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

### 1.1 Product identifier

**Trade name**

**einzA Härter LawiPur, 2-K-PU Mattsiegel**

**UFI:**
**P1WC-D1NF-V00R-U1K4**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses of the substance or mixture**
decorative paints/finishes

**Uses advised against**
No data available.

### 1.3 Details of the supplier of the safety data sheet

**Address**
einzA Farben GmbH & Co KG
Junkersstraße 13
30179 Hannover

Telephone no. +49 (0)511 67490-0
Fax no. +49 (0)511 67490-20
e-mail info@einzA.com

**Information provided by / telephone**
In emergencies, the country-specific emergency number can be found in the corresponding country-specific safety data sheets.

**Advice on Safety Data Sheet**
sdb_info@umco.de

### 1.4 Emergency telephone number

+49 (0)40 0511 - 674 90-0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**
Acute Tox. 4; H332
Eye Irrit. 2; H319
Resp. Sens. 1; H334
Skin Sens. 1; H317
STOT SE 3; H335

**Classification information**
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Hazard pictograms**


GHS07


GHS08

**Signal word**
Danger

**Hazardous component(s) to be indicated on label:**
Aliphatic polyisocyanate
tosyl isocyanate

**Hazard statement(s)**

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |

**Hazard statements (EU)**

| | |
|---|---|
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

**Precautionary statement(s)**

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/eye protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to a facility in accordance with local and national regulations. |

**UFI:**
P1WC-D1NF-V00R-U1K4

### 2.3 Other hazards
The product does not contain any components > 0.1% that meet the criteria for PBT and vPvB according to Regulation (EC) No. 1907/2006, Annex XIII, or that have been included in the list compiled in accordance with Article 59(1). This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances
Not applicable. The product is not a substance.

### 3.2 Mixtures
**Hazardous ingredients**

| No | Substance name | | Additional information | |
|---|---|---|---|---|
| | CAS / EC / Index / REACH no | Classification (EC) 1272/2008 (CLP) | Concentration | % |
| 1 | **Aliphatic polyisocyanate** | | | |
| | 28182-81-2<br>931-274-8<br>-<br>01-2119485796-17 | Acute Tox. 4; H332<br>Skin Sens. 1; H317<br>STOT SE 3; H335 | >= 70,00 - < 90,00 | wt% |
| 2 | **Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, phosphate** | | | |
| | 9046-01-9<br>-<br>-<br>- | Aquatic Chronic 3; H412<br>Eye Dam. 1; H318<br>Skin Irrit. 2; H315 | < 2,50 | wt% |
| 3 | **tosyl isocyanate** | | | |
| | 4083-64-1<br>223-810-8<br>615-012-00-7<br>01-2119980050-47 | EUH014<br>Eye Irrit. 2; H319<br>Resp. Sens. 1; H334<br>Skin Irrit. 2; H315<br>STOT SE 3; H335 | < 2,50 | wt% |

| | | | | |
|---|---|---|---|---|
| 4 | **cyclohexyldimethylamine** | | | |
| | 98-94-2<br>202-715-5<br>-<br>01-2119533030-60 | Acute Tox. 3; H301<br>Acute Tox. 3; H311<br>Acute Tox. 3; H331<br>Aquatic Chronic 3; H412<br>Flam. Liq. 3; H226<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318 | < 0,50 | wt% |
| 5 | **hexamethylene-diisocyanate** | | | |
| | 822-06-0<br>212-485-8<br>615-011-00-1<br>01-2119457571-37 | Acute Tox. 4; H302<br>Eye Irrit. 2; H319<br>Resp. Sens. 1; H334<br>Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>STOT SE 3; H335<br>Acute Tox. 1; H330 | < 0,10 | wt% |

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

| No | Note | Specific concentration limits | M-factor (acute) | M-factor (chronic) |
|---|---|---|---|---|
| 5 | - | Resp. Sens. 1; H334: C >= 0,5%<br>Skin Sens. 1; H317: C >= 0,5% | - | - |

| Acute toxicity estimate (ATE) values | | | |
|---|---|---|---|
| **No** | **oral** | **dermal** | **inhalative** |
| 4 | 289 mg/kg bodyweight | 380 mg/kg bodyweight | |

### 3.3 Other information

According to the information provided in the supply chain, the monomeric diisocyanate content is < 0.1 %.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information**
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

**After inhalation**
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

**After skin contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

**After eye contact**
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

**After ingestion**
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Alcohol resistant foam, CO2, powders, water spray

**Unsuitable extinguishing media**

water jet.

