1 Identification

- **Product identifier**
- **Trade name:** Cavesol
- **Application of the substance / the mixture**
  - Dry-cleaning
  - Spotting agent, stain remover
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - SEITZ GmbH
    - Gutenbergstrasse 3
    - 65830 Kriftel / Germany
    - Tel. + 49(0) 6192-9948-0
    - Fax + 49(0) 6192-9948-99
    - msds@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](Corrosion symbol)
  - Eye Dam. 1 H318 Causes serious eye damage.
  - ![GHS07](Irritation symbol)
  - 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](Corrosion symbol)

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - benzenesulfonic acid, C10-13-alkyl derivs., sodium salts
  - poly(oxy-1,2-ethanediyl), α-phosphono-ω-(octyloxy)-

- **Hazard statements**
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.

- **Precautionary statements**
  - P280 Wear protective gloves / eye protection.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P310 Immediately call a POISON CENTER or doctor/physician.

(Contd. on page 2)
Trade name: Cavesol

P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical advice/attention.

Hazard description:

WHMIS classification
D2B - Toxic material causing other toxic effects

Classification system
NFPA ratings (scale 0-4)

- Health = 2
- Fire = 0
- Reactivity = 0

HMIS-ratings (scale 0-4)

- HEALTH Health = 2
- FIRE Fire = 0
- REACTIVITY Reactivity = 0

Other hazards

Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>&lt; 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5</td>
<td>1,2,3-propanetriole</td>
<td>&lt; 25%</td>
</tr>
<tr>
<td>34590-94-8</td>
<td>dipropylene glycol monomethylether</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>68411-30-3</td>
<td>benzenesulfonic acid, C10-13-alkyl derivs., sodium salts</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>31800-88-1</td>
<td>poly(oxo-1,2-ethanediyl), α-phosphono-w-(octyloxy)-</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td>68551-17-7</td>
<td>alkanes, C10-13-iso-</td>
<td>&lt; 2.5%</td>
</tr>
</tbody>
</table>

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.

Most important symptoms and effects, both acute and delayed
No further relevant information available.
Trade name: Cavesol

- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

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
    No further relevant information available.

- 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
    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
  Avoid contact with eyes and skin.

- 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).
  Dispose of the collected material according to regulations.

- Reference to other sections
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- Precautions for safe handling
  Keep away from heat and direct sunlight.
  Avoid contact with eyes and skin.
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.

- Information about protection against explosions and fires: No special measures required.

- 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.
    Store in cool, dry conditions in well sealed receptacles.
    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

<table>
<thead>
<tr>
<th>Component</th>
<th>Type of Value</th>
<th>Description</th>
</tr>
</thead>
</table>
| 56-81-5 1,2,3-propanetriole | PEL (USA) | Long-term value: 15* 5** mg/m³  
| | | *total dust **respirable fraction |
| | TLV (USA) | TLV withdrawn-insufficient data human occup. exp. |
| