1 Identification of substance

- **Trade name:** Capa® 3022
- **Application of the substance / the preparation**
  Polyurethane
  Paints
  Construction
  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:**
  56-81-5 1,2,3-propanetriol, glycerol <20%
  36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol] >80%

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)**
  ![NFPA ratings](image)
  - Health = 1
  - Fire = 1
  - Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
  ![HMIS-ratings](image)
  - Health = 1
  - Fire = 1
  - Reactivity = 0
Trade name: Capa® 3022

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.
- 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.
- Additional information: The product is combustible

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:
  - Prevent from spreading (e.g. by damming-in or oil barriers).
  - Do not allow to enter sewers/month or ground water.
- Measures for cleaning/collecting:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - 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:
  - 56-81-5 1,2,3-propanetriol, glycerol
    - PEL: 15* 5** mg/m³
    - TLV: 10* ppm
    - *total dust **respirable fraction
- 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.
Trade name: Capa® 3022

- **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:** Viscous
  - **Color:** Colorless
  - **Odor:** Odorless

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Undetermined.

- **Flash point:** 160°C (320°F)

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

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

- **Vapor pressure at 20°C (68°F):** <2 hPa (<2 mm Hg)

- **Density:** 1.1 g/cm³

- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

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

- **Viscosity:**
  - Dynamic at 40°C (104°F): 100 mPas

### 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:
  - LD/LC50 values that are relevant for classification:
    - 36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol]
      Oral | LD50 | >2000 mg/kg (rat)
    - 56-81-5 1,2,3-propanetriol, glycerol
      Oral | LD50 | > 4000 mg/kg (rat)
  - 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.

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)
      - 56-81-5 1,2,3-propanetriol, glycerol
        EC50/24 h | > 10000 mg/l (daphnia)
        EC50/96 h | > 10000 mg/l (algae)
        LC50/24 h | > 5000 mg/l (fish)
  - 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:  -
Trade name: **Capa® 3022**

- **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):**
  - All ingredients are listed.

- **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)**
    56-81-5 1,2,3-propanetriol, glycerol 2-242

  - **Korea Existing Chemical Inventory**
    36890-68-3 2-Oxepanone, polymer with 2,2'-oxybis[ethanol] KE-27510
Trade name: Capa® 3022

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.

National regulations:

Technical instructions (air):

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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