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

- **Product identifier**
- **Trade name:** Slate-Lite 2K-Protection Furniture (Hardener)
- **Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
- **Application of the substance / the mixture** Coating compound/ Surface coating/ paint
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - R&D GmbH, Boschstraße 12, D-53359 Rheinbach
  - **Tel. +49 (0)2226 - 89 577 57**
  - **info@slate-lite.com**
- **Further information obtainable from:** Abteilung Produktsicherheit
- **Emergency telephone number:**
  - Giftnotrufzentrale (GiZ Nord) +49 0551 - 19240 (24h)

2 Hazards identification

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

![GHS07]

| Skin Sens. | H317 May cause an allergic skin reaction. |
| Aquatic Chronic 3 | H412 Harmful to aquatic life with long lasting effects. |

- **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:**
  - Aliph. Polyisocyanat hexamethylene-di-isocyanate
- **Hazard statements**
  - H317 May cause an allergic skin reaction.
  - H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

(Contd. on page 2)
Trade name: Slate-Lite 2K-Protection Furniture (Hardener)

3 Composition/information on ingredients

- Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>197393-84-3</td>
<td>Aliph. Polyisocyanate Skin Sens. 1, H317; Aquatic Chronic 3, H412</td>
<td>50-100%</td>
</tr>
<tr>
<td>822-06-0</td>
<td>hexamethylene-di-isocyanate Acute Tox. 3, H331; Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
<td>≥0.1-&lt;0.5%</td>
</tr>
</tbody>
</table>

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

4 First aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation:
  Supply fresh air and to be sure call for a doctor.
  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.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  Most important symptoms and effects, both acute and delayed No further relevant information available.
  Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- Extinguishing media
  Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  Special hazards arising from the substance or mixture No further relevant information available.
  Advice for firefighters
  Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  · Information about fire - and explosion protection: No special measures required.
  · Conditions for safe storage, including any incompatibilities
  · Storage:
    · Requirements to be met by storerooms and receptacles: No special requirements.
    · Information about storage in one common storage facility: Not required.
    · Further information about storage conditions: None.
  · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>822-06-0 hexamethylene-di-isocyanate</td>
</tr>
<tr>
<td>WEL</td>
</tr>
</tbody>
</table>

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

· Exposure controls
  · Personal protective equipment:
    · General protective and hygienic measures:
      Immediately remove all soiled and contaminated clothing
      Wash hands before breaks and at the end of work.
    · 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. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves
  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.
Trade name: Slate-Lite 2K-Protection Furniture (Hardener)

- 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: Goggles recommended during refilling

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Colour: Colourless
      - Odour: Characteristic
      - Odour threshold: Not determined.
    - pH-value: Not determined.
  - Change in condition
    - Melting point/freezing point: Undetermined.
    - Initial boiling point and boiling range: 175 °C
    - Flash point: 65 °C
    - Flammability (solid, gas): Not applicable.
    - Ignition temperature: 165 °C
    - Decomposition temperature: Not determined.
    - Auto-ignition temperature: Product is not selfigniting.
    - Explosive properties: Product does not present an explosion hazard.
    - Explosion limits:
      - Lower: 0.8 Vol %
      - Upper: 5.6 Vol %
    - Vapour pressure at 20 °C: 0.7 hPa
    - Density at 20 °C: 1.08 g/cm³
    - Relative density: Not determined.
    - Vapour density: Not determined.
    - Evaporation rate: Not determined.
  - Solubility in / Miscibility with water: Not miscible or difficult to mix.
  - Partition coefficient: n-octanol/water: Not determined.
  - Viscosity:
    - Dynamic: Not determined.
    - Kinematic at 20 °C: 25 s (DIN 53211/4)
  - Solvent content:
    - Organic solvents: 24.9 %
    - VOC (EC) 24.90 %
  - Solids content: 74.8 %
  - Other information No further relevant information available.

10 Stability and reactivity

- Reactivity No further relevant information available.
Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity: Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:
822-06-0 hexamethylene-di-isocyanate

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 738 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 593 mg/kg (rat)</td>
</tr>
</tbody>
</table>

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.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behaviour in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Ecotoxicological effects:
Remark: Harmful to fish
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
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
**14 Transport information**

- **UN-Number**
  - ADR, ADN, IMDG, IATA: not regulated

- **UN proper shipping name**
  - ADR, ADN, IMDG, IATA: not regulated

- **Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA: not regulated

- **Packing group**
  - ADR, IMDG, IATA: not regulated

- **Environmental hazards:**
  - Marine pollutant: No

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.

- **UN "Model Regulation":**
  - not regulated

**15 Regulatory information**

- **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
  - Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**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**
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H331 Toxic if inhaled.
  - H34 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - H335 May cause respiratory irritation.
  - H412 Harmful to aquatic life with long lasting effects.

- **Department issuing SDS:** Abteilung Umweltzschutz
- **Contact:** Hr. Suter

- **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
Trade name: Slate-Lite 2K-Protection Furniture (Hardener)

CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3