### 5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Toxic pyrolysis products; Exposure to decomposition products may cause a health hazard.

### 5.3 Advice for firefighters
Do not allow run-off from fire fighting to enter drains or water courses. Appropriate breathing apparatus may be required.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
**For non-emergency personnel**
Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.

**For emergency responders**
No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions
If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Do not allow to enter drains/watercourses/soil.

### 6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

### 6.4 Reference to other sections
No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling
**Advice on safe handling**
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet [sanding]/[flatting] should be used wherever possible. Avoid inhalation of dust from sanding. For personal protection see section 8.

**General protective and hygiene measures**
Avoid skin and eye contact. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

**Advice on protection against fire and explosion**
No special measures necessary.

### 7.2 Conditions for safe storage, including any incompatibilities
**Technical measures and storage conditions**
Comply with legal health and safety regulations; Storage in accordance with the Ordinance on Industrial Safety and Health. Prevent unauthorised access. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep from freezing.

**Requirements for storage rooms and vessels**
Always keep in containers of same material as the original one. Never use pressure to empty: container is not a pressure vessel. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. Observe label precautions.

**Incompatible products**
Store away from oxidising agents, from strongly alkaline and strongly acid materials.

**Stoarge Class according TRGS 510**
12 Non-combustible liquids that cannot be assigned to any of the above storage classes.

### 7.3 Specific end use(s)
No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational exposure limit values**

| No | Substance name | CAS no. | EC no. |
|---|---|---|---|
| 1 | **Aliphatic polyisocyanate** | **28182-81-2** | **931-274-8** |
| | **2024/869/EC** | | |
| | Diisocyanates (measured as NCO (10)) | | |
| | WEL long-term (8-hr TWA reference period) | 0,006 mg/m³ 12 ppm | |
| | Skin resorption / sensibilisation<br>Comments | Skin (8) Dermal and respiratory sensitisation (9)<br>A limit value of 10 µg NCO/m3 in relation to a reference period of 8 hours and a short-term exposure limit value of 20 µg NCO/m3 shall apply until 31 December 2028. | |
| | **TRGS 900** | | |
| | Diisocyanate (gemessen als „NCO“) | | |
| | WEL long-term (8-hr TWA reference period) | 0,006 mg/m³ | |
| | Ceiling Limit<br>Skin resorption / sensibilisation | 2<br>Sah | |

**DNEL, DMEL and PNEC values**

**DNEL values (worker)**

| No | Substance name | | | CAS / EC no | |
|---|---|---|---|---|---|
| | **Route of exposure** | **Exposure time** | **Effect** | **Value** | |
| 1 | **Aliphatic polyisocyanate** | | | **28182-81-2<br>931-274-8** | |
| | inhalative | Short term (acut) | local | 1 | mg/m³ |
| | with reference to: Air | | | | |
| | inhalative | Long term (chronic) | local | 0,5 | mg/m³ |
| | with reference to: Air | | | | |
| 2 | **tosyl isocyanate** | | | **4083-64-1<br>223-810-8** | |
| | dermal | Long term (chronic) | systemic | 0,92 | mg/kg bw/day |
| | inhalative | Long term (chronic) | systemic | 3,24 | mg/m³ |
| 3 | **cyclohexyldimethylamine** | | | **98-94-2<br>202-715-5** | |
| | dermal | Long term (chronic) | systemic | 0,6 | mg/kg/day |
| | dermal | Long term (chronic) | local | | |
| | Comments: high hazard (no threshold derived) | | | | |
| | dermal | Short term (acut) | local | | |
| | Comments: high hazard (no threshold derived) | | | | |
| | inhalative | Long term (chronic) | local | 8,3 | mg/m³ |
| | inhalative | Short term (acut) | local | 8,3 | mg/m³ |
| | inhalative | Long term (chronic) | systemic | 0,53 | |

**DNEL value (consumer)**

| No | Substance name | | | CAS / EC no | |
|---|---|---|---|---|---|
| | **Route of exposure** | **Exposure time** | **Effect** | **Value** | |
| 1 | **tosyl isocyanate** | | | **4083-64-1<br>223-810-8** | |
| | oral | Long term (chronic) | systemic | 0,46 | mg/kg bw/day |
| | dermal | Long term (chronic) | systemic | 0,46 | mg/kg bw/day |
| | inhalative | Long term (chronic) | systemic | 0,8 | mg/m³ |

