1 Identification of substance

· Trade name: Capa® 2085

· Application of the substance / the preparation
Automotive industry
Polyurethane
Adhesives

· Manufacturer/Supplier:
Perstorp UK Limited
Baronet Road
Warrington
Cheshire WA4 6HA
United Kingdom
Tel. +44 (0) 1925 643500
Fax. +44 (0) 1925 232207
Web: www.perstorp.com
E-mail: polyolinfo@perstorp.com

Perstorp Polyols Inc
600 Matzinger Road
Toledo, Ohio 43612
Tel. 419-729-5448,
800-537-0280
Fax. 419-729-3291

· Information department: Corporate EHSQ Perstorp Holding AB.
· Emergency information:
(United States) - CHEMTREC 1-800-424-9300.
(Int.) +46 8 337043 (Emergency Response Center, Sweden)

2 Composition/Data on components

· Chemical components:

<table>
<thead>
<tr>
<th>CAS NO.</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>36890-68-3</td>
<td>2-Oxepanone, polymer with 2,2'-oxybis[ethanol]</td>
<td>&gt;99%</td>
</tr>
</tbody>
</table>

3 Hazards identification

· Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· NFPA ratings (scale 0 - 4)

Health = 1
Fire = 1
Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 1 Health = 1
FIRE 1 Fire = 1
REACTIVITY 0 Reactivity = 0

4 First aid measures

· General information: Immediately remove any clothing soiled by the product.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
5 Fire fighting measures

- Suitable extinguishing agents:
  - Water
  - Foam
  - Carbon dioxide
  - Fire-extinguishing powder

- Special hazards caused by the material, its products of combustion or resulting gases:
  - Formation of toxic gases is possible during heating or in case of fire.
  - In case of fire, the following can be released:
    - Carbon monoxide (CO)
    - Monomer (2-Oxepanone, Hexan-6-Olide, CAS 502-44-3)

- Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Person-related safety precautions: Ensure adequate ventilation
- Measures for environmental protection:
  - Do not allow to enter sewers/surface or ground water.
  - Prevent from spreading (e.g. by damming-in or oil barriers).
- Measures for cleaning/collection:
  - Absorb liquid components with liquid-binding material.
  - Pick up mechanically.

7 Handling and storage

- Information for safe handling: Keep away from heat and direct sunlight.

- Storage:
  - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
  - Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection

- Components 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.
- Additional information: The lists that were valid during the creation were used as basis.
- Personal protective equipment:
  - Breathing equipment: Not necessary if room is well-ventilated.
  - Protection of hands:

- Material of gloves
  - Protective gloves
  - PVC gloves
  - Chloroprene rubber, CR
  - Butyl rubber, BR
Material Safety Data Sheet
acc. to ISO/DIS 11014

Trade name: **Capa® 2085**

- **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:**
  
  ![Safety glasses]

**9 Physical and chemical properties**

- **General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Paste</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>25 - 30°C (77 - 86°F)</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Flash point</td>
<td>275°C (527°F)</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>approx 200 °C (approx 392 °F)</td>
</tr>
<tr>
<td>Density at 30°C (86 °F)</td>
<td>1.05 g/cm³</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Segregation coefficient (n-octanol/water)</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic at 60 °C (140 °F)</td>
<td>120 mPas</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**
  To avoid thermal decomposition do not overheat.

- **Materials to be avoided:**
  Avoid contact with acids.
  Avoid contact with bases.

- **Dangerous products of decomposition:**
  Possible decomposition and release of monomer at temperatures above 200°C

**11 Toxicological information**

- **Acute toxicity:**

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol]</td>
<td>Oral [LD50] &gt;2000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
Trade name: Capa® 2085

Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations.

12 Ecological information

- Information about elimination (persistence and degradability):
  36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol]
  Biotic degradation >60 % (STURM)

- Other information: The product is readily biodegradable.

- Ecotoxicological effects:
  Aquatic toxicity:
  36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol]
  EC50/96 h 80-82 mg/l (fish)
  NOEC (16hr) 330-530 mg/l (bacteria)

- Remark: The product is not classified as dangerous to the environment.

13 Disposal considerations

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

14 Transport information

- DOT regulations: -
- Hazard class: -
- Land transport ADR/RID (cross-border): -
- ADR/RID class: -
- Maritime transport IMDG: -
- IMDG Class: -
- Air transport ICAO-TI and IATA-DGR: -
- ICAO/IATA Class: -

- Transport/Additional information: Not dangerous according to the above specifications.

15 Regulations

- Sara
  - Section 355 (extremely hazardous substances):
    None of the ingredient is listed.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol]
- Proposition 65
  - Chemicals known to cause cancer:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
Trade name: Capa® 2085

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

- **Carcinogenicity categories**
  - **EPA (Environmental Protection Agency)**
    None of the ingredients is listed.
  - **IARC (International Agency for Research on Cancer)**
    None of the ingredients is listed.
  - **NTP (National Toxicology Program)**
    None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    None of the ingredients is listed.
  - **MAK (German Maximum Workplace Concentration)**
    None of the ingredients is listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)**
    None of the ingredients is listed.
  - **Canadian Domestic Substance List (DSL)**
    All ingredients are listed.
  - **Chinese Chemical Inventory of Existing Chemical Substances**
    All ingredients are listed.
  - **Japan Existing and New chemical Substance List (ENCS)**
    7-786
  - **Korea Existing Chemical Inventory**
    36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol] KE-27510

- **Product related hazard informations:**
  Observe the general safety regulations when handling chemicals.
  The substance is not subject to classification according to the sources of literature known to us.

**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.

- **Department issuing MSDS:** Corporate EHSQ Perstorp Holding AB