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

1.1 Product identifier

- Trade name: Transpoxy Masterbond
- Article number: 4.67 B

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: KOSSAN PAINT (M) SDN. BHD.
  1,Jalan Koporat 1/KU9, Taman Perindustrian Meru, 42200 Kapar, Selangor Darul Ehsan, Malaysia.

Further information obtainable from:
Product safety department.
lkheong@kossanpaint.com.my

1.4 Emergency telephone number:

Manufacturer/supplier
603-33922799

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
  Repr. 2 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

- GHS05 corrosion
  Skin Corr. 1B H314 Causes severe skin burns and eye damage.
  Eye Dam. 1 H318 Causes serious eye damage.

- GHS09 environment
  Aquatic Acute 1 H400 Very toxic to aquatic life.
  Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

(Contd. on page 2)
GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC C Corrosive
- Hazard description:
  C Corrosive
  N Dangerous for the environment

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 10 Flammable.
R 21/22 Harmful in contact with skin and if swallowed.
R 34 Causes burns.
R 43 May cause sensitisation by skin contact.
R 62 Possible risk of impaired fertility.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 63 Possible risk of harm to the unborn child.

- Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements
- Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- Code letter and hazard designation of product:
  C Corrosive
  N Dangerous for the environment

- Hazard-determining components of labelling:
  3-aminomethyl-3,5,5-trimethylcyclohexylamine
  4-nonylphenol, branched

- Risk phrases:
  10 Flammable.
  21/22 Harmful in contact with skin and if swallowed.
  34 Causes burns.
  43 May cause sensitisation by skin contact.
  62 Possible risk of impaired fertility.
  50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  63 Possible risk of harm to the unborn child.

- Safety phrases: 1/2 Keep locked up and out of the reach of children.

- 2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

(Contd. on page 3)
SECTION 3: Composition/information on ingredients

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

· Dangerous components:

| CAS: 84852-15-3 | 4-nonylphenol, branched | Xn R22-62-63; N R50/53 |
| CAS: 2855-13-2 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine | Xn R21/22; Xi R43 |
| CAS: 1330-20-7 | xylene | Xn R20/21; Xi R38 |
| CAS: 78-83-1 | butanol | Xi R37/38-41 |
| CAS: 90-72-2 | 2,4,6-tris(dimethylaminomethyl)phenol | Xn R22; Xi R36/38 |

· 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.

· 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:
Call for a doctor immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

· 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
  - Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.
  - For safety reasons unsuitable extinguishing agents: Water with full jet

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.

- 5.3 Advice for firefighters
  - Protective equipment: No special measures required.

SECTION 6: Accidental release measures

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

- 6.2 Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.

- 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Use neutralising agent.
  Dispose contaminated material as waste according to item 13.
  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
  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.

- 7.2 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.

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

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>WEL Short-term value</th>
<th>WEL Long-term value</th>
<th>Sk: BMGV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene (2.5-10%)</td>
<td>441 mg/m³, 100 ppm</td>
<td>220 mg/m³, 50 ppm</td>
<td>BMGV 650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>WEL Short-term value</th>
<th>WEL Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-83-1 butanol (2.5-10%)</td>
<td>231 mg/m³, 75 ppm</td>
<td>154 mg/m³, 50 ppm</td>
</tr>
</tbody>
</table>

- Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Substance</th>
<th>BMGV 650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene (2.5-10%)</td>
<td></td>
</tr>
</tbody>
</table>

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

8.2 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.
    - Do not inhale gases / fumes / aerosols.
    - 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/ 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.

- 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.
### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**General Information**

- **Appearance:** Liquid
- **Colour:** Amber coloured
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.

**Change in condition**

- **Melting point/freezing point:** Undetermined.
- **Initial boiling point and boiling range:** Undetermined.

- **Flash point:** 27 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 500 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not self-igniting.
- **Explosion properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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

- **Vapour pressure:** Not determined.
- **Density at 20 °C:** 0.92 g/cm³
- **Relative density**
- **Vapour density**
- **Evaporation rate**
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.

#### 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
  Harmful if swallowed.
- LD/LC50 values relevant for classification:
  1330-20-7 xylene
  - Oral LD50: 4300 mg/kg (rat)
  - Dermal LD50: 2000 mg/kg (rabbit)
- Primary irritant effect:
- Skin corrosion/irritation
  Causes severe skin burns and eye damage.
- Serious eye damage/irritation
  Causes serious eye damage.
- Respiratory or skin sensitisation
  May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity
    Based on available data, the classification criteria are not met.
  - Carcinogenicity
    Based on available data, the classification criteria are not met.
  - Reproductive toxicity
    Suspected of damaging fertility. Suspected of damaging the unborn child.
- STOT-single exposure
  Based on available data, the classification criteria are not met.
- STOT-repeated exposure
  Based on available data, the classification criteria are not met.
- Aspiration hazard
  Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 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.
- Ecotoxicological effects:
- Remark: Very toxic for fish
- Additional ecological information:
- General notes:
  Must not reach sewage water or drainage ditch undiluted or unneutralised.
  Also poisonous for fish and plankton in water bodies.
  Very toxic for aquatic organisms
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
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.

- **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 (4-nonylphenol, branched), MARINE POLLUTANT
  - IATA PAINT

- **14.3 Transport hazard class(es)**
  - ADR, IMDG

  ![Flammable liquid symbol]

  - **Class** 3 Flammable liquids.

  - IATA

  ![Flammable liquid symbol]

  - **Class** 3 Flammable liquids.

- **14.4 Packing group**
  - ADR, IMDG, IATA III

- **14.5 Environmental hazards:**
  - Product contains environmentally hazardous substances: 4-nonylphenol, branched
  - Marine pollutant: No
  - Special marking (ADR): Symbol (fish and tree)

- **14.6 Special precautions for user**
  - Warning: Flammable liquids.
  - EMS Number: F-E-S-E

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

(Contd. on page 9)
SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - Seveso category
    - E1 Hazardous to the Aquatic Environment
    - P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- 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.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H322 Harmful if inhaled.
  - H332 Harmful if inhaled.
  - H361/ld Suspected of damaging fertility. Suspected of damaging the unborn child.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.
  - H412 Harmful to aquatic life with long lasting effects.
  - R10 Flammable.
  - R20/21 Harmful by inhalation and in contact with skin.
  - R21/22 Harmful in contact with skin and if swallowed.
  - R34 Causes burns.
  - R36/38 Irritating to eyes and skin.
  - R37/38 Irritating to respiratory system and skin.
  - R38 Irritating to skin.
  - R41 Risk of serious damage to eyes.
  - R43 May cause sensitisation by skin contact.
  - R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - R62 Possible risk of impaired fertility.
  - R63 Possible risk of harm to the unborn child.

(CRtd. on page 8)
R67 Vapours may cause drowsiness and dizziness.

- **Department issuing SDS:** Product safety department.
- **Contact:** Mr. S.K. Lim
- **Abbreviations and acronyms:**
  - 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
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Flum. Liq. 3: Flammable liquids – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Rep. 2: Reproductive toxicity – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
  - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.