**PNEC values**

| No | Substance name | | CAS / EC no | |
|---|---|---|---|---|
| | **ecological compartment** | **Type** | **Value** | |
| 1 | **Aliphatic polyisocyanate** | | **28182-81-2<br>931-274-8** | |
| | water | fresh water | 0,127 | mg/L |

| | | | | |
|---|---|---|---|---|
| | water | marine water | 0,0127 | mg/L |
| | water | fresh water sediment | 266700 | mg/kg |
| | with reference to: dry weight | | | |
| | water | marine water sediment | 266700 | mg/kg |
| | with reference to: dry weight | | | |
| | soil | - | 53182 | mg/kg |
| | with reference to: dry weight | | | |
| | sewage treatment plant | - | 38,28 | mg/L |
| 2 | **tosyl isocyanate** | | **4083-64-1 223-810-8** | |
| | water | fresh water | 0,03 | mg/L |
| | water | fresh water sediment | 0,172 | mg/kg dry weight |
| | water | Aqua intermittent | 0,3 | mg/L |
| | water | marine water | 0,003 | mg/L |
| | water | marine water sediment | 0,017 | mg/kg dry weight |
| | soil | - | 0,017 | mg/kg dry weight |
| | sewage treatment plant | - | 0,4 | mg/L |
| 3 | **cyclohexyldimethylamine** | | **98-94-2 202-715-5** | |
| | water | fresh water | 3,5 | µg/L |
| | water | marine water | 0,35 | µg/L |
| | water | Aqua intermittent | 35 | µg/L |
| | water | fresh water sediment | 36,92 | µg/kg dry weight |
| | water | marine water sediment | 3,69 | µg/kg dry weight |
| | soil | - | 5,33 | µg/kg dry weight |
| | sewage treatment plant | - | 20,60 | mg/L |

## 8.2 Exposure controls

**Appropriate engineering controls**

Provide good ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

### Personal protective equipment

**Respiratory protection**

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. In case of brush application: Filter A2. When applied by spraying: Filter A2P2. (DIN EN 14387)

**Eye / face protection**

Wear safety googles to protect against splashes. Safety glasses with side protection shield (EN 166)

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

| | | | |
|---|---|---|---|
| Appropriate Material | In case of short-term contact / splash protection: nitrile rubber | | |
| Material thickness | > | 0,4 | mm |
| Breakthrough time | > | 120 | min |
| Appropriate Material | In case of prolonged exposure: nitrile rubber | | |

| | | | |
|---|---|---|---|
| Material thickness | > | 0,4 | mm |
| Breakthrough time | > | 480 | min |

**Other**
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

**Environmental exposure controls**
Do not allow to enter drains or water courses.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| **State of aggregation** |
|---|
| liquid |

| **Form** |
|---|
| liquid |

| **Colour** |
|---|
| according to product name |

| **Odour** |
|---|
| characteristic |

| **pH value** | |
|---|---|
| reason for missing pH | substance/mixture is non-soluble (in water) |

| **Boiling point / boiling range** | | | | |
|---|---|---|---|---|
| Value | appr. | | 100 | °C |

| **Melting point/freezing point** |
|---|
| No data available |

| **Decomposition temperature** |
|---|
| No data available |

| **Flash point** | | | | |
|---|---|---|---|---|
| Value | 65 | - | 68 | °C |
| Method | closed cup | | | |

| **Ignition temperature** |
|---|
| No data available |

| **Oxidising properties** |
|---|
| Not applicable |

| **Flammability** |
|---|
| Not applicable |

| **Lower explosion limit** |
|---|
| No data available |

| **Upper explosion limit** |
|---|
| No data available |

| **Vapour pressure** | | | |
|---|---|---|---|
| Value | < | 100 | hPa |
| Reference temperature | | 50 | °C |

| **Relative vapour density** |
|---|
| No data available |

| **Relative density** |
|---|
| No data available |

| **Density** | | | | |
|---|---|---|---|---|
| Value | 1,11 | - | 1,12 | g/cm³ |
| Reference temperature | | | 20 | °C |

| | |
|---|---|
| Method | DIN 51757 |

| **Solubility in water** | |
|---|---|
| Comments | miscible |

| **Solubility** |
|---|
| No data available |

| **Partition coefficient n-octanol/water (log value)** | | | |
|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | **202-715-5** |

