## 1 Identification

- **Product identifier**
  - **Trade name:** PureClin SAN
  - **Application of the substance / the mixture**
    - Dry-cleaning
    - Detergent

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - SEITZ GmbH
    - Gutenbergstrasse 1 - 3
    - 65830 Kriftel / Germany
    - Tel. + 49(0) 6192-9948-0
    - Fax + 49(0) 6192-9948-99
    - order@seitz24.com
    - www.seitz24.com
  - **Information department:**
    - CHEM-TEL Inc.
    - 1305 North Florida Ave
    - Tampa Florida 33602
  - **Emergency telephone number:** 1-800-255-3924

## 2 Hazard(s) identification

- **Classification of the substance or mixture**
  - ![GHS05 Corrosion](image)
  - **Eye Dam. 1 H318** Causes serious eye damage.
  - ![GHS07](image)
  - **Skin Irrit. 2 H315** Causes skin irritation.

- **Label elements**
  - **GHS label elements**
    - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - ![GHS05](image)

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - docusate sodium
  - poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates
  - isodidecanol, ethoxylated
  - quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

- **Hazard statements**
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
3 Composition/information on ingredients

- Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 68551-17-7</td>
<td>alkanes, C10-13-iso-</td>
<td>25 - 50%</td>
</tr>
<tr>
<td>CAS: 577-11-7</td>
<td>docusate sodium</td>
<td>&lt; 15%</td>
</tr>
<tr>
<td>CAS: 68511-37-5</td>
<td>poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>CAS: 69011-36-5</td>
<td>isotridecanol, ethoxylated</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>CAS: 34590-94-8</td>
<td>dipropylene glycol monomethyl ether</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>CAS: 68424-85-1</td>
<td>quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>CAS: 78-96-6</td>
<td>1-aminopropan-2-ol</td>
<td>&lt; 2.5%</td>
</tr>
</tbody>
</table>

- Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of 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 rinse with water.
    If skin irritation continues, consult a doctor.
  - After eye contact
    Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
  - Information for doctor
  - Most important symptoms and effects, both acute and delayed
    Eye damage
    Skin irritation
  - Indication of any immediate medical attention and special treatment needed
    Symptomatic treatment

(Contd. on page 3)
5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents
  Water with full jet.
- Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment:
  Do not inhale explosion gases or combustion gases.
  Wear self-contained respiratory protective device.
- Additional information
  Cool endangered receptacles with water spray.
  Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
  Do not breathe gases/ vapours.
  Avoid contact with eyes and skin.
  Keep away from ignition sources
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Send for recovery or disposal in suitable receptacles.
- 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.

7 Handling and storage

- Handling
  Precautions for safe handling
  Keep away from heat and direct sunlight.
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
  Avoid contact with eyes and skin.
  Information about protection against explosions and fires:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- Conditions for safe storage, including any incompatibilities
- Storage
  Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
  Information about storage in one common storage facility: Store away from foodstuffs.
  Further information about storage conditions:
  Protect from heat and direct sunlight.
Trade name: PureClin SAN

Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
Protect from frost.
Time of storage: max. 24 month

Specific end use(s) Dry-cleaning

* 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>CAS: 34590-94-8 dipropylene glycol monomethylether</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEL (USA)</strong></td>
</tr>
<tr>
<td><strong>REL (USA)</strong></td>
</tr>
<tr>
<td><strong>TLV (USA)</strong></td>
</tr>
<tr>
<td><strong>EL (Canada)</strong></td>
</tr>
<tr>
<td><strong>EV (Canada)</strong></td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment
- General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Do not eat, drink, smoke or sniff while working.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
- Breathing equipment:
Use suitable respiratory protective device in case of insufficient ventilation (exceeding the workplace limit values, formation of aerosols).
- Protection of hands:
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Material of gloves
Nitrile rubber, NBR
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
Trade name: PureClin SAN

therefore to be checked prior to the application.

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

- **Eye protection**: Tightly sealed goggles.

- **Body protection**: Protective work clothing.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Color:** Light yellow
    - **Odor:** Product specific
    - **Odor threshold:** No further relevant information available.
  - **pH-value (100 g/l) at 20 °C (68 °F):** ~ 7.4
  - **Change in condition**
    - **Melting point/Melting range:** not applicable
    - **Boiling point/Boiling range:** undetermined
  - **Flash point:** > 95 °C (> 203 °F) (EN 22719)
  - **Flammability (solid, gaseous)**
    - No further relevant information available.
  - **Ignition temperature:** No further relevant information available.
  - **Decomposition temperature:** No further relevant information available.
  - **Auto igniting:** Product is not selfigniting.
  - **Danger of explosion:**
    - Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
  - **Explosion limits:**
    - **Lower:** No further relevant information available.
    - **Upper:** No further relevant information available.
  - **Oxidizing properties**
    - No further relevant information available.
  - **Vapor pressure:**
    - No further relevant information available.
  - **Density at 20 °C (68 °F):** ~ 0.91 g/cm³ (ISO 2811)
  - **Relative density**
    - No further relevant information available.
  - **Vapor density**
    - No further relevant information available.
  - **Evaporation rate**
    - No further relevant information available.
  - **Solubility in / Miscibility with Water:** Fully miscible
  - **Partition coefficient (n-octanol/water):** No further relevant information available.
  - **Viscosity:**
    - **dynamic:** No further relevant information available.
    - **kinematic at 40 °C (104 °F):** > 20.5 mm²/s

(Contd. on page 6)
Safety Data Sheet  
acc. to OSHA HCS

Printing date 01/31/2017 Reviewed on 01/31/2017

Trade name: PureClin SAN

10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: Stable under normal ambient conditions. No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: Strong oxidizing agents
- **Hazardous decomposition products**: No dangerous decomposition products known

11 Toxicological information

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

<table>
<thead>
<tr>
<th>CAS</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>68551-17-7 alkanes, C10-13-iso-</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>577-11-7 docusate sodium</td>
<td>&gt; 3000 mg/kg</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>68511-37-5 poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>69011-36-5 isotridecanol, ethoxylated</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>34590-94-8 dipropylene glycol monomethylether</td>
<td>&gt; 5000 mg/kg</td>
<td>9500 mg/kg</td>
</tr>
<tr>
<td>68424-85-1 quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>&gt; 300 - 2000 mg/kg</td>
<td>(OECD 401)</td>
</tr>
<tr>
<td>78-96-6 1-aminopropan-2-ol</td>
<td>4260 mg/kg</td>
<td>1851 mg/kg</td>
</tr>
</tbody>
</table>

- **on the skin**: Causes skin irritation.
- **on the eye**: Causes serious eye damage.
- **Sensitization**: Based on available data, the classification criteria are not met.
Trade name: PureClin SAN

- **Additional toxicological information:**
  - **Carcinogenic categories**
    - IARC (International Agency for Research on Cancer)
      None of the ingredients is listed.
    - NTP (National Toxicology Program)
      None of the ingredients is listed.
    - OSHA-Ca (Occupational Safety & Health Administration)
      None of the ingredients is listed.

### 12 Ecological information

#### Toxicity

| CAS: 68511-37-5 poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates |
|---|---|---|
| EC50 | 0.1 - 1 mg/l (Aquatic invertebrates) (Daphnia magna; 48h) |
| LC50 | 0.1 - 1 mg/l (Fish) (Brachydanio rerio; 96h) |

| CAS: 69011-36-5 isotridecanol, ethoxylated |
|---|---|
| EC50 | > 1 mg/l (Aquatic plants, algae) (72 h; Desmodesmus subspicatus; OECD 201) |
| | > 1 mg/l (Aquatic invertebrates) (48 h; Daphnia magna; OECD 202) |
| LC50 | > 1 mg/l (Fish) (96 h; Cyprinus carpio; OECD 203) |
| NOEC | 1.36 mg/l (Aquatic invertebrates) (21 d; Daphnia magna) |

| CAS: 34590-94-8 dipropylene glycol monomethylether |
|---|---|
| EC50 | > 969 mg/l (Aquatic plants, algae) (96 h; Scenedesmus capricornutum) |
| | 1919 mg/l (Aquatic invertebrates) (48 h; Daphnia) |
| LC50 | > 10000 mg/l (Fish) (96 h; Pimephales promelas) |

| CAS: 68424-85-1 quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides |
|---|---|
| EC50 | 0.025 mg/l (Aquatic plants, algae) (72 h; Selenastrum capricornutum; OECD 201) |
| LC50 | 0.85 mg/l (Fish) (96 h; Oncorhynchus mykiss; OECD 203) |
| NOEC | 0.025 mg/l (Aquatic invertebrates) (21 d; Daphnia; OECD 211) |

| CAS: 78-96-6 1-aminopropan-2-ol |
|---|---|
| EC50 | 32.7 mg/l (Aquatic plants, algae) (Scenedesmus subspicatus; 72h) |
| | 108.8 mg/l (Aquatic invertebrates) (Daphnia magna; 48h) |
| LC50 | > 215–< 464 mg/l (Fish) (Leuciscus idus; 96h) |

*Persistence and degradability* No further relevant information available.

*Behavior in environmental systems:*

*Bioaccumulative potential* No further relevant information available.

*Mobility in soil* No further relevant information available.

