

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 1/13



PU Plast clear 1min. 50ml (Comp. B)

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

1.1. Product identifier

Trade name/designation:

PU Plast clear 1min. 50ml (Comp. B)

Article No.:

T910002

UFI:

NVTM-UYWX-RV0V-J40A

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

Use of the substance/mixture:

2K PU adhesive

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH

Hartleitnerstraße 3

4653 Eberstälzell

Austria

Telephone: +43 (0) 7241 213 79

E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|--|--|--------------------------|
| Skin corrosion/irritation (<i>Skin Irrit. 2</i>) | H315: Causes skin irritation. | |
| Respiratory or skin sensitisation (<i>Skin Sens. 1A</i>) | H317: May cause an allergic skin reaction. | |
| Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>) | H319: Causes serious eye irritation. | |
| Acute toxicity (inhalative) (<i>Acute Tox. 4</i>) | H332: Harmful if inhaled. | |
| Respiratory or skin sensitisation (<i>Resp. Sens. 1</i>) | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. | |
| STOT-single exposure (<i>STOT SE 3</i>) | H335: May cause respiratory irritation. | |
| Carcinogenicity (<i>Carc. 2</i>) | H351: Suspected of causing cancer. | |
| STOT-repeated exposure (<i>STOT RE 2</i>) | H373: May cause damage to organs through prolonged or repeated exposure. | |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 2/13

PU Plast clear 1min. 50ml (Comp. B)

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS07

Exclamation mark



GHS08

Health hazard

Signal word: Danger

Hazard components for labelling:

4,4'-Methylenediphenyldiisocyanat, Oligomere; 4,4'-methylenediphenyl diisocyanate

| Hazard statements for health hazards | |
|--------------------------------------|--|
| H315 | Causes skin irritation. |
| 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. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

| Supplemental hazard information | |
|---------------------------------|---|
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

| Precautionary statements Prevention | |
|-------------------------------------|--|
| P201 | Obtain special instructions before use. |
| P280 | Wear protective gloves/protective clothing and eye protection/face protection. |
| P284 | [In case of inadequate ventilation] wear respiratory protection. |

| Precautionary statements Response | |
|-----------------------------------|--|
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |

| Precautionary statements Storage | |
|----------------------------------|--|
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |

Additional information:

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Other adverse effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 3/13



PU Plast clear 1min. 50ml (Comp. B)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

| Product identifiers | Substance name Classification according to Regulation (EC) No 1272/2008 [CLP] | Concentration |
|---|---|--------------------|
| CAS No.: 25686-28-6 EC No.: 500-040-3 REACH No.: 01-2119457013-49 | 4,4'-Methylenediphenyldiisocyanat, Oligomere Acute Tox. 4 (H332), Carc. 2 (H351), Eye Irrit. 2 (H319), Resp. Sens. 1 (H334), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315), Skin Sens. 1A (H317) Danger | 20 - ≤ 50 Vol-% |
| CAS No.: 101-68-8 EC No.: 202-966-0 Index No.: 615-005-00-9 REACH No.: 01-2119457014-47 | 4,4'-methylenediphenyl diisocyanate Acute Tox. 4 (H332), Carc. 2 (H351), Eye Irrit. 2 (H319), Resp. Sens. 1 (H334), STOT RE 2 (H373**), STOT SE 3 (H335), Skin Irrit. 2 (H315), Skin Sens. 1 (H317) Danger Specific concentration limit (SCL) Eye Irrit. 2; H319: C ≥ 5% Skin Irrit. 2; H315: C ≥ 5% Resp. Sens. 1; H334: C ≥ 0.1% STOT SE 3; H335: C ≥ 5% | 20 - ≤ 50 Vol-% |

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Following inhalation:

The affected person must be carried outside. If breathing is labored, consult a doctor.

In case of skin contact:

Soiled, soaked clothing must be taken off. One must take a shower immediately. In case of skin irritation, consult a physician. Wash contaminated clothing before reuse.

After eye contact:

Any contact lenses must be removed. One must immediately and extensively wash with water for at least 30 / 60 minutes, opening the eyelids well. Consult a doctor if symptoms persist.