| | | |
|---|---|---|
| log Pow | 2,01 | |
| Reference temperature | 25 | °C |
| Method | OECD 107 | |
| Source | ECHA | |

| **Kinematic viscosity** | | | |
|---|---|---|---|
| Value | 50 - 60 | sec | |
| Reference temperature | 20 | °C | |
| Method | DIN EN 2431 (4 mm) | | |

| **Solvent separation test** |
|---|
| Not applicable |

| **Particle characteristics** |
|---|
| No data available |

| **Microplastics** |
|---|
| This product does not contain synthetic polymer microparticles >= 0.01%. |

### 9.2 Other information

| **Other information** |
|---|
| No data available. |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage and handling conditions (See section 7).

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

### 10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.6 Hazardous decomposition products

None if stored, handled and transported properly. In case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

| **Acute oral toxicity (result of the ATE calculation for the mixture)** |
|---|
| **Product Name** |
| **einzA Härter LawiPur, 2-K-PU Mattsiegel** |

| | |
|---|---|
| Comments | The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE oral > 2000 mg/kg). |

| **Acute oral toxicity** | | | | | |
|---|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** | |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | | **931-274-8** | |
| LD50 | | > | 2500 | | mg/kg bodyweight |
| Species | | rat | | | |
| Method | | OECD 423 | | | |
| Source | | ECHA | | | |
| **2** | **cyclohexyldimethylamine** | **98-94-2** | | **202-715-5** | |
| LD50 | | | 289 | | mg/kg bodyweight |
| Species | | rat | | | |
| Source | | ECHA | | | |

| **Acute dermal toxicity (result of the ATE calculation for the mixture)** | |
|---|---|
| **Product Name** | |
| **einzA Härter LawiPur, 2-K-PU Mattsiegel** | |
| Comments | The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE dermal > 2000 mg/kg). |

| **Acute dermal toxicity** | | | | | |
|---|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** | |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | | **931-274-8** | |
| LD50 | | > | 2000 | | mg/kg bodyweight |
| Species | | rat | | | |
| Method | | OECD 402 | | | |
| Source | | ECHA | | | |
| **2** | **cyclohexyldimethylamine** | **98-94-2** | | **202-715-5** | |
| LD50 | | | 380 | | mg/kg bodyweight |
| Species | | rat | | | |
| Method | | OECD 402 | | | |
| Source | | ECHA | | | |

| **Acute inhalational toxicity (result of the ATE calculation for the mixture)** | |
|---|---|
| **Product Name** | |
| **einzA Härter LawiPur, 2-K-PU Mattsiegel** | |
| ATE (Mixture) | 14,1002 mg/l |
| Route of exposure / physical from | Vapour |
| Method | Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6. |

| **Acute inhalational toxicity** | | | | | |
|---|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** | |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | | **202-715-5** | |
| LC50 | | 1,7 | - 5,5 | | mg/l |
| Duration of exposure | | | 6 | | h |
| State of aggregation | | Vapour | | | |
| Species | | rat | | | |
| Method | | OECD 403 | | | |
| Source | | ECHA | | | |

| **Skin corrosion/irritation** | | | |
|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | **931-274-8** |
| Species | | rabbit | |
| Method | | OECD 404 | |

| | |
|---|---|
| Source | ECHA |
| Evaluation | low-irritant |
| Evaluation/classification | Based on available data, the classification criteria are not met. |

| **Serious eye damage/irritation** | | | |
|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | **931-274-8** |
| Species | rabbit | | |
| Method | OECD 405 | | |
| Source | ECHA | | |
| Evaluation | low-irritant | | |
| Evaluation/classification | Based on available data, the classification criteria are not met. | | |

| **Respiratory or skin sensitisation** | | | |
|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | **931-274-8** |
| Route of exposure | Skin | | |
| Species | guinea pig | | |
| Method | OECD 406 | | |
| Source | ECHA | | |
| Evaluation | sensitizing | | |
| **2** | **cyclohexyldimethylamine** | **98-94-2** | **202-715-5** |
| Route of exposure | Skin | | |
| Species | mouse | | |
| Method | OECD 429 | | |
| Source | ECHA | | |
| Evaluation | non-sensitizing | | |

