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

- **1.1 Product identifier**
  - Trade name: LUBA-print® 280/F
  - UFI: 0RE1-V0CW-R00R-FQES

- **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

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

- **1.4 Emergency telephone number:** For Chemical Emergencies: CHEMTREC: +1 703 741 5970

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**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008
    - Skin Sens. 1 H317 May cause an allergic skin reaction.

- **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:**
  - 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyli)triethanol

- **Hazard statements**
  - H317 May cause an allergic skin reaction.

- **Precautionary statements**
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P272 Contaminated work clothing should not be allowed out of the workplace.
  - P280 Wear protective gloves.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  - P321 Specific treatment (see on this label).
  - P501 Dispose of contents/container in accordance with local/regional/national/international 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: wax emulsion

| CAS: 8002-74-2 | Paraffin waxes and Hydrocarbon waxes substance with a workplace exposure limit | 20-50% |
| CAS: 124-68-5 | 2-amino-2-methylpropanol | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 | 1-3% |
| CAS: 4719-04-4 | 2,2′,2″-(hexahydro-1,3,3-triazine-1,3,5-triy1)triethanol | Acute Tox. 2, H330; STOT RE 1, H372; Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317 | 0.1-1% |

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: 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. If symptoms persist, 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.
- 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.
  - 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
- 5.4 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.
- Wear protective equipment. Keep unprotected persons away.
- 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).
SECTION 7: Handling and storage

- **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.
- **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:**
    - Store in cool, dry conditions in well sealed receptacles.
- **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.
- **Control parameters**
  - **Additional information:** The lists valid during the making were used as basis.
- **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.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    - **Material of gloves**
      - Nitrile rubber, NBR
      - Recommended thickness of the material: \( \geq 0.2 \) 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.
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- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- 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: Beige
      Odour: Specific type
      Odour threshold: Not determined.
  - pH-value at 20 °C:
    ≈ 10 (DIN ISO 976)
  - Change in condition
    Melting point/freezing point: Undetermined.
    Initial boiling point and boiling range: ≈ 100 °C (water)
  - Flash point:
    > 100 °C (DIN EN ISO 2719)
  - 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.
  - Vapour pressure:
    Not determined.
  - Density at 20 °C:
    ≈ 0.95 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:
    ≈ 20 mPas (DIN EN ISO 3219)
    Kinematic:
    Not determined.
  - Solvent content:
    Water:
    ≈ 60 %
  - 9.2 Other information
    No further relevant information available.

(Contd. on page 5)
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.

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: 8002-74-2 Paraffin waxes and Hydrocarbon waxes**
  - Oral, LD50 > 5,000 mg/kg (rat)

  **CAS: 124-68-5 2-amino-2-methylpropanol**
  - Oral, LD50: 2,900 mg/kg (rat)
  - Dermal, LD50: > 2,000 mg/kg (rabbit)

- 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: May cause an allergic skin reaction.
  - 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: 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
  - Aquatic toxicity:
    
    **CAS: 124-68-5 2-amino-2-methylpropanol**
    - EC50 (static): 342.9 mg/l (bacteria) (activated sludge / 3 h)
    - LC50 (static): 193 mg/l (daphnia) (Daphnia magna / 48 h)
    - 190 mg/l (fish) (Lepomis macrochirus / 96 h)

    **CAS: 4719-04-4 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol**
    - EC50: 5 mg/l (alga) (green alga / 72 h)
    - 9 mg/l (daphnia) (Daphnie / 48 h)
    - 12 mg/l (fish) (Zebrabübbling / 96 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.
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- Ecotoxic 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 01* aqueous 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

- 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.

(Contd. on page 7)
Abbreviations and acronyms:

- 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:
    - Waterhazard 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.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled.
  - H372 Causes damage to organs through prolonged or repeated exposure.
  - 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)
  - 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
  - Acute Tox. 2: Acute toxicity - inhalation – Category 2
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
  - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3