.
Dilute with plenty of water.
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.

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

CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes
WEL: Short-term value: 6 mg/m³
Long-term value: 2 mg/m³
Recommended thickness of the material:
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.

- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing

(Contd. on page 5)
**SECTION 9: Physical and chemical properties**

- **General Information**
  - **Form:** Fluid
  - **Colour:** White
  - **Odour:** Alcohol-like
  - **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 self-igniting.

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

- **Explosion limits:**
  - **Lower:** ≈ 2 Vol % (propan-2-ol)
  - **Upper:** ≈ 12 Vol % (propan-2-ol)

- **Oxidising properties:** None.

- **Vapour pressure at 20 °C:** ≈ 48 hPa (propan-2-ol)

- **Density at 20 °C:** ≈ 0.81 g/cm³ (DIN EN ISO 2811-1)

- **Relative density:** Not determined.

- **Vapour density:** Not determined.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with water:** Fully miscible.

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

- **Viscosity:**
  - **Dynamic at 23 °C:** ≈ 13 mPas (DIN EN ISO 3219)
  - **Kinematic:** Not determined.

- **Solvent separation test:** Not determined

**SECTION 10: Stability and reactivity**

- **Reactivity:** No further relevant information available.

- **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.
SECTION 11: Toxicological information

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

<table>
<thead>
<tr>
<th>CAS: 67-63-0 Propan-2-ol</th>
<th>Oral</th>
<th>LD50</th>
<th>5,280 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dermal</td>
<td>LD50</td>
<td>12,800 mg/kg (rabbit)</td>
</tr>
<tr>
<td></td>
<td>Inhalative</td>
<td>LC50/4h</td>
<td>30 mg/l (rat)</td>
</tr>
</tbody>
</table>

| CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes | Oral | LD50 | >5,000 mg/kg (rat) |

- 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)
  - 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

<table>
<thead>
<tr>
<th>Aquatic toxicity:</th>
<th>CAS: 67-63-0 Propan-2-ol</th>
<th>EC50</th>
<th>&gt;1,000 mg/l (algae) (Scenedesmus subspicatus / 72 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>13,299 mg/l (daphnia) (Daphnia Magna / 48 h)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC10</td>
<td>5,175 mg/l (bacteria) (Pseudomonas putida / 18 h)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>9,640 mg/l (fish) (Pimephales promelas / 96 h)</td>
<td></td>
</tr>
</tbody>
</table>

- 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.

- Ecotoxicity effects:
  - Behaviour in sewage processing plants:
    Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.

- 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.

(Contd. of page 7)
### Safety data sheet

**according to 1907/2006/EC, Article 31**

**Printing date:** 21.01.2020  **Version number:** 1  **Revision:** 11.03.2016

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#### Trade name: LUBA-print® 660

(Contd. of page 6)

- **12.5 Results of PBT and vPvB assessment**
  According to Annex XIV of Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.
  Self classification.
- **12.6 Other adverse effects** No further relevant information available.

---

#### 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.

- **European waste catalogue**
  07 07 04* other organic solvents, washing liquids and mother liquors

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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#### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR/RID/ADN, IMDG, IATA** UN1219

- **14.2 UN proper shipping name**
- **ADR/RID/ADN**
  - IMDG, IATA 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) mixture

- **14.3 Transport hazard class(es)**
- **ADR/RID/ADN, IMDG, IATA**

  ![Flammable icon]

  - **Class** 3 Flammable liquids.
  - **Label** 3

- **14.4 Packing group**
- **ADR/RID/ADN, IMDG, IATA** II

- **14.5 Environmental hazards:** Not applicable.

- **14.6 Special precautions for user**
  - **Warning:** Flammable liquids.
  - **Hazard identification number (Kemler code):** 33
  - **EMS Number:** F-E-S-D
  - **Stowage Category** 8

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - **Transport/Additional information:** Not applicable.

- **Transport/Additional information:**
  - **ADR/RID/ADN**
  - **Limited quantities (LQ)** 1L
  - **Transport category** 2

(Contd. on page 8)
Trade name: LUBA-print® 660

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- 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
- 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 I (German AwSV, Self-assessment): slightly 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.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

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
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)
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
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3