*Additional ecological information:

*General notes:*
Do not allow product to reach ground water, water course or sewage system.
The surfactant(s) contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Contaminated adsorbent, soil, water must be disposed of in a permitted hazardous waste management facility. Recovered products may be reused, reprocessed or incinerated or must be treated in a permitted hazardous waste management facility. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, The Clean Water Act, RCRA, as well as applicable Federal, State, and local Regulations regarding disposal.

14 Transport information

- UN-Number Void
- DOT Void
- ADR, IMDG, IATA UN3082

- UN proper shipping name
  - DOT Void
  - ADR 3082 Environmentally hazardous substances, liquid, n.o.s. (quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates)
  - IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates), MARINE POLLUTANT
  - IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates)
### Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th>Class</th>
<th>ADR</th>
<th>IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Void</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Class
- ADR: 9 (M6) Miscellaneous dangerous substances and articles
- IMDG, IATA: 9 Miscellaneous dangerous substances and articles

#### Label
- ADR, IMDG, IATA: 9

### Packing group

<table>
<thead>
<tr>
<th>DOT</th>
<th>ADR, IMDG, IATA</th>
<th>DOT</th>
<th>ADR, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Void</td>
<td></td>
<td>III</td>
</tr>
</tbody>
</table>

### Environmental hazards:

- Product contains environmentally hazardous substances: poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C12-14-alkylethers, phosphates
- Marine pollutant: Symbol (fish and tree)
- Special marking (ADR): Symbol (fish and tree)
- Special marking (IATA): Symbol (fish and tree)

### Special precautions for user

- Warning: Miscellaneous dangerous substances and articles
  - Danger code (Kemler): 90
  - EMS Number: F-A,S-F
  - Stowage Category: A

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- Not applicable.

### Transport/Additional information:

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>UN &quot;Model Regulation&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Code: E1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
<tr>
<td></td>
<td>Limited quantities (LQ)</td>
<td>Code: E1</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (QUATERNARY)</td>
<td></td>
</tr>
</tbody>
</table>
Trade name: PureClin SAN

<table>
<thead>
<tr>
<th>15 Regulatory information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian substance lists</td>
</tr>
<tr>
<td>- Canadian domestic substance list (DSL): All ingredients are listed.</td>
</tr>
<tr>
<td>- Canadian ingredient disclosure list (limit 0.1%): None of the ingredients is listed.</td>
</tr>
<tr>
<td>- Canadian ingredient disclosure list (limit 1%):</td>
</tr>
<tr>
<td>CAS: 577-11-7 docusate sodium</td>
</tr>
<tr>
<td>CAS: 34590-94-8 dipropylene glycol monomethylether</td>
</tr>
<tr>
<td>CAS: 78-96-6 1-aminopropan-2-ol</td>
</tr>
<tr>
<td>Sara</td>
</tr>
<tr>
<td>- Section 355 (extremely hazardous substances): None of the ingredients is listed.</td>
</tr>
<tr>
<td>- Section 313 (specific toxic chemical listings): None of the ingredients is listed.</td>
</tr>
<tr>
<td>- TSCA (Toxic Substances Control Act): All ingredients are listed.</td>
</tr>
<tr>
<td>Proposition 65</td>
</tr>
<tr>
<td>- Chemicals known to cause cancer: None of the ingredients is listed.</td>
</tr>
<tr>
<td>- Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.</td>
</tr>
<tr>
<td>- Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.</td>
</tr>
<tr>
<td>- Chemicals known to cause developmental toxicity: None of the ingredients is listed.</td>
</tr>
<tr>
<td>New Jersey Right-to-Know List:</td>
</tr>
<tr>
<td>CAS: 34590-94-8 dipropylene glycol monomethylether</td>
</tr>
<tr>
<td>CAS: 78-96-6 1-aminopropan-2-ol</td>
</tr>
<tr>
<td>New Jersey Special Hazardous Substance List: None of the ingredients is listed.</td>
</tr>
<tr>
<td>Pennsylvania Right-to-Know List:</td>
</tr>
<tr>
<td>CAS: 34590-94-8 dipropylene glycol monomethylether</td>
</tr>
<tr>
<td>CAS: 78-96-6 1-aminopropan-2-ol</td>
</tr>
</tbody>
</table>
Trade name: PureClin SAN

- Pennsylvania Special Hazardous Substance List:
  None of the ingredients is listed.

- EPA (Environmental Protection Agency)
  None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)
  None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- National regulations
- Other regulations, limitations and prohibitive regulations
- Please note:
  The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws. The following specific information is made for the purpose of complying with numerous laws and regulations.
- Other information: The product has been designed for professional use only.

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.

- Date of preparation / last revision 01/31/2017 / 2
- 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
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- * Data compared to the previous version altered.