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

- 1.1 Product identifier
  - Product name: LOBADUR B3 Härter Hardener WS 2K Duo glänzend glossy/ 2K Supra A.T. glänzend glossy
  - Article number: 11480-B3-000

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - No further relevant information available.

- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: LOBA GmbH & Co. KG
    Leonberger Straße 56 - 62
    D-71254 Ditzingen  Tel.: +49 (0)7156/357-0
  - Informing department: Productmanagement
    e-mail: service@loba.de
  - 1.4 Emergency telephone number:
    Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008

  GHS05 corrosion
  Eye Dam. 1 H318 Causes serious eye damage.

  GHS07
  Skin Irrit. 2 H315 Causes skin irritation.
  Skin Sens. 1 H317 May cause an allergic skin reaction.
  STOT SE 3 H335 May cause respiratory irritation.

  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

  GHS05 GHS07

  Signal word Danger
  Hazard-determining components of labelling:
  Aliphatic polyisocyanate
  poly(oxy-1,2-ethanediyl), α-tridecyl-ω-hydroxy-, phosphate
  Isophorondiisocyanat-Oligomere
cyclohexyldimethylamine
hexamethylene diisocyanate
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

**Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**
EUH204 Contains isocyanates. May produce an allergic reaction.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**
PBT: Not applicable.
vPvB: Not applicable.

**SECTON 3: Composition/information on ingredients**

**3.2 Chemical characterisation: Mixtures**

**Description:** Mixture of the substances listed below with harmless additions.

**Dangerous components:**

<table>
<thead>
<tr>
<th>CAS: 28182-81-2</th>
<th>Aliphatic polyisocyanate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-060-2</td>
<td>1 Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>Reg.nr.: 01-219485796-17</td>
<td></td>
</tr>
<tr>
<td>25-50%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 53880-05-0</th>
<th>Isophorondiisocyanat-Oligomere</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-125-5</td>
<td>1 Skin Sens. 1, H317</td>
</tr>
<tr>
<td>Reg.nr.: 01-219488734-24</td>
<td></td>
</tr>
<tr>
<td>10-25%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 9046-01-9</th>
<th>poly(oxy-1,2-ethanediyl), α-tridecyl-ω-hydroxy-, phosphate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Eye Dam. 1, H318;</td>
<td>Aquatic Chronic 2, H411;</td>
</tr>
<tr>
<td>1 Skin Irrit. 2, H315</td>
<td></td>
</tr>
<tr>
<td>5-&lt;10%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 98-94-2</th>
<th>cyclohexyldimethamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 202-715-5</td>
<td>1 Skin Corr. 1B, H314; Aquatic Chronic 2, H411;</td>
</tr>
<tr>
<td>Reg.nr.: 01-219533030-60</td>
<td>1 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332</td>
</tr>
<tr>
<td>≥1-&lt;2.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 822-06-0</th>
<th>hexamethylene diisocyanate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 212-485-8</td>
<td>1 Acute Tox. 3, H331; Resp. Sens. 1, H334; 1 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>Index number: 615-011-00-1</td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-219457571-37-0000/5/6</td>
<td></td>
</tr>
<tr>
<td>≥0.1-&lt;0.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 4098-71-9</th>
<th>3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 223-861-6</td>
<td>1 Acute Tox. 3, H331; Resp. Sens. 1, H334;</td>
</tr>
<tr>
<td>Index number: 615-008-00-5</td>
<td>Aquatic Chronic 2, H411; 1 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>Reg.nr.: 01-219490408-31</td>
<td></td>
</tr>
<tr>
<td>≥0.25-&lt;0.5%</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

· Additional information For the wording of the listed hazard phrases refer to section 16.

· 4.1 Description of first aid measures
  · General information
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  · After inhalation
  Supply fresh air and call for doctor for safety reasons.
  In case of unconsciousness bring patient into stable side position for transport.
  · After skin contact Instantly wash with water and soap and rinse thoroughly.
  · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
  · After swallowing In case of persistent symptoms 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, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· 5.2 Special hazards arising from the substance or mixture No further relevant information available.

· 5.3 Advice for firefighters
  · Protective equipment: Put on breathing apparatus.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Not required.