| **Germ cell mutagenicity** | | | |
|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | **202-715-5** |
| Type of examination | in vitro gene mutation study in bacteria | | |
| Species | Salmonella typhimurium TA98, TA100, TA1535, TA1537 | | |
| Method | OECD 471 | | |
| Source | ECHA | | |
| Evaluation/classification | Based on available data, the classification criteria are not met. | | |

| **Reproduction toxicity** | | | | |
|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** | |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | **202-715-5** | |
| Route of exposure | oral | | | |
| NOAEL | > | 1500 | ppm | |
| Duration of exposure | | 54 | day(s) | |
| Type of examination | Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test | | | |
| Species | rats (male/female) | | | |
| Method | OECD 422 | | | |
| Source | ECHA | | | |

| **Carcinogenicity** |
|---|
| No data available |

| **STOT - single exposure** |
|---|
| No data available |

| **STOT - repeated exposure** | | | | |
|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | **EC no.** | |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | **202-715-5** | |
| Route of exposure | oral | | | |
| NOAEL | | 100 | mg/kg bw/d | |
| Duration of exposure | | 90 | day(s) | |
| Species | rats (male/female) | | | |
| Method | OECD 408 | | | |
| Source | ECHA | | | |

| | | | |
|---|---|---|---|
| Route of exposure | inhalational | | |
| NOEL | | 104 | mg/m³ |
| Species | rats (male/female) | | |
| Source | ECHA | | |

| **Aspiration hazard** |
|---|
| No data available |

| **Delayed and immediate effects as well as chronic effects from short and long-term exposure** |
|---|
| Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. |

### 11.2 Information on other hazards

| **Endocrine disrupting properties** |
|---|
| No data available |

**Other information**
No data available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| **Toxicity to fish (acute)** | | | | |
|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** |
| **1** | **cyclohexyldimethylamine** | **98-94-2** | | **202-715-5** |
| LC50 | | 31,58 | | mg/l |
| Duration of exposure | | 96 | | h |
| Species | Leuciscus idus | | | |
| Method | DIN 38 412, Part 15 | | | |
| Source | ECHA | | | |

| **Toxicity to fish (chronic)** |
|---|
| No data available |

| **Toxicity to Daphnia (acute)** | | | | |
|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | | **931-274-8** |
| EC50 | | 127 | | mg/l |
| Duration of exposure | | 48 | | h |
| Species | Daphnia magna | | | |
| Source | ECHA | | | |
| **2** | **cyclohexyldimethylamine** | **98-94-2** | | **202-715-5** |
| EC50 | | 75 | | mg/l |
| Duration of exposure | | 48 | | h |
| Species | Daphnia magna | | | |
| Method | OECD 202 | | | |
| Source | ECHA | | | |

| **Toxicity to Daphnia (chronic)** |
|---|
| No data available |

| **Toxicity to algae (acute)** | | | | |
|---|---|---|---|---|
| **No** | **Substance name** | **CAS no.** | | **EC no.** |
| **1** | **Aliphatic polyisocyanate** | **28182-81-2** | | **931-274-8** |
| EC50 | > | 1000 | | mg/l |
| Duration of exposure | | 72 | | h |

| | |
|---|---|
| Species | Scenedesmus subspicatus |
| Method | OECD 201 |
| Source | ECHA |

| 2 | cyclohexyldimethylamine | 98-94-2 | 202-715-5 | |
|---|---|---|---|---|
| EC50 | | | 3,5 | mg/l |
| Duration of exposure | | | 72 | h |
| Species | Pseudokirchneriella subcapitata | | | |
| Method | OECD 201 | | | |
| Source | ECHA | | | |

| Toxicity to algae (chronic) |
|---|
| No data available |

| Bacteria toxicity | | | | |
|---|---|---|---|---|
| No | Substance name | CAS no. | EC no. | |
| 1 | Aliphatic polyisocyanate | 28182-81-2 | 931-274-8 | |
| EC50 | | | 3828 | mg/l |
| Duration of exposure | | | 3 | h |
| Species | activated sludge | | | |
| Method | OECD 209 | | | |
| Source | ECHA | | | |
| 2 | cyclohexyldimethylamine | 98-94-2 | 202-715-5 | |
| EC50 | | | 206 | mg/l |
| Duration of exposure | | | 17 | h |
| Species | Pseudomonas putida | | | |
| Method | DIN 38412 T.8 | | | |
| Source | ECHA | | | |

