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

1.1 Product identifier
- Trade name: LUBA-print® 551/26

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-isothiazol-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

| CAS: 64-17-5 | Ethanol       | Flam. Liq. 2, H225, Eye Irrit. 2, H319 |
| REG.: 01-2119457610-43 |             |                                    |

*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.
Trade name: LUBA-print® 551/26

(Contd. of page 1)

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.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: Do not inhale explosion gases or combustion gases.
- Additional information
  Product contains water and is non-combustible.
  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 Wear protective clothing.
- 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.

(Contd. on page 3)
### SECTION 8: Exposure controls/personal protection

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

**8.1 Control parameters**

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS:</strong> 64-17-5 Ethanol</td>
</tr>
<tr>
<td>WEL</td>
</tr>
</tbody>
</table>

**DNEIs**

| Oral | consumer, long-term exposure, systemic effects | 87 mg/kg bw/day (human) |
| Dermal | worker, long-term exposure, systemic effects | 343 mg/kg bw/day (human) |
|         | consumer, long-term exposure, systemic effects | 206 mg/kg bw/day (human) |
| Inhalative | worker, long-term exposure, systemic effects | 950 mg/m³ (human) |
|         | worker, short-term exposure, local effects | 1,900 mg/m³ (human) |
|         | consumer, long-term exposure, systemic effects | 114 mg/m³ (human) |
|         | consumer, short-term exposure, local effects | 950 mg/m³ (human) |

**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:** Use suitable respiratory protective device only when aerosol or mist is formed.

**Protection of hands:**

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

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**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.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information
  - Appearance:
    - Form: Viscous
    - Colour: White
  - Odour:
    - Odour threshold: Not determined.
  - pH-value at 20 °C: ≈ 4 (DIN ISO 976)
  - Change in condition
    - Melting point/freezing point: Undetermined.
    - Initial boiling point and boiling range: ≈ 90 °C (water)
  - 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:
  - ≈ 1.0 g/cm³ (DIN EN ISO 2811-1)
- Relative density
- 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: ≈ 137 mPas (DIN EN ISO 3219)
  - Kinematic: Not determined.

- Solvent content:
  - Water: ≈ 55 %

9.2 Other information

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 toxicological effects

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

- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>CAS: 64-17-5 Ethanol</th>
<th>Oral LD50</th>
<th>3,450 mg/kg (mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7,060 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6,300 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermal LD50</th>
<th>&gt;2,000 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalative LC50/4h</td>
<td>20,000 mg/l (rat)</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>
<th>EC50 6,500 mg/l (bacteria) (Pseudomonas putida / 16 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;9,268 mg/l (daphnia) (Daphnia magna / 48 h)</td>
</tr>
<tr>
<td></td>
<td>&gt;100 mg/l (daphnia) (Daphnia magna / 24 h)</td>
</tr>
<tr>
<td></td>
<td>8,140 mg/l (fish) (Leuciscus idus / 48 h)</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.

- 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.
**Safety data sheet**  
*according to 1907/2006/EC, Article 31*

**Trade name:** LUBA-print® 551/26

(Contd. of page 5)

· **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

· **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. on page 7)
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.
- National regulations:
  - Waterhazard class: Water hazard class 1 (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.

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