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

- 1.1 Product identifier
  - Trade name: COETRANS Balcony Coating transparent glossy

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - Application of the substance / the mixture: Coating

- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: KEMPER SYSTEM GmbH & Co. KG
    Holländische Strasse 32-36
    34246 Vellmar
    Deutschland / Germany
    Telefon: +49 (0)561 / 8295-0
    Telefax: +49 (0)561 / 8295-5110
    E-Mail: MSDS@KEMPER-SYSTEM.COM

- Further information obtainable from:
  - Research and Development

- 1.4 Emergency telephone number:
  Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
  Langenbeckstraße 1; Gebäude 601; 55131 Mainz
  Tel. Nr.: +49 (0)6131 / 19 24 0
  Universitätsmedizin der Johannes Gutenberg-Universität Mainz

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - GHS02 flame
    - Flam. Liq. 3 H226 Flammable liquid and vapour.
    - GHS08 health hazard
    - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
    - GHS09 environment
    - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008
    - GHS07
    - Eye Irrit. 2 H319 Causes serious eye irritation.
    - Skin Sens. 1 H317 May cause an allergic skin reaction.

- 2.3 Hazard pictograms
  The product is classified and labelled according to the CLP regulation.

- Signal word
  Warning

- Hazard-determining components of labelling:
  aliphatic polyisocyanate
  Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2,25%)
  Urethane bis Oxazolidine
  Isophorondiisocyanate homopolymer

- Hazard statements
  H226 Flammable liquid and vapour.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
  H373 May cause damage to organs through prolonged or repeated exposure.
  H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
  P211 No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P260 Do not breathe dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)
Trade name: COETRANS Balcony Coating transparent glossy

<table>
<thead>
<tr>
<th>SECTION 3: Composition/information on ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>· 3.2 Chemical characterisation: Mixtures</td>
</tr>
<tr>
<td>· Description:</td>
</tr>
<tr>
<td>Mixtures of substances listed below with nonhazardous additions.</td>
</tr>
</tbody>
</table>

### Dangerous components:
- **CAS: 42882-87-9**
  - aliphatic polyisocyanate
  - Skin Sens. 1, H317
  - 25-50%

- **CAS number: 918-668-5**
  - EC number: 918-668-5
  - Hydrocarbons, C9, aromatic
  - Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336
  - 12,5-25%

- **CAS: 108-65-6**
  - ECINES: 203-603-9
  - 2-methoxy-1-methylethyl acetate
  - Flam. Liq. 3, H226
  - 10-12,5%

- **CAS: 59719-67-4**
  - EINECS: 261-879-6
  - Urethane bis Oxazolidine
  - Aquatic Chronic 2, H411; Eye Irrit. 2, H319; Skin Sens. 1B, H317
  - 10-12,5%

- **CAS: 53880-05-0**
  - EC number: 931-312-3
  - Isophorondiisocyanate homopolymer
  - Skin Sens. 1, H317; STOT SE 3, H335
  - 2,5-10%

- **CAS number: 919-448-0**
  - EC number: 919-448-0
  - Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
  - Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336
  - 2,5-10%

- **CAS: 25550-51-0**
  - EINECS: 247-094-1
  - Hexahydromethylphthalic anhydride
  - Resp. Sens. 1, H334; Eye Dam. 1, H318; Skin Sens. 1, H317
  - < 0,5%

- **CAS: 4088-71-9**
  - EINECS: 223-881-6
  - 3-isocyanatomethyl-5,5-dimethylcyclohexyl isocyanate
  - Acute Tox. 2, H361; Resp. Sens. 1, H334; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335
  - < 0,5%

- **EINECS: 400-830-7**
  - Benzotriazole derivate
  - Aquatic Chronic 2, H411; Skin Sens. 1, H317
  - < 0,5%

### SVHC
- 25550-51-0 hexahydromethylphthalic anhydride

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

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
  - General information:
    - Immediately remove any clothing soiled by the product.
    - 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 to be sure call for a doctor.
  - In case of unconsciousness place patient stably in side position for transportation.
  - Supply fresh air; consult doctor in case of complaints.
  - Immediately wash with water and soap and rinse thoroughly.

- **After skin contact:**
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After eyewash:**
  - If symptoms persist consult doctor.

- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - CO2, sand, extinguishing powder. Do not use water.
  - Alcohol resistant foam
  - ABC powder

- **For safety reasons unsuitable extinguishing agents:**
  - Water with full jet

- **5.2 Special hazards arising from the substance or mixture**
  - During heating or in case of fire poisonous gases are produced.
Trade name: COETRANS Balcony Coating transparent glossy

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure adequate ventilation.
  - Keep away from ignition sources.

- **6.2 Environmental precautions**
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/surface or ground water.

