1.1 Product identifier

- **Trade name:** LUBA-print® 501/S-100
- **UFI:** FPH0-C0P3-K00X-52VP

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Application of the substance / the mixture** Wax additive for paints and printing inks

1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:** MÜNZING CHEMIE GmbH
- **Münstingstrasse 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**

- **Flam. Liq. 3** H226 Flammable liquid and vapour.
- **STOT SE 3** H335-H336 May cause respiratory irritation. 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:** Warning

- **Hazard-determining components of labelling:**
  Solvent naphtha (petroleum), light arom.

- **Hazard statements:**
  - **H226** Flammable liquid and vapour.
  - **H335-H336** May cause respiratory irritation. May cause drowsiness or dizziness.
  - **H411** Toxic to aquatic life with long lasting effects.

- **Precautionary statements:**
  - **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - **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].
  - **P405** Store locked up.
  - **P501** Dispose of contents/container in accordance with local/regiona/national/international regulations.

(Contd. on page 2)
Dispose of fire debris and contaminated fire fighting water in accordance with official 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.
  
<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Reg.nr.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-95-6</td>
<td>265-199-0</td>
<td>01-2119455851-35</td>
<td>Solvent naphtha (petroleum), light arom.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Flam. Liq. 3; H226; Asp. Tox. 1; H304; Aquatic Chronic 2; H411; STOT SE 3, H335-H356</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.
    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.
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:
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- DNELs

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral worker, long-term exposure, systemic effects</td>
<td>11 mg/kg bw/day (human)</td>
<td></td>
</tr>
<tr>
<td>Oral consumer, long-term exposure, systemic effects</td>
<td>25 mg/kg bw/day (human)</td>
<td></td>
</tr>
<tr>
<td>Dermal worker, long-term exposure, systemic effects</td>
<td>11 mg/kg bw/day (human)</td>
<td></td>
</tr>
<tr>
<td>Dermal consumer, long-term exposure, systemic effects</td>
<td>100 mg/m³ (human)</td>
<td></td>
</tr>
<tr>
<td>Inhalative worker, long-term exposure, systemic effects</td>
<td>32 mg/m³ (human)</td>
<td></td>
</tr>
<tr>
<td>Inhalative consumer, long-term exposure, systemic effects</td>
<td></td>
<td></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:
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.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form: Fluid
Colour: Colourless
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: ≈ 162 °C (solvent naphtha (light))

Flash point: ≈ 47 °C (DIN EN ISO 2719)

Flammability (solid, gas): Not applicable.

Ignition temperature: ≈ 450 °C (solvent naphtha (light))

Decomposition temperature: Not determined.
### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **10.3 Possibility of hazardous reactions**
  - Flammable vapour-air mixtures may develop if stored in large receptacles and above room temperature.
- **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:**
  - **CAS:** 64742-95-6 Solvent naphtha (petroleum), light arom.
  - Oral LD50 >3,592 mg/kg (rat)
  - Dermal LD50 >3,160 mg/kg (rab)
- **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 (carcinogenity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity Based on available data, the classification criteria are not met.
SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

**CAS: 64742-95-6 Solvent naphtha (petroleum), light arom.**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL50</td>
<td>9.2 mg/l (fish) (Oncorhynchus mykiss / 96 h)</td>
</tr>
<tr>
<td>EL50</td>
<td>2.6-2.9 mg/l (alga) (green alga / 72 h)</td>
</tr>
<tr>
<td></td>
<td>3.2 mg/l (daphnia) (Ceriodaphnia Dubia / 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.

Ecotoxical effects:

Remark: Toxic for fish

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 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Toxic for aquatic organisms

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 07 04*</td>
<td>other organic solvents, washing liquids and mother liquors</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td></td>
</tr>
<tr>
<td><strong>ADR/RID/ADN</strong></td>
<td>1993 FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light arom.), ENVIRONMENTALLY HAZARDOUS</td>
</tr>
<tr>
<td><strong>IMDG</strong></td>
<td>FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light arom.), MARINE POLLUTANT</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light arom.)</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td><strong>ADR/RID/ADN, IMDG</strong></td>
<td></td>
</tr>
<tr>
<td>![Flammable liquid symbol] ![Tree symbol]</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>3 Flammable liquids.</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td></td>
</tr>
<tr>
<td>![Flammable liquid symbol]</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>3 Flammable liquids.</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>3</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td></td>
</tr>
<tr>
<td><strong>ADR/RID/ADN, IMDG, IATA</strong></td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazards:</td>
<td></td>
</tr>
<tr>
<td>Product contains environmentally hazardous substances:</td>
<td></td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>Solvent naphtha (petroleum), light arom.</td>
</tr>
<tr>
<td><strong>Special marking (ADR/RID/ADN):</strong></td>
<td>Symbol (fish and tree)</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td></td>
</tr>
<tr>
<td>Warning: Flammable liquids.</td>
<td></td>
</tr>
<tr>
<td><strong>Hazard identification number (Kemler code):</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>EMS Number:</strong></td>
<td>F-E,S,E</td>
</tr>
<tr>
<td><strong>Stowage Category</strong></td>
<td>A</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</td>
<td></td>
</tr>
<tr>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td></td>
</tr>
<tr>
<td><strong>ADR/RID/ADN</strong></td>
<td></td>
</tr>
<tr>
<td>Limited quantities (LQ)</td>
<td>5L</td>
</tr>
<tr>
<td>Transport category</td>
<td>3</td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>D/E</td>
</tr>
</tbody>
</table>
Safety data sheet
describing 1907/2006/EC, Article 31

Printing date 21.01.2020
Version number 1
Revision: 11.10.2016

Trade name: LUBA-print® 501/S-100

(Contd. of page 7)

- UN "Model Regulation":
  UN 1993 FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.), 3, III, ENVIRONMENTALLY HAZARDOUS

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
    - 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
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - National regulations:
    - Employment restrictions concerning pregnant and lactating women must be observed.
    - Employment restrictions concerning juveniles must be observed.
  - Water hazard class: Water hazard class 2 (Self-assessment): 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
  - H226 Flammable liquid and vapour.
  - H304 May be fatal if swallowed and enters airways.
  - H335 May cause respiratory irritation.
  - H365 May cause drowsiness or dizziness.
  - 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
  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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Flam. Liq. 3: Flammable liquids – Category 3
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  Asp. Tox. 1: Aspiration hazard – Category 1
  Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2