### 12.2 Persistence and degradability

| Biodegradability | | | | |
|---|---|---|---|---|
| No | Substance name | CAS no. | EC no. | |
| 1 | Aliphatic polyisocyanate | 28182-81-2 | 931-274-8 | |
| Type | aerobic biodegradation | | | |
| Value | | | 1 | % |
| Duration | | | 28 | day(s) |
| Method | OECD 301 A | | | |
| Source | ECHA | | | |
| Evaluation | not readily biodegradable | | | |
| 2 | cyclohexyldimethylamine | 98-94-2 | 202-715-5 | |
| Type | aerobic biodegradation | | | |
| Value | | 90 - | 100 | % |
| Duration | | | 18 | day(s) |
| Method | OECD 301 A | | | |
| Source | ECHA | | | |
| Evaluation | readily biodegradable | | | |

### 12.3 Bioaccumulative potential

| Bioconcentration factor (BCF) | | | |
|---|---|---|---|
| No | Substance name | CAS no. | EC no. |
| 1 | Aliphatic polyisocyanate | 28182-81-2 | 931-274-8 |
| BCF | | 141 | |
| Method | QSAR | | |
| Source | ECHA | | |

| Partition coefficient n-octanol/water (log value) | | | | |
|---|---|---|---|---|
| No | Substance name | CAS no. | EC no. | |
| 1 | cyclohexyldimethylamine | 98-94-2 | 202-715-5 | |
| log Pow | | | 2,01 | |
| Reference temperature | | | 25 | °C |
| Method | OECD 107 | | | |
| Source | ECHA | | | |

### 12.4 Mobility in soil
No data available.

### 12.5 Results of PBT and vPvB assessment
No data available.

### 12.6 Endocrine disrupting properties
No data available.

### 12.7 Other adverse effects
No data available.

### 12.8 Other information

| Other information |
|---|
| Do not allow to enter drains or water courses. |

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

| | | |
|---|---|---|
| Waste code | 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.
Allow paint/varnish to dry out completely in a well-ventilated area and dispose of in residual waste once completely soldified. Dispose of liquid or non-drying residues separately.
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

**Packaging**
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer. Empty containers must be scrapped or reconditioned.

## SECTION 14: Transport information

### 14.1 UN number or ID number
Not classified as dangerous in the meaning of transport regulations.

### 14.2 UN proper shipping name
Not classified as dangerous in the meaning of transport regulations.

### 14.3 Transport hazard class(es)
Not classified as dangerous in the meaning of transport regulations.

### 14.4 Packing group
Not classified as dangerous in the meaning of transport regulations.

### 14.5 Environmental hazards
Not classified as dangerous in the meaning of transport regulations.

### 14.6 Special precautions for user
Transport within the user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### 14.7 Maritime transport in bulk according to IMO instruments
Not relevant

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU regulations**

| **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)** |
|---|
| According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006. |

| **REACH candidate list of substances of very high concern (SVHC) for authorisation** |
|---|
| According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006. |

| **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES** | |
|---|---|
| The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. | No 3 |
| The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII. | |

| No | Substance name | CAS no. | EC no. | No |
|---|---|---|---|---|
| 1 | **hexamethylene-diisocyanate** | **822-06-0** | **212-485-8** | **75** |
| 2 | **tosyl isocyanate** | **4083-64-1** | **223-810-8** | **75** |

| **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances** |
|---|
| This product is not subject to Part 1 or 2 of Annex I. |

| **Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)** | |
|---|---|
| VOC content | 76,80 % |

| **Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products** |
|---|
| relevant VOC limit value as referred to in Annex II of Directive 2004/42/CE , Cat. : j, type: wb = 140 g/l<br>Max. VOC content (limit value) of the product in its ready for use condition = < 140 g/l |

## National regulations

**Water Hazard Class (Germany)**

| | |
|---|---|
| Class | 1 |
| Source | Classification according to AwSV (Regulation on facilities for handling substances that are hazardous to water). |

**Other regulations**

GISCODE PU35 PU systems, contains solvents (>10% VOC)

**Other national regulations**

Adhere to national regulations for proper handling and use of hazardous materials. Use appropriate personal protective equipment. For example, TRGS (Technical Rules for Hazardous Substances) and the DGUV (German Social Accident Insurance) rules.

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

## SECTION 16: Other information

**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

**Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

| | |
|---|---|
| EUH014 | Reacts violently with water. |
| H226 | Flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Classification information**
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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