· 6.2 Environmental precautions:
  Do not allow product to reach sewage system or water bodies.
  Inform respective authorities in case product reaches water or sewage system.

· 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose of contaminated material as waste according to item 13.
  Ensure adequate ventilation.

· 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 information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling
  Keep containers tightly sealed.
  Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities

- **Storage**
  - Requirements to be met by storerooms and containers: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Keep container tightly sealed.
  - Storage class: 10

7.3 Specific end use(s)
No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Short-term value</th>
<th>Long-term value</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>822-06-0 hexamethylene diisocyanate</td>
<td>0.07 mg/m³</td>
<td>0.02 mg/m³</td>
<td>Sen; as -NCO</td>
</tr>
<tr>
<td>4098-71-9 3-isocyanatomethy1-3,5,5-trimethylcyclohexyl isocyanate</td>
<td>0.07 mg/m³</td>
<td>0.02 mg/m³</td>
<td>Sen; as -NCO</td>
</tr>
</tbody>
</table>

Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Component</th>
<th>Biological limit value</th>
<th>Medium</th>
<th>Sampling time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>822-06-0 hexamethylene diisocyanate</td>
<td>1 µmol creatinine/mol</td>
<td>urine</td>
<td>At the end of the period of exposure</td>
<td>isocyanate-derived diamine</td>
</tr>
<tr>
<td>4098-71-9 3-isocyanatomethy1-3,5,5-trimethylcyclohexyl isocyanate</td>
<td>1 µmol creatinine/mol</td>
<td>urine</td>
<td>At the end of the period of exposure</td>
<td>isocyanate-derived diamine</td>
</tr>
</tbody>
</table>

Additional information:
The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

**Personal protective equipment**

General protective and hygienic measures
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

Breathing equipment:
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Protection of hands:
Protective gloves.
To avoid skin problems reduce the wearing of gloves to the required minimum.
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
  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.
  Recommended thickness of the material: \( \geq 0.4 \text{ mm} \)

- **Penetration time of glove material**
  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).
  Value for the permeation: Level \( \leq 6 \)

- **Eye protection:** Tightly sealed safety glasses.

### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.1 Information on basic physical and chemical properties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Smell</td>
<td>Recognisable</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>65 °C</td>
</tr>
<tr>
<td><strong>Inflammability (solid, gaseous):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Self-inflammability:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Steam pressure:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density at 20 °C</strong></td>
<td>1.05 g/cm³</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Not miscible or difficult to mix</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>kinematic at 20 °C:</td>
<td>18 s (DIN 53211/4)</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
Reacts with alcohols, amines, aqueous acids and alkalis
Reacts with water
Danger of bursting
· 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.
· Primary irritant effect:
· Skin corrosion/irritation
Causes skin irritation.
· Serious eye damage/irritation
Causes serious eye damage.
· 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
May cause respiratory irritation.
· 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: No further relevant information available.
· 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
· Additional ecological information:
· General notes:
Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.
Harmful to aquatic organisms
49.0.2

12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be landfilled or incinerated under adherence to the regulations pertaining to the disposal of especially hazardous waste.

European waste catalogue

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 00 00</td>
<td>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS</td>
</tr>
<tr>
<td>08 01 00</td>
<td>wastes from MFSU and removal of paint and varnish</td>
</tr>
<tr>
<td>08 01 11*</td>
<td>waste paint and varnish containing organic solvents or other hazardous substances</td>
</tr>
</tbody>
</table>

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
- ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
  - Class Void

14.4 Packing group
- ADR, 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.

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.
**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Alteration in the context will be marked with a cross (*). 

- **Relevant phrases**
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H331 Toxic if inhaled.
  - H332 Harmful if inhaled.
  - H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - H335 May cause respiratory irritation.
  - H411 Toxic to aquatic life with long lasting effects.

- **Department issuing data specification sheet:** Productmanagement.

- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - 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
  - 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
  - Acute Tox. 3: Acute toxicity – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Resp. Sens. 1: Respiratory sensitisation – Category 1
  - Skin Sens. 1: Skin sensitisation – Category 1
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
  - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.