1 Identification of substance

- **Trade name:** Capa® 2205
- **Application of the substance / the preparation**
  Polyurethane
  Automotive industry
  Binder
  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:** Void

<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>≥99%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Information pertaining to particular dangers for man and environment:**
- **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
  Fire = 1
  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.
Trade name: **Capa® 2205**

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

### 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:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
  - Pick up mechanically.
  - 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

- **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:**

  ![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.
Trade name: **Capa® 2205**

- **Eye protection:** Safety glasses

### 9 Physical and chemical properties

- **General Information**
  - **Form:** Solid (wax)
  - **Color:** White
  - **Odor:** Odorless

- **Change in condition**
  - **Melting point/Melting range:** 40-50 °C (104-122 °F)
  - **Boiling point/Boiling range:** Undetermined.

- **Flash point:** 275 °C (527 °F)

- **Ignition temperature:**

- **Decomposition temperature:** 200 °C (392 °F)

- **Auto igniting:** Product is not selfigniting.

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

- **Density at 55 °C (131 °F):** 1.07 g/cm³

- **Solubility in / Miscibility with Water:** Insoluble.

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

- **Viscosity:**
  - **Dynamic at 60 °C (140 °F):** 475 mPas

- **Solvent content:**

- **Solids content:** ≥ 99.0 %

### 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 reactions**
  - No dangerous reactions known.

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

### 11 Toxicological information

- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**
    - Oral LD50 >2000 mg/kg (rat)

(Contd. on page 4)
Material Safety Data Sheet
acc. to ISO/DIS 11014

07/22/2009 Reviewed on 07/21/2009

Trade name: **Capa® 2205**

- 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 internally approved calculation methods for preparations:
  - 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.

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**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.
- Ecotoxic 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 harmful to fish, but shows less effects to aquatic organisms.

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**13 Disposal considerations**

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

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**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.

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**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):
    - All ingredients are listed.
**Trade name:** Capa® 2205

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

### 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 USA