# Safety Data Sheet according to P.U.(A) 310/2013

**Printing date:** 07.03.2017  
**Vers.-Nr:** 55  
**Revision:** 07.03.2017

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## 1 Identification of the hazardous chemical and of the supplier

- **Product identifier**
  - **Trade name:** Transpoxxy Intermediate 2.19 pack B
  - **Article number:** 219b

- **Recommended use of the chemical and restrictions on use**
  - No further relevant information available.

- **Application of the substance/preparation:**
  - Epoxy curing agent
  - Paint

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/supplier:**
    - Transocean Coatings
    - Kossan Paint (M) Sdn. Bhd.
    - 1, Jalan Koporat 1/KU 9, Taman Perindustrian Meru
    - 42200 Kapar Selangor, Malaysia
    - Phone: +60-3-33922799
    - Fax: +60-3-33923799
  - **Emergency telephone number:** Manufacturer/Supplier

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## 2 Hazard identification

- **Classification of the substance or mixture**
  - Flam. Liq. 3 H226 Flammable liquid and vapour.
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**
  - **GHS label elements**
    - The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**

  ![GHS02](image1)  
  ![GHS05](image2)

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - reaction product based on fatty acids and polyethyleneamine xylene

- **Hazard statements**
  - Flammable liquid and vapour.
  - Causes skin irritation.
  - Causes serious eye damage.

- **Precautionary statements**
  - Keep away from heat/sparks/open flames/hot surfaces – No smoking.
  - Use explosion-proof electrical/ ventilating/lighting equipment.
  - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Immediately call a POISON CENTER/doctor.

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*Contd. on page 2*
3 Composition and information of the ingredients of the hazardous chemical

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

- Dangerous components:
  - 68410-23-1 reaction product based on fatty acids and polyethyleneamine 50-100%
    - Eye Dam. 1, H318
  - 1330-20-7 xylene 25-50%
    - Flam. Lig. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315

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

4 First-aid measures

- Description of first aid measures
- General information:
  Symptoms of poisoning may even occur several hours after the accident; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
  No further relevant information available.
Advisory for firefighters

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.

· Environmental precautions: Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents.

· 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.

7 Handling and storage

· Handling:
  · Precautions for safe handling:
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.

  · Information about fire - and explosion protection:
    Keep ignition sources away - Do not smoke.
    Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Storage:
  · Requirements to be met by storerooms and receptacles: No special requirements.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions: Keep container tightly sealed.
  · Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

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

· Control parameters

  · Ingredients with limit values that require monitoring at the workplace:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

  · DNELs

<table>
<thead>
<tr>
<th>Substance</th>
<th>Dermal long term DNEL</th>
<th>Inhalative long term DNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene</td>
<td>108 mg/kg/d (General Population)</td>
<td>14,8 mg/m³ (General Population)</td>
</tr>
<tr>
<td></td>
<td>180 mg/kg/d (Workers)</td>
<td>77 mg/m³ (Workers)</td>
</tr>
</tbody>
</table>
### PNECs

<table>
<thead>
<tr>
<th>Substance</th>
<th>PNEC (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene</td>
<td></td>
</tr>
<tr>
<td>PNEC STP</td>
<td>6.58 mg/l (water treatment plant)</td>
</tr>
<tr>
<td>PNEC aqua</td>
<td>327 ug/l (freshwater)</td>
</tr>
<tr>
<td>PNEC sediment</td>
<td>327 ug/l (marine water)</td>
</tr>
<tr>
<td>PNEC soil</td>
<td>12.46 mg/kg (freshwater)</td>
</tr>
<tr>
<td></td>
<td>12.46 mg/kg (marine water)</td>
</tr>
<tr>
<td></td>
<td>2.31 mg/kg (Soil)</td>
</tr>
</tbody>
</table>

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

### Exposure controls

- **Personal protective equipment:**

### General protective and hygienic measures:

- 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 skin.
- Avoid contact with the eyes and skin.

### Respiratory protection:

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

### Protection of hands:

**Protective gloves**

The glove material has to be impermeable and resistant to the product/substance/preparation.

Due to missing tests no recommendation to the glove material can be given for the product/substance/preparation/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.

**Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

**Tightly sealed goggles**
Trade name: Transpoxy Intermediate 2.19 pack B

9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>137 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>27 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>500 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</td>
</tr>
<tr>
<td>Lower</td>
<td>1.1 Vol %</td>
</tr>
<tr>
<td>Upper</td>
<td>7.0 Vol %</td>
</tr>
<tr>
<td>Vapour pressure at 20 °C</td>
<td>6.7 hPa</td>
</tr>
<tr>
<td>Density at 20 °C:</td>
<td>0.931 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Dynamic: Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solvent content:</td>
<td>VOC (EC) 358.2 g/l</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
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Trade name: Transpoxy Intermediate 2.19 pack B

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

11 Toxicological information

- Information on toxicological effects
- Acute toxicity
- LD/LC50 values relevant for classification:
  1330-20-7 xylene

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50</td>
<td>LC50/ 96 hr (static)</td>
<td>LD50</td>
</tr>
<tr>
<td></td>
<td>&gt;2000 mg/kg (rat)</td>
<td>2.6 mg/l (Rainbow trout (Oncorhynchus mykiss)) (OESO 203 or equivalent)</td>
<td>&gt;2000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion or irritation
    Irritant to skin and mucous membranes.
  - Serious eye damage or eye irritation
    Strong irritant with the danger of severe eye injury.
  - Respiratory / skin sensitization
    No sensitising effects known.
- Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Harmful
  Irritant

12 Ecological information

- Toxicity
  - Aquatic toxicity:
    1330-20-7 xylene

<table>
<thead>
<tr>
<th></th>
<th>EC 50 (48 hr)</th>
<th>EC 50 (72 hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-10 mg/l (daphnia)</td>
<td>1-10 mg/l (Algae)</td>
</tr>
</tbody>
</table>

- Persistence and degradability
  No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential
  No further relevant information available.
- Mobility in soil
  No further relevant information available.
- 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.
- Results of PBT and vPvB assessment
- PBT: Not applicable.

(Contd. on page 7)
Trade name: Transpoxy Intermediate 2.19 pack B

- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

### 13 Disposal information

- Waste treatment methods
  - Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

### 14 Transportation information

- UN-Number: UN1307
- ADR, IMDG, IATA
- UN proper shipping name
  - ADR
  - IMDG, IATA: XYLENES mixture
- Transport hazard class(es)
  - ADR, IMDG, IATA
    - Class: 3 Flammable liquids.
    - Label: 3
  - Packing group: III
  - Environmental hazards:
    - Marine pollutant: No
  - Special precautions for user:
    - Danger code (Kemler): Warning: Flammable liquids.
    - EMS Number: F-E,S-D
    - Stowage Category: A
  - 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

(Contd. on page 8)
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<table>
<thead>
<tr>
<th>· Tunnel restriction code</th>
<th>D/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>· IMDG</td>
<td></td>
</tr>
<tr>
<td>· Limited quantities (LQ)</td>
<td>5L</td>
</tr>
<tr>
<td>· Excepted quantities (EQ)</td>
<td>E1</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
<tr>
<td>· UN &quot;Model Regulation&quot;:</td>
<td>UN 1307 XYLENES MIXTURE, 3, III</td>
</tr>
</tbody>
</table>

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  The product is classified and labelled according to the Globally Harmonised System (GHS).

· GHS label elements
  The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms
  ![GHS02](image) ![GHS05](image)

· Signal word Danger

· Hazard-determining components of labelling:
  reaction product based on fatty acids and polyethyleneamine xylene

· Hazard statements
  Flammable liquid and vapour.
  Causes skin irritation.
  Causes serious eye damage.

· Precautionary statements
  Keep away from heat/sparks/open flames/hot surfaces – No smoking.
  Use explosion-proof electrical/ ventilating/lighting equipment.
  IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Immediately call a POISON CENTER/doctor.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU
  · Named dangerous substances - ANNEX I None of the ingredients is listed.
  · Seveso category P5c FLAMMABLE LIQUIDS
  · Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
  · Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
  · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
16 Other information

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

Abbreviations and acronyms:
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- 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)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity - oral – Category 4
- Skin Irrit. 2: Skin corrosion or irritation – Category 2
- Eye Dam. 1: Serious eye damage or eye irritation – Category 1