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

1.1 Product identifier
- Trade name: POLYFLEX 422
- Article number: PU0422/1

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: Den Braven France s.a.r.l.
  Zone Industrielle du Meux, BP 20114
  60880 LE MEUX Cédex
  FRANCE
  ohuss@denbraven.fr

1.4 Emergency telephone number: During normal opening times: +33 3 44 91 68 68

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

- Information concerning particular hazards for human and environment:
  The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- 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 Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Additional information:
  Contains isocyanates. May produce an allergic reaction.
  Safety data sheet available on request.

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

SECTION 3: Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 1330-20-7</td>
</tr>
<tr>
<td>EINECS: 215-535-7</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 2)
SECTION 4: First aid measures

4.1 Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

SECTION 5: Firefighting measures

5.1 Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Not required.

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

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
- No special measures required.
- Ensure good ventilation/exhaustion at the workplace.

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: Do not store together with oxidizing and acidic materials.
  - Further information about storage conditions: Protect from heat and direct sunlight.

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:
  
  **1330-20-7 xylene (2.5-10%)**
  
  WEL Short-term value: 441 mg/m³, 100 ppm
  Long-term value: 220 mg/m³, 50 ppm
  Sk; BMGV

- Ingredients with biological limit values:
  
  **1330-20-7 xylene (2.5-10%)**
  
  BMGV 650 mmol/mol creatinine
  Medium: urine
  Sampling time: post shift
  Parameter: methyl hippuric acid

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

8.2 Exposure controls

- Personal protective equipment:
  
  - General protective and hygienic measures: Do not eat, drink, smoke or sniff while working.
  - Respiratory protection: Not required.
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    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.

  - Nitrile rubber, NBR

- Penetration time of glove material
  
  The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be
  observed.

- Eye protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information
  
  - Form: Pasty
  - Colour: Various colours
  - Odour: Characteristic
  - Flash point: > 61 °C
  - Ignition temperature: 500 °C
  - Danger of explosion: Product does not present an explosion hazard.
  
  - Explosion limits:
    Lower: Not determined.
    Upper: Not determined.
### SECTION 10: Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with alcohols, amines, aqueous acids and alkalis.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  - Hydrogen chloride (HCl)
  - Hydrogen cyanide (prussic acid)
  - Isocyanate
  - Carbon monoxide and carbon dioxide
  - Sulphur oxides (SOx)

  During the crosslinking / polymerization: Carbon Dioxide

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7 xylene</td>
</tr>
<tr>
<td>Oral LD50 4300 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50 2000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**
  The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
  When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
  People who have a history of asthma, skin sensitization or respiratory disease should not handle this mixture.

### SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation** Smaller quantities can be disposed of with household waste.

**European waste catalogue**

08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

- **Uncleaned packaging**
  - **Recommendation**: Disposal must be made according to official regulations.

### SECTION 14: Transport information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1 UN-Number</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>14.3 Transport hazard class(es)</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>ADR, ADN, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>14.4 Packing group</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>ADR, IMDG, IATA</strong></td>
<td>Void</td>
</tr>
<tr>
<td><strong>14.5 Environmental hazards:</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>14.6 Special precautions for user</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;</strong>:</td>
<td>-</td>
</tr>
</tbody>
</table>

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - No further relevant information available.

- **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.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H332 Harmful if inhaled.
  - R10 Flammable.
  - R20/21 Harmful by inhalation and in contact with skin.
  - R38 Irritating to skin.

- **Department issuing MSDS:** Product safety department
- **Contact:** Mr. Huss

- **Abbreviations and acronyms:**
  - 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 Harmonized 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
  - Flam. Liq. 3: Flammable liquids, Hazard Category 3
  - Acute Tox. 4: Acute toxicity, Hazard Category 4
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2