- **6.3 Methods and material for containment and cleaning up**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
  - Do not flush with water or aqueous cleansing agents.

- **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 disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**
  - Store in cool, dry place in tightly closed receptacles.
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
  - Use only in well ventilated areas.

- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - Requirements to be met by storerooms and receptacles:
      - Provide solvent resistant, sealed floor.
    - Information about storage in one common storage facility:
      - Store away from foodstuffs.
    - Further information about storage conditions:
      - Store in dry conditions.
      - Protect from frost.
      - Keep container tightly sealed.

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

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

- **8.1 Control parameters**
  - Ingredients with limit values that require monitoring at the workplace:
    - 108-65-6 2-methoxy-1-methylethyl acetate
      - WEL Short-term value: 548 mg/m³, 100 ppm
      - Long-term value: 274 mg/m³, 50 ppm
      - Sk
    - 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
      - WEL Short-term value: 0.07 mg/m³
    - Long-term value: 0.02 mg/m³
    - Sen; as -NCO
    - DNELs
      - 108-65-6 2-methoxy-1-methylethyl acetate
        - Dermal Long term - systemic effects: 153.5 mg/kg (worker)
        - Inhalative Long term - systemic effects: 275 mg/m³ (worker)

- **8.2 Exposure controls**
  - **Personal protective equipment:**
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.

- **8.3 General protective and hygienic measures:**
  - The lists valid during the making were used as basis.
- Respiratory protection: Use suitable respiratory protective device when high concentrations are present. Not necessary if room is well-ventilated.

- Protection of hands: Protective gloves
  Only use chemical-protective gloves with CE-labelling of category III. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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.
  Recommended thickness of the material: $\geq 0.4$ mm
  Synthetic rubber gloves

- Penetration time of glove material
  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. 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: $\geq 0.4$ mm
  Synthetic rubber gloves

- Eye protection: Tightly sealed goggles

- Body protection: Protective work clothing
  Impervious protective clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Fluid
    - Colour: According to product specification
    - Odour: Characteristic
    - Odour threshold: Not determined.
  - pH-value: Not determined.

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- Flash point: 48 °C

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature:
  - Decomposition temperature: Not determined.
  - Self-igniting: Product is not selfigniting.
  - Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Density at 20 °C: 1.03 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.
Safety data sheet  
according to 1907/2006/EC, Article 31  

Trade name: COETRANS Balcony Coating transparent glossy  

- viscosity:  
  - Dynamic:  
  - Kinematic at 20 °C: Not determined.  
  - 84 s (ISO 6 mm)  
- solvent content:  
  - VOC (EC)  
  - 28.60 %  
- 9.2 Other information  
  - No further relevant information available.  

SECTION 10: Stability and reactivity  

- 10.1 Reactivity  
  - No further relevant information available.  
- 10.2 Chemical stability  
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.  
- 10.3 Possibility of hazardous reactions  
  - No dangerous reactions known.  
- 10.4 Conditions to avoid  
  - No further relevant information available.  
- 10.5 Incompatible materials:  
  - No further relevant information available.  
- 10.6 Hazardous decomposition products:  
  - No dangerous decomposition products known.  

SECTION 11: Toxicological information  

- 11.1 Information on toxicological effects  
  - Acute toxicity  
  - Based on available data, the classification criteria are not met.  
- LD/LC50 values relevant for classification:  
  - hydrocarbons, C9, aromatic  
    - Oral LD50 >2000 mg/kg (rat)  
    - Dermal LD50 >2000 mg/kg (rabbit)  
  - 108-65-6 2-methoxy-1-methylethyl acetate  
    - Oral LD50 8532 mg/kg (rat)  
    - Dermal LD50 >5000 mg/kg (rat)  
    - Inhalative LC50/4 h 35.7 mg/l (rat)  
  - 59719-67-4 Urethane bis Oxazolidine  
    - Oral LD50 >5000 mg/kg (rat)  
    - Dermal LD50 >2000 mg/kg (rabbit)  
  - 53880-05-0 Isophorondiisocyanate homopolymer  
    - Oral LD50 2000 mg/kg (rat)  
    - Dermal LD50 >14000 mg/kg (rat)  
  - Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)  
    - Oral LD50 >15000 mg/kg (rat)  
    - Dermal LD50 >3400 mg/kg (rat)  
  - 25550-51-0 hexahydromethylphthalic anhydride  
    - Oral LD50 >5000 mg/kg (rat)  
  - 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate  
    - Dermal LD50 >7000 mg/kg (rat) (OECD- Prüfrichtlinie 402)  
    - Inhalative LC50/4 h 0.5 mg/l (ATE)  
  - benzotriazol derivate  
    - Oral LD50 >5000 mg/kg (rat) (unbekannt)  
    - Dermal LD50 >2000 mg/kg (rat) (unbekannt)  
    - Inhalative LC50/4 h >5.8 mg/l (rat) (unbekannt)  
- Primary irritant effect:  
  - Skin corrosion/irritation  
  - Based on available data, the classification criteria are not met.  
  - Serious eye damage/irritation  
  - Causes serious eye irritation.  
  - Respiratory or skin sensitisation  
  - May cause an allergic skin reaction.  
- CMR effects (carcinogenity, 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  
  - May cause damage to organs through prolonged or repeated exposure.  
  - Aspiration hazard  
  - Based on available data, the classification criteria are not met.  

