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

1.1 Product identifier
- Trade name: LUBA-print® 582/E
- UFI: SY30-Y072-600C-26MN

1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.
- 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
  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
  Flam. Liq. 3 H226 Flammable liquid and vapour.
  STOT SE 3 H336 May cause drowsiness or dizziness.

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

- Signal word Warning

- Hazard-determining components of labelling:
  - n-butyl acetate

- Hazard statements
  - H226 Flammable liquid and vapour.
  - H336 May cause drowsiness or dizziness.

- 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/regional/national/international regulations.

(Contd. on page 2)
SE 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>CAS</th>
<th>EINECS</th>
<th>EN</th>
<th>PBT</th>
<th>vPvB</th>
<th>Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-86-4</td>
<td>204-658-1</td>
<td>Flam. Liqu. 3; H226; STOT SE 3, H336</td>
<td>None</td>
<td>None</td>
<td>n-butyl acetate</td>
</tr>
<tr>
<td>8002-74-2</td>
<td>232-315-6</td>
<td>Paraffin waxes and Hydrocarbon waxes</td>
<td>None</td>
<td>None</td>
<td>substance with a workplace exposure limit 3-(&lt;)5%</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.

(Contd. on page 3)
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.
  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).
  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: 123-86-4 n-butyl acetate**
    - WEL: Short-term value: 966 mg/m³, 200 ppm
    - Long-term value: 724 mg/m³, 150 ppm

    **CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes**
    - WEL: Short-term value: 6 mg/m³
    - Long-term value: 2 mg/m³

  - **DNELs**

    **CAS: 123-86-4 n-butyl acetate**
    - Inhalative worker, long-term exposure, systemic effects: 480 mg/m³ (human)
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date: 21.01.2020
Version number: 1
Revision: 03.07.2015

Trade name: LUBA-print® 582/E

| worker, short-term exposure, local effects | 960 mg/m³ (human) |
| consumer, long-term exposure, systemic effects | 102.34 mg/m³ (human) |
| consumer, short-term exposure, local effects | 859.7 mg/m³ (human) |

PNECs
CAS: 123-86-4 n-butyl acetate

| fresh water | 0.18 mg/l (not specified) |
| marine water | 0.018 mg/l (not specified) |
| soil | 0.0903 mg/kg (not specified) |
| sediment (fresh water) | 0.981 mg/kg (not specified) |
| sediment (marine water) | 0.0981 mg/kg (not specified) |
| sewage treatment plant | 35.6 mg/l (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.

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

(Contd. on page 5)
**Safety data sheet**

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

**Trade name:** LUBA-print® 582/E

---

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Specific type</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>≈ 126 °C (n-butylacetate).</td>
</tr>
<tr>
<td>Flash point</td>
<td>≈ 25 °C (DIN EN ISO 2719).</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>≈ 390 °C (n-butylacetate).</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosion properties</td>
<td>Product is not explosive. However, formation of explosive air/vapour mixtures is possible.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>≈ 1.2 Vol % (n-butylacetate)</td>
</tr>
<tr>
<td>Upper</td>
<td>≈ 7.5 Vol % (n-butylacetate)</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>None.</td>
</tr>
<tr>
<td>Evaporation rate at 20 °C</td>
<td>10.7 kPa (n-butylacetate).</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>≈ 0.88 g/cm³ (DIN EN ISO 2811-1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic at 23 °C</td>
<td>≈ 18 mPas (DIN EN ISO 3219)</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solvent separation test</td>
<td>Not determined.</td>
</tr>
<tr>
<td>9.2 Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

---

**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.

---

(Contd. of page 6)
**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: 123-86-4 n-butyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td>Inhalative</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: 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
      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>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 123-86-4 n-butyl acetate</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>LC50</td>
</tr>
<tr>
<td>IC50</td>
</tr>
<tr>
<td>NOEC</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.
  - 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.
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.

SECTION 14: Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA UN1123

14.2 UN proper shipping name

ADR/RID/ADN

IMDG, IATA

1123 BUTYL ACETATES mixture

BUTYL ACETATES mixture

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA

3 Flammable liquids.

14.4 Packing group

ADR/RID/ADN, IMDG, IATA

III

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Flammable liquids.

Hazard identification number (Kemler code):

30

EMS Number:

F-E,S-D

Stowage Category

A

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) 5L

Transport category 3

Tunnel restriction code D/E

(Contd. of page 6)
Trade name: LUBA-print® 582/E

(Contd. of page 7)

· UN "Model Regulation": UN 1123 BUTYL ACETATES MIXTURE, 3, III

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 1 (German AnSV, 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
  H226 Flammable liquid and vapour.
  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. 3: Flammable liquids – Category 3
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3