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

1.1 Product identifier
- Trade name: LUBA-print® SXF 9510 BG
- UFI: YTP0-R02W-Y00M-UJCI

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

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
Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

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

GHS07

Signal word Warning

Hazard-determining components of labelling:
Ethylene glycol monobutyl ether

Hazard statements
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see on this label).
SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
  - Description:
    Wax dispersion
    Mixture of substances listed below with nonhazardous additions.
  - Dangerous components:
    | CAS: 111-76-2 | Ethylene glycol monobutyl ether | 20-50% |
    | EINECS: 203-905-0 | Acute Tox. 4; H302; Acute Tox. 4; H312; Acute Tox. 4; H332; Skin Irrit. 2; H315; Eye Irrit. 2; H319 |
    | Reg.nr.: 01-2119475108-36 |
    | CAS: 8002-74-2 | Paraffin waxes and Hydrocarbon waxes |
    | EINECS: 232-315-6 | substance with a workplace exposure limit |
    | Reg.nr.: 01-2119488076-30 |
  - 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.
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - 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.
  - Formation of toxic gases is possible during heating or in case of fire.
    Hydrogen fluoride (HF)
    Fluorophosgene (COF₂)

(Contd. on page 3)
See Section 13 for disposal information.

See Section 8 for information on personal protection equipment.

Additional information about design of technical facilities:

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

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 111-76-2 Ethylene glycol monobutyl ether

WEL:
- Short-term value: 246 mg/m³, 30 ppm
- Long-term value: 123 mg/m³, 25 ppm

Sk, BMGV

(Contd. on page 4)
Recommended thickness of the material: > 0.5 mm

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

*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:** Specific type
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/freezing point:** Undetermined.
    - **Initial boiling point and boiling range:** ≈ 170 °C (2-butoxyethanol)
  - **Flash point:** ≈ 67 °C (DIN EN ISO 2719)
  - **Flammability (solid, gas):** Not applicable.
  - **Ignition temperature:** ≈ 240 °C (2-butoxyethanol)
  - **Decomposition temperature:** Not determined.
  - **Auto-ignition temperature:** Product is not selfigniting.
  - **Explosion properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
  - **Explosion limits:**
    - Lower: ≈ 1.1 Vol % (2-butoxyethanol)
    - Upper: ≈ 10.6 Vol % (2-butoxyethanol)
  - **Oxidising properties:** None.
  - **Vapour pressure at 20 °C:** ≈ 1.0 hPa (2-butoxyethanol)
  - **Density at 20 °C:** ≈ 0.92 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: ≈ 54 mPas (DIN EN ISO 3219)
    - Kinematic: Not determined.
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 and stored 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: Danger of toxic fluorine based pyrolysis products.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects:
  - Acute toxicity:
    - Harmful if inhaled.

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 111-76-2 Ethylene glycol monobutyl ether</td>
</tr>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Inhalative LC50/4h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation
    - Causes skin irritation.
  - Serious eye damage/irritation
    - Causes serious eye irritation.

- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Based on available data, the classification criteria are not met.
- 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

<table>
<thead>
<tr>
<th>Aquatic toxicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 111-76-2 Ethylene glycol monobutyl ether</td>
</tr>
<tr>
<td>EC50 (static)</td>
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<td></td>
</tr>
</tbody>
</table>
Trade name: LUBA-print® SXF 9510 BG

| LC50 (static) | 1.474 mg/l (fish) (Oncorhynchus mykiss / 96 h (OECD 203)) |
| NOEC       | 100 mg/l (daphnia) (Daphnia magna / 21 d (OECD 211)) |
|            | >100 mg/l (fish) (Brachydanio rerio (OECD 204)) |

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. 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

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, IMDG, IATA: Void

14.5 Environmental hazards:
Marine pollutant: No
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.01.2020
Version number 1
Revision: 29.09.2017

Trade name: LUBA-print® SXF 9510 BG

(Contd. of page 7)

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

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.
· 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
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

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
Acute Tox. 4: Acute toxicity - oral – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2