(Contd. on page 6)
SECTION 12: Ecological information

- **12.1 Toxicity**
  - Aquatic toxicity:
    - 108-65-5 2-methoxy-1-methylethyl acetate
      - LC50/96 h >100 mg/l (oryzias latipes (Ricefish))
      - 161 mg/l (fis)
    - 59719-67-4 Urethane bis Oxazolidine
      - EC50/48 h 87.1 mg/l (Daphnia magna)
      - 18.6 mg/l (Selenastrum capricornutum)
    - 53880-05-0 Isophorondiisocyanate homopolymer
      - LC50/96 h >1.51 mg/l (Cyprinus Carpio) (Richtlinie 67/548/EWG, Anhang V, C.1.)
      - EC50/48 h >3.36 mg/l (Daphnia magna) (OECD- Prüfrichtlinie 202)
      - EC50/3h >10000 mg/l (Belebtschlamm (freshwater)) (OECD- Prüfrichtlinie 209)
    - Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
      - LC50 - OECD203 13100 mg/l (rat)
    - 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
      - EC50/48 h 27 mg/l (Daphnia magna) (Richtlinie 67/548/EWG, Anhang V, C.2.)
  - **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.
  - **Ecotoxicical effects:**
    - **Remark:** Toxic for fish
  - **Additional ecological information:**
    - **General notes:** Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
      - Do not allow product to reach ground water, water course or sewage system.
      - Danger to drinking water if even small quantities leak into the ground.
      - Also poisonous for fish and plankton in water bodies.
      - Toxic for aquatic organisms
  - **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 together with household garbage. Do not allow product to reach sewage system.
  - **European waste catalogue**
    - 08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances
    - 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09
  - **Uncleaned packaging:**
    - **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
  - ADR, IMDG, IATA
    - UN1263
- **14.2 UN proper shipping name**
  - ADR
    - 1263 PAINT, ENVIRONMENTALLY HAZARDOUS
  - IMDG
    - PAINT (hydrocarbons, C9, aromatic, Urethane bis Oxazolidine), MARINE POLLUTANT
  - IATA
    - Paint
- **14.3 Transport hazard class(es)**
  - ADR
    - **Class:** 3 (F1) Flammable liquids.
Trade name: COETRANS Balcony Coating transparent glossy

- Label 3
- IMDG

- Class 3 Flammable liquids.
- Label 3
- IATA

- Class 3 Flammable liquids.
- Label 3

- 14.4 Packing group
- ADR, IMDG, IATA III

- 14.5 Environmental hazards:
  Product contains environmentally hazardous substances: bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
  Marine pollutant: Yes
  Symbol (fish and tree)
  Symbol (fish and tree)

- 14.6 Special precautions for user
  Warning: Flammable liquids.
  Danger code (Kemler): 30
  EMS Number: F-E,S-E
  Stowage Category A

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

- Transport/Additional information:
- ADR
  Limited quantities (LQ) 5L
  Excepted quantities (EQ) Code: E1
  Maximum net quantity per inner packaging: 30 ml
  Maximum net quantity per outer packaging: 1000 ml
  Transport category 3
  Tunnel restriction code D/E
- IMDG
  Limited quantities (LQ) 5L
  Excepted quantities (EQ) Code: E1
  Maximum net quantity per inner packaging: 30 ml
  Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation": UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  Directive 2012/18/EU
  None of the ingredients is listed.
- Named dangerous substances - ANNEX I
  E2 Hazardous to the Aquatic Environment
  P5c FLAMMABLE LIQUIDS
- Seveso category
  None of the ingredients is listed.
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

- National regulations:
- Other regulations, limitations and prohibitive regulations
  Substances of very high concern (SVHC) according to REACH, Article 57
  25550-51-0 hexahydromethylphthalic anhydride

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enter the airways.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

- Department issuing MSDS:
research & development

- Contact:
research & development

- 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)
IATA-DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the “International Civil Aviation Organisation” (ICAO)
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
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)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

* Data compared to the previous version altered.