Following ingestion:

A doctor must be consulted immediately. Vomiting may only be induced on the doctor's orders. Nothing may be administered orally without the doctor's order or if the person concerned is unconscious.

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

Causes skin irritation. May cause an allergic skin reaction. Causes severe eye irritation. Harmful by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. It may irritate the respiratory tract. Suspected cancer. May cause damage to organs through prolonged or repeated exposure.

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 media:

Carbon dioxide (CO₂), Foam, Powder, Water mist

Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of combustion products.

5.3. Advice for firefighters

The containers shall be cooled with water jets to prevent the decomposition of the product and the formation of potentially harmful substances. Complete fire protective clothing shall be worn at all times.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 4/13

PU Plast clear 1min. 50ml (Comp. B)

Extinguishing water that is not allowed to enter the sewage pipes shall be collected. The water used for extinguishing and the fire residues shall be taken up in accordance with the regulations in force.

5.4. Additional information

Personal protection: Normal firefighting clothing, e.g. an open-circuit compressed air respirator (EN 137) firefighting kit (EN469), firefighting gloves (EN 659) and firefighting boots (HO A 29 or A30)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

The leakage may be blocked if there is no danger. Appropriate protective devices (including personal protective devices as per para. 8 from the safety instructions) shall be put on to prevent contamination of skin, eyes and personal clothing. These instructions apply to both reprocessing supervisors and emergency stop interventions.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Prevent the product from entering waste water, surface water, ground water.

6.3. Methods and material for containment and cleaning up

For cleaning up:

The spilled product must be sucked into a suitable container. The container to be used shall be tested for compatibility with the product, subject to section 10. The residual product shall be absorbed with inert absorbent material. Adequate ventilation of the affected area shall be provided. Contaminated material must be disposed of in accordance with the regulations in section 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Do not handle the product until you have read all other sections of this safety sheet. Avoid dispersal of the product in the environment. Do not eat, drink or smoke while using the product. Before entering the eating area, remove wetted clothing and protective devices.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store the product in clearly labelled containers. Keep containers away from incompatible materials, referring to section 10.

Storage class (TRGS 510, Germany): 10 - Combustible liquids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

Recommendation:

No further relevant information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 5/13

PU Plast clear 1min. 50ml (Comp. B)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

| Limit value type (country of origin) | Substance name | ① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark |
|--------------------------------------|--|--|
| MAK (AT) | 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | ① 0.005 ppm (0.05 mg/m ³) ⑤ III B, Sah |
| MAK (AT) | 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | ② 0.01 ppm (0.1 mg/m ³) ⑤ (max. 8x5 min./Schicht, Momentanwert) III B, Sah |

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

| Substance name | DNEL value | ① DNEL type ② Exposure route |
|---|-------------------------|---|
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.05 mg/m ³ | ① DNEL worker ② Long-term - inhalation, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.025 mg/m ³ | ① DNEL Consumer ② Long-term - inhalation, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.1 mg/m ³ | ① DNEL worker ② Acute - inhalation, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 50 mg/kg bw/day | ① DNEL worker ② Acute - inhalation, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.05 mg/m ³ | ① DNEL Consumer ② Acute - inhalation, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.05 mg/m ³ | ① DNEL worker ② Long-term - inhalation, local effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.025 mg/m ³ | ① DNEL Consumer ② Long-term - inhalation, local effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.1 mg/m ³ | ① DNEL worker ② Acute - inhalation, local effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 28.7 mg/cm ² | ① DNEL worker ② Acute - inhalation, local effects |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 6/13

PU Plast clear 1min. 50ml (Comp. B)

| Substance name | DNEL value | ① DNEL type ② Exposure route |
|---|-------------------------|---|
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.05 mg/m ³ | ① DNEL Consumer ② Acute - inhalation, local effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 25 mg/kg bw/day | ① DNEL Consumer ② Acute - dermal, systemic effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 17.2 mg/cm ² | ① DNEL Consumer ② Acute - dermal, local effects |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 20 mg/kg bw/day | ① DNEL Consumer ② Acute - oral, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.025 mg/m ³ | ① DNEL worker ② Long-term - inhalation, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.05 mg/m ³ | ① DNEL worker ② Long-term - inhalation, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.1 mg/m ³ | ① DNEL worker ② Acute - inhalation, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.05 mg/m ³ | ① DNEL Consumer ② Acute - inhalation, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.05 mg/m ³ | ① DNEL worker ② Long-term - inhalation, local effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.025 mg/m ³ | ① DNEL Consumer ② Long-term - inhalation, local effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.1 mg/m ³ | ① DNEL worker ② Acute - inhalation, local effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.05 mg/m ³ | ① DNEL Consumer ② Acute - inhalation, local effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 50 mg/kg bw/day | ① DNEL worker ② Acute - dermal, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 25 mg/kg bw/day | ① DNEL Consumer ② Acute - dermal, systemic effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 28.7 mg/cm ² | ① DNEL worker ② Acute - dermal, local effects |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 17.2 mg/cm ² | ① DNEL Consumer ② Acute - dermal, local effects |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 7/13

PU Plast clear 1min. 50ml (Comp. B)

| Substance name | DNEL value | ① DNEL type ② Exposure route |
|--|-----------------|---|
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 20 mg/kg bw/day | ① DNEL Consumer ② Acute - oral, systemic effects |

| Substance name | PNEC Value | ① PNEC type |
|---|-------------------|--------------------------------------|
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 1 mg/L | ① PNEC aquatic, freshwater |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 0.1 mg/L | ① PNEC aquatic, marine water |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 1 mg/L | ① PNEC sewage treatment plant |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 | 1 mg/kg | ① PNEC soil |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 3.7 µg/L | ① PNEC aquatic, freshwater |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 0.37 µg/L | ① PNEC aquatic, marine water |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 1 mg/L | ① PNEC sewage treatment plant |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 11.7 mg/kg bw/day | ① PNEC sediment, freshwater |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 1.17 mg/kg bw/day | ① PNEC sediment, marine water |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 2.33 mg/kg bw/day | ① PNEC soil |
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 | 37 µg/L | ① PNEC aquatic, intermittent release |

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Emergency stop showers with face-eye-rinsing are to be provided.

Exposure levels must be kept as low as possible to avoid heavy deposition in the body. Personal protective devices shall be handled in such a way that the highest possible protection is assured (e.g. reduction of replacement times).

8.2.2. Personal protection equipment

Eye/face protection:

The use of penetration-proof goggles is recommended (ref. standard EN 166).

Skin protection:

Hand protection:

The hands must be protected with category III work gloves (ref. standard EN 374). For the final choice of material for the work gloves, the following aspects must be included: Compatibility, degradation, breaking time and permeability. In the case of preparations, the work glove resistance to chemical agents

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 8/13

PU Plast clear 1min. 50ml (Comp. B)

must be tested before use, as it is unpredictable. Glove wear time is conditioned by exposure time and modes of use.

Glove material: NBR (Nitrile rubber)

Breakthrough time: 240 min.

Thickness of the glove material: 0,5 mm

Skin protection:

Work clothing with long sleeves and category II accident protection shoes must be worn (see Regulation 2016/425 and standard EN ISO 20344). After taking off the protective clothing, one must wash with soap and water.

Respiratory protection:

If the threshold value (e.g. TLV-TWA) of the substance or one or more substances contained in the product is exceeded, it is advisable to wear a mask with a type A filter, the class of which (1, 2 or 3) should be selected according to the highest concentration used. (Ref. standard EN 14387). In the presence of gases or vapours of a different nature and/or gases or vapours containing particles (aerosol, smoke, mist, etc.), use combined filters.

If the technical measures taken are not sufficient to reduce the exposure of the worker to the thresholds considered, the use of respiratory protective devices is necessary. The protection provided by the mask is limited in any case. If the substance under consideration is odourless or its odour threshold exceeds the corresponding TLV-TWA, or in case of emergency, an open-circuit self-operated compressed air respirator (ref. standard EN137) or an external air intake respirator (ref. standard EN138) must be worn. For the correct selection of the respiratory protective device, refer to standard EN 529.

Other protection measures:

Considering that appropriate protective measures should always take precedence over personal protective clothing, ensure that the workplace is well ventilated by effective local exhaust ventilation. For the selection of personal protective equipment, the trusted chemical manufacturers may need to be consulted. The personal protective equipment must be CE marked to indicate its suitability for the applicable regulations.

