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

1.1 Product identifier

- Trade name: LUBA-print® T-152/D30-T
- UFI: V7P0-6084-U005-75S3

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
Münzingerstrasse 2
74232 Abstatt, Germany
E-Mail: info@munzing.com
Tel.: +49 7131 987-100

Further information obtainable from:
Product Safety Department
E-mail (MSDS): mds@munzing.com

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.
Aquatic Chronic 3  H412 Harmful 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

Signal word Warning

Hazard-determining components of labelling:
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H412 Harmful 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/regional/national/international regulations.

(Contd. on page 2)
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing agents:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.</td>
</tr>
<tr>
<td>For safety reasons unsuitable extinguishing agents:</td>
</tr>
<tr>
<td>Special hazards arising from the substance or mixture:</td>
</tr>
<tr>
<td>Advice for firefighters:</td>
</tr>
<tr>
<td>Protective equipment:</td>
</tr>
<tr>
<td>Additional information:</td>
</tr>
</tbody>
</table>

GB
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.
  Inform respective authorities in case of seepage into water course or sewage system.
  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: 8002-74-2 Paraffin waxes and Hydrocarbon waxes**
  WEL: Short-term value: 6 mg/m³
  Long-term value: 2 mg/m³

  **DNELs**
  Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics
  Oral consumer, long-term exposure, systemic effects: 300 mg/kg bw/day (human)
  Worker, long-term exposure, systemic effects: 300 mg/kg bw/day (human)
  Dermal consumer, long-term exposure, systemic effects: 300 mg/kg bw/day (human)
  (Contd. on page 4)
**Trade name:** LUBA-print® T-152/D30-T

**Inhalative worker, long-term exposure, systemic effects:** 1,500 mg/m³ (human)

**Inhalative consumer, long-term exposure, systemic effects:** 900 mg/m³ (human)

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

**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:** Not determined.

**Change in condition**
- **Melting point/freezing point:** Undetermined.
- **Initial boiling point and boiling range:** 110 - 190 °C (01-2119471843-32)

**Flash point:** ≈ 27 °C (DIN EN ISO 2719)

**Flammability (solid, gas):** Not applicable.

**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
Ignition temperature: > 200 °C (01-2119471843-32)
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  Lower: ≈ 0.6 Vol % (01-2119471843-32)
  Upper: ≈ 7.0 Vol % (01-2119471843-32)

Oxidising properties: None.
Vapour pressure at 20 °C: 5 kPa (01-2119471843-32)
Density at 20 °C: ≈ 0.79 g/cm³ (DIN EN ISO 2811-1)
Relative density: Not determined.
Vapour density: Not determined.
Evaporation rate: Not determined.
Solubility in / Miscibility with water: Insoluble.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
  Dynamic at 23 °C: ≈ 48 mPas (DIN EN ISO 3219)
  Kinematic at 40 °C: > 20.5 mm²/s (DIN EN ISO 51562)
Solvent separation test: Not determined.
9.2 Other information: No further relevant information available.

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:
   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:
   Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclcics, <2% aromatics
<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>5,000 mg/kg (rat) (OECD 401)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;5,000 mg/kg (rabbit) (OECD 402)</td>
</tr>
</tbody>
</table>
   CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes
<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;5,000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

(Contd. on page 6)
SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

| Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics |
|------------------------|------------------|
| LL50                  | >10.0-<30 mg/l (fish) (Oncorhynchus mykiss / 96 h) |
| EL50                  | >1,000 mg/l (algae) (green algae / 72 h) |
|                       | >22.0-<46 mg/l (daphnia) (daphnia magna / 48 h) |
| NOELR                 | <1 mg/l (algae) (green algae / 72 h) |

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:

Remark: Harmful to 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 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.

Harmful to 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

07 07 04* other organic solvents, washing liquids and mother liquors
SECTION 14: Transport information

14.1 UN-Number
ADR/RID/ADN, IMDG, IATA UN1993

14.2 UN proper shipping name
ADR/RID/ADN 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics)
IMDG, IATA FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics)

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

- Class: 3 Flammable liquids.
- Label: III

14.4 Packing group
ADR/RID/ADN, IMDG, IATA

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Hazard identification number (Kemler code): Warning: Flammable liquids. 30
EMS Number: F-E,S-E
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

UN "Model Regulation":
UN 1993 FLAMMABLE LIQUID, N.O.S. (HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS), 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

(Contd. of page 7)
Trade name: LUBA-print® T-152/D30-T

(Contd. of page 7)

- 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.
  - 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
  H226 Flammable liquid and vapour.
  H304 May be fatal if swallowed and enters airways.
  H336 May cause drowsiness or dizziness.
  H412 Harmful 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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3