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

1.1 Product identifier
- Trade name: LUBA-print® 552/A

1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MÜNZING CHEMIE GmbH
  Münzingstrasse 2
  74232 Abstatt, Germany
  E-Mail: info@munzing.com
  Tel.: +49 7131 987-100

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified as hazardous, according to the CLP regulation.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Additional information:
  Contains Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
  Safety data sheet available on request.

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: wax emulsion

- Dangerous components:
  | CAS: 64-17-5 | Ethanol |
  | EINECS: 200-578-6 | Flam. Liq. 2, H225, Eye Irrit. 2, H319 |
  | Reg.nr.: 01-2119457610-43 | 3-5% |

- 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: Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)
7.3 Specific end use(s)

6.3 Methods and material for containment and cleaning up:

- Trade name: LUBA-print® 552/A

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

- Use fire extinguishing methods suitable to surrounding conditions.

5.1 Extinguishing media

- Suitable extinguishing agents:
  
  CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Use fire extinguishing methods suitable to surrounding conditions.

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.

3.1 Precautions for safe handling

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

3.2 Other Hazards

- Protect from heat.

3.3 Personal protection equipment

- No special precautions are necessary if used correctly.

3.4 Protective equipment:

- Wear protective clothing.

3.5 First aid measures

- No first aid measures or special equipment necessary.

3.6 Extinguishing media

- Use fire extinguishing methods suitable to surrounding conditions.

3.7 Special protective equipment

- No further relevant information available.

3.8 Other information

- Store in a cool location.

- Protect from heat.

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

3.9 Other information

- No fire extinguishing methods suitable to surrounding conditions.

- No special precautions are necessary if used correctly.

- Protect from heat.

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

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- 5.2 Special hazards arising from the substance or mixture
- 5.3 Advice for firefighters

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

- 6.2 Environmental precautions:

- 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).

- 6.4 Reference to other sections

- No dangerous substances are released.
- 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

- No special precautions are necessary if used correctly.

- Information about fire - and explosion protection:

- The product is not flammable.
- Protect from heat.

- 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: Not required.

- Further information about storage conditions:

- Protect from frost.
- 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:

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL: Long-term value: 1920 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>

- DNELs

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>87 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>950 mg/m³ (human)</td>
</tr>
<tr>
<td>consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>950 mg/m³ (human)</td>
</tr>
</tbody>
</table>

- PNECs

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>fresh water</td>
</tr>
<tr>
<td>marine water</td>
</tr>
<tr>
<td>aqua - intermittent release</td>
</tr>
<tr>
<td>soil</td>
</tr>
<tr>
<td>sediment (fresh water)</td>
</tr>
<tr>
<td>sewage treatment plant</td>
</tr>
<tr>
<td>secondary poisoning</td>
</tr>
</tbody>
</table>

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

8.2 Exposure controls

- Personal protective equipment:

  General protective and hygienic measures:
  The usual precautionary measures are to be adhered to when handling chemicals.

  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: Only use chemical-protective gloves with CE-labelling of category III.

- Material of gloves

  Nitrile rubber, NBR
  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.

(Contd. on page 4)
### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Fluid
    - **Colour:** White
    - **Odour:** Weak, characteristic
    - **Odour threshold:** Not determined.
  - **pH-value at 20 °C:** ≈ 5 (DIN ISO 976)
  - **Change in condition**
    - **Melting point/freezing point:** Undetermined.
    - **Initial boiling point and boiling range:** ≈ 90 °C
  - **Flash point:** Not applicable.
  - **Flammability (solid, gas):** Not applicable.
  - **Ignition temperature:** Not determined.
  - **Decomposition temperature:** Not determined.
  - **Auto-ignition temperature:** Product is not selfigniting.
  - **Explosive properties:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - **Lower:** Not determined.
    - **Upper:** Not determined.
  - **Oxidising properties:** None.
  - **Vapour pressure:** Not determined.
  - **Density at 20 °C:** ≈ 1.01 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: ≈ 250 mPas (DIN EN ISO 3219)
    - Kinematic: Not determined.
  - **Solvent content:**
    - **Water:** ≈ 55 %
  - **9.2 Other information**
    - No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
Safety data sheet
according to 1907/2006/EC, Article 31

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(Contd. of page 4)

10.2 Chemical stability
10.3 Possibility of hazardous reactions
10.4 Conditions to avoid
10.5 Incompatible materials
10.6 Hazardous decomposition products

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· No dangerous reactions known.
· No further relevant information available.
· No further relevant information available.
· 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.

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td>Inhalative</td>
</tr>
</tbody>
</table>

· Primary irritant effect: Skin corrosion/irritation Based on available data, the classification criteria are not met.
· Serious eye damage/irritation Based on available data, the classification criteria are not met.
· 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 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.

SECTION 12: Ecological information

12.1 Toxicity

· Aquatic toxicity:

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
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<tbody>
<tr>
<td>EC50</td>
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<tr>
<td></td>
</tr>
<tr>
<td>LC50</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

· Persistence and degradability No further relevant information available.
· Bioaccumulative potential No further relevant information available.
· Mobility in soil No further relevant information available.
· Ecotoxicological 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.

(Contd. on page 6)
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.01.2020  Version number 1  Revision: 28.05.2019

Trade name: LUBA-print® 552/A

- 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.
  - 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 01* aqueous 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.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR/RID/ADN, ADN, IMDG, IATA Void
- 14.2 UN proper shipping name
  - ADR/RID/ADN, ADN, IMDG, IATA Void
- 14.3 Transport hazard class(es)
  - ADR/RID/ADN, ADN, IMDG, IATA Void
  - Class Void
- 14.4 Packing group
  - ADR/RID/ADN, ADN, IMDG, IATA Void
- 14.5 Environmental hazards:
  - Marine pollutant: No
- 14.6 Special precautions for user
  - Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.
- Transport/Additional information:
  - Not a dangerous good to the above specifications.
- UN "Model Regulation": Void

(Contd. of page 7)
SECTION 15: Regulatory information

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- National regulations:
  - Water hazard class: Water hazard class 1 (German AwSV, Self-assessment): slightly hazardous for water.
- 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.

- 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