8.2.3. Environmental exposure controls

Emissions from manufacturing processes, including those from ventilation equipment, should be checked for compliance with environmental legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: yellow

Odour: characteristic

Safety relevant basis data

| Parameter | Value | ① Method ② Remark |
|--|-----------------------|----------------------|
| pH | No data available | |
| Melting point | No data available | |
| Freezing point | No data available | |
| Initial boiling point and boiling range | > 300 °C | |
| Flash point | 205 °C | |
| Evaporation rate | No data available | |
| Auto-ignition temperature | No data available | |
| Upper/lower flammability or explosive limits | No data available | |
| Vapour pressure | 0.01 Pa | |
| Vapour density | No data available | |
| Density | 1.2 g/cm ³ | |
| Bulk density | not applicable | |
| Water solubility | No data available | |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 9/13



PU Plast clear 1min. 50ml (Comp. B)

| Parameter | Value | ① Method ② Remark |
|---------------------------|-------------------|----------------------|
| Dynamic viscosity | 3,000 mPa* s | |
| Kinematic viscosity | No data available | |
| Self ignition temperature | > 600 °C | |

9.2. Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Avoid: Acids, Alcohols, Amines, Bases, glycols, Hydroxide, metals.

10.4. Conditions to avoid

Humid air.

10.5. Incompatible materials

Avoid: Acids, Alcohols, Amines, Bases, glycols, Hydroxide, metals.

10.6. Hazardous decomposition products

No further relevant information available.

SECTION 11: Toxicological information

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

Toxicological information

| Acute Toxicity Estimate for Mixtures | | |
|--|--------------------------------|-------------------|
| ATE (inhalation, vapour): | 16.92 mg/L | |
| 4,4'-Methylenediphenyldiisocyanat, Oligomere | CAS No.: 25686-28-6 | EC No.: 500-040-3 |
| LD ₅₀ oral: | >5,000 mg/kg | |
| LD ₅₀ dermal: | >9,400 mg/kg | |
| LC ₅₀ Acute inhalation toxicity (vapour): | 0.49 mg/L 4 h | |
| 4,4'-methylenediphenyl diisocyanate | CAS No.: 101-68-8 | EC No.: 202-966-0 |
| LD ₅₀ oral: | >2,000 mg/kg (Rat) | |
| LD ₅₀ dermal: | >9,400 mg/kg (Rabbit) OECD 402 | |
| LC ₅₀ Acute inhalation toxicity (vapour): | 0.368 mg/L (Rat) OECD 403 | |

Acute oral toxicity:

Based on available data, the classification criteria are not met.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Causes skin irritation.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

Sensitising to the skin. Sensitising to the respiratory tract.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Suspected of causing cancer.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 10/13



PU Plast clear 1min. 50ml (Comp. B)

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

May cause respiratory irritation.

STOT-repeated exposure:

May cause damage to organs.

Aspiration hazard:

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties:

No further relevant information available.

SECTION 12: Ecological information

12.1. Toxicity

| |
|--|
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 |
|--|

| |
|---|
| LC₅₀ : >1,000 mg/L 4 d (fish, Brachydanio rerio) OECD 203 |
|---|

| |
|--|
| EC₅₀ : >1,000 mg/L (crustaceans, Daphnia magna) OECD 202 |
|--|

| |
|---|
| ErC₅₀ : >1,640 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201 |
|---|

| |
|------------------------|
| NOEC : >10 mg/L |
|------------------------|

Assessment/classification:

No further relevant information available.

12.2. Persistence and degradability

| |
|--|
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 |
|--|

| |
|---|
| Biodegradation : Poorly biodegradable. |
|---|

| |
|---|
| Remark : Not biodegradable, polyurea is inert and not degradable according to experience to date, slowly reacts with water at the interface with the formation of CO ₂ to form a solid, highly melting and insoluble reaction product (polyurea). |
|---|

Additional information:

No further relevant information available.

