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

1.1 Product identifier

- Trade name: LUBA-print® 154/S

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
  Münzingsstrasse 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

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

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
- Dangerous components: Void

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.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed 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.
    - Use fire extinguishing methods suitable to surrounding conditions.
- **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:**
  - 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.

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.
8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid contact with the eyes and skin.

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.

Eye protection: Safety glasses
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: White
Odour: Weak, characteristic
Odour threshold: Not determined.

pH-value at 20 °C: ≈ 8 (DIN ISO 976)

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: ≈ 100 °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.
Primary irritant effect: Based on available data, the classification criteria are not met.

\[ 9.2 \text{ Other information} \]

\[ \text{Relative density} \]

\[ \text{Solubility in / Miscibility with water:} \]

\[ \text{Partition coefficient: n-octanol/water:} \]

\[ \text{Viscosity:} \]

\[ \text{Solvent content:} \]

\[ \text{Water:} \]

\[ \approx 40\% \]

\[ \text{STOT-repeated exposure} \]

\[ \text{Solubility in / Miscibility with} \]

\[ 0.96 \text{ g/cm}^3 \text{ (DIN EN ISO 2811-1)} \]

\[ \text{12.2 Persistence and degradability} \]

\[ \text{10.6 Hazardous decomposition products:} \]

\[ \text{No further relevant information available.} \]

\[ \text{10.1 Reactivity:} \]

\[ \text{No further relevant information available.} \]

\[ \text{10.2 Chemical stability} \]

\[ \text{No decomposition if used according to specifications.} \]

\[ \text{10.3 Possibility of hazardous reactions:} \]

\[ \text{No dangerous reactions known.} \]

\[ \text{10.4 Conditions to avoid:} \]

\[ \text{No further relevant information available.} \]

\[ \text{10.5 Incompatible materials:} \]

\[ \text{No further relevant information available.} \]

\[ \text{10.6 Hazardous decomposition products:} \]

\[ \text{No dangerous decomposition products known.} \]

\[ \text{SECTION 12: Ecological information} \]

\[ \text{12.1 Toxicity:} \]

\[ \text{No further relevant information available.} \]

\[ \text{12.2 Persistence and degradability:} \]

\[ \text{No further relevant information available.} \]

\[ \text{12.3 Bioaccumulative potential:} \]

\[ \text{No further relevant information available.} \]
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.01.2020
Revision: 29.06.2016
Version number 1

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· 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.

<table>
<thead>
<tr>
<th>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 07 01* aqueous 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

· 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
· 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.

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- 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.
  - 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.

- 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)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative