1 Identification of substance

- Trade name: Capa® 2209
- Product status:
- Application of the substance / the preparation
  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:
  27102-04-1 2-Oxepanone homopolymer, 1,2-ethanediyl ester 99%

3 Hazards identification

- Classification system:
- NFPA ratings (scale 0 - 4)
  Health = 0
  Fire = 1
  Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  HEALTH 0 Health = 0
  FIRE 1 Fire = 1
  REACTIVITY 0 Reactivity = 0

4 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.

(Contd. on page 2)
5 Fire fighting measures

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

- Special hazards caused by the material, its products of combustion or resulting gases:
  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: Avoid formation of dust.
- Measures for environmental protection:
  Inform respective authorities in case of seepage into water course or sewage system.
- Measures for cleaning/collecting:
  Pick up mechanically.
  Dispose of the collected material according to regulations.
  Clean the affected area carefully; suitable cleaners are:
  Water

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

- Additional information about design of technical systems: No further data; see item 7.
- Components with limit values that require monitoring at the workplace:
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>TLV</th>
<th>Short-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>27102-04-1</td>
<td>2-Oxepanone homopolymer, 1,2-ethanediyl ester</td>
<td></td>
<td>3 resp., 10 inha. dust mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Particles not otherwise classified</td>
</tr>
</tbody>
</table>

- Additional Occupational Exposure Limit Values for possible hazards during processing:
  - PNOC (Particles Not Otherwise Classified):
    - USA TLV: - 3 mg/m³ respirable dust; - 10 mg/m³ inhalable dust
    - USA OSHA: - 5 mg/m³ respirable dust; - 15 mg/m³ inhalable dust

- Additional information: The lists that were valid during the creation were used as basis.
- Personal protective equipment:
  - General protective and hygienic measures:
    The usual precautionary measures for handling chemicals should be followed.
  - Breathing equipment: Not necessary if room is well-ventilated.
Trade name: Capa® 2209

- Protection of hands:
  - Protective gloves

- Material of gloves
  - PVC gloves
  - Chloroprene rubber, CR
  - Butyl rubber, BR

- 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
  - Form: Solid material
  - Color: White
  - Odor: uncharacteristic

- Change in condition
  - Melting point/Melting range: 40 °C (104 °F)
  - Boiling point/Boiling range: Undetermined.

- Flash point: 275 °C (527 °F)

- Danger of explosion: Product does not present an explosion hazard.

- Density at 20 °C (68 °F): 1.07 g/cm³

- Solubility in / Miscibility with Water: Insoluble.

- Segregation coefficient (n-octanol/water): Undetermined.

- Solvent content:
  - Organic solvents: 0.0 %

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.
  - Carbon monoxide
### 11 Toxicological information

- Acute toxicity:
  - LD/LC50 values that are relevant for classification: Not available.
- Primary irritant effect:
  - on the skin: Not available.
  - on the eye: Not available.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological information

- Ecotoxic effects:
- Other information:
  Based on similar products, this product is not expected to be hazardous for the environment

### 13 Disposal considerations

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

### 14 Transport information

<table>
<thead>
<tr>
<th>DOT regulations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class: -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land transport ADR/RID (cross-border):</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID class: -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maritime transport IMDG:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG Class: -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air transport ICAO-TI and IATA-DGR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAO/IATA Class: -</td>
</tr>
</tbody>
</table>

- 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):
    - 27102-04-1 2-Oxepanone homopolymer, 1,2-ethanediyl ester: Polymer, exempted
    - 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® 2209**

- **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)** None of the ingredients is listed.
  - **Chinese Chemical Inventory of Existing Chemical Substances** All ingredients are listed.
  - **Japan Existing and New chemical Substance List (ENCS)** 7-786

- **Product related hazard informations:**
  The substance is not subject to classification according to the sources of literature known to us.
  Caution - substance not yet fully tested.

**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