12.3. Bioaccumulative potential

| |
|--|
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 |
|--|

| |
|----------------------------------|
| Log K_{OW} : 5.22 |
|----------------------------------|

| |
|--|
| Bioconcentration factor (BCF) : 200 |
|--|

Accumulation / Evaluation:

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

| |
|--|
| 4,4'-Methylendiphenyldiisocyanat, Oligomere CAS No.: 25686-28-6 EC No.: 500-040-3 |
|--|

| |
|---|
| Results of PBT and vPvB assessment : — |
|---|

| |
|--|
| 4,4'-methylenediphenyl diisocyanate CAS No.: 101-68-8 EC No.: 202-966-0 |
|--|

| |
|---|
| Results of PBT and vPvB assessment : — |
|---|

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No further relevant information available.

12.7. Other adverse effects

No further relevant information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 11/13



PU Plast clear 1min. 50ml (Comp. B)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Reuse if possible. Product residues are to be considered as hazardous waste. The hazardousness of the waste partially containing this product must be evaluated on the basis of the legal provisions in force. Disposal must be entrusted to a company authorised for waste management, taking into account national and, where applicable, local regulations.

Waste treatment options

Appropriate disposal / Package:

Uncleaned packaging: Contaminated packaging material must be sent for recycling or disposal in accordance with the country's waste management regulations.

SECTION 14: Transport information

| Land transport (ADR/RID) | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|--|--|--|--|
| 14.1. UN number or ID number | | | |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| 14.2. UN proper shipping name | | | |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| 14.3. Transport hazard class(es) | | | |
| not relevant | not relevant | not relevant | not relevant |
| 14.4. Packing group | | | |
| not relevant | not relevant | not relevant | not relevant |
| 14.5. Environmental hazards | | | |
| not relevant | not relevant | not relevant | not relevant |
| 14.6. Special precautions for user | | | |
| not relevant | not relevant | not relevant | not relevant |

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Restrictions on the product or substances according to Annex XVII Regulation (EC) 1907/2006:

Product: point 3

Substances contained:

point 56 (4,4'-Methylenediphenyl diisocyanate, oligomers Reg. Nr.: 01-2119457013-49)

point 56 (4,4'-methylenediphenyl diisocyanate Reg. Nr.: 01-2119457014-47)

point 74 (Diisocyanate)

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2

Page 12/13



PU Plast clear 1min. 50ml (Comp. B)

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

| | |
|------------------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| DNEL | derived no-effect level |
| EC ₅₀ | Effective Concentration 50% |
| EN | European Standard |
| ES | Exposure scenario |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| KG | body weight |
| LC ₅₀ | Lethal (fatal) Concentration 50% |
| LD ₅₀ | Lethal (fatal) Dose 50% |
| MAK | Maximum concentration in the workplace air (CH) |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety & Health |
| OECD | Organisation for Economic Cooperation and Development |
| OSHA | Occupational Safety & Health Administration |
| PBT | persistent and bioaccumulative and toxic |
| PNEC | Predicted No Effect Concentration |
| REACH | Registration, Evaluation and Authorization of Chemicals |
| RID | Dangerous goods regulations for transport by rail |
| SCL | Specific concentration limit |
| TRGS | Technische Regeln für Gefahrstoffe |
| UN | United Nations |

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|--|--|--------------------------|
| Skin corrosion/irritation (<i>Skin Irrit. 2</i>) | H315: Causes skin irritation. | |
| Respiratory or skin sensitisation (<i>Skin Sens. 1A</i>) | H317: May cause an allergic skin reaction. | |
| Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>) | H319: Causes serious eye irritation. | |
| Acute toxicity (inhalative) (<i>Acute Tox. 4</i>) | H332: Harmful if inhaled. | |
| Respiratory or skin sensitisation (<i>Resp. Sens. 1</i>) | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. | |
| STOT-single exposure (<i>STOT SE 3</i>) | H335: May cause respiratory irritation. | |
| Carcinogenicity (<i>Carc. 2</i>) | H351: Suspected of causing cancer. | |
| STOT-repeated exposure (<i>STOT RE 2</i>) | H373: May cause damage to organs through prolonged or repeated exposure. | |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 23 May 2023

Print date: 15 Feb 2024

Version: 2



Page 13/13

PU Plast clear 1min. 50ml (Comp. B)

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

| Hazard statements | |
|-------------------|--|
| H315 | Causes skin irritation. |
| 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. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

16.6. Training advice

No data available

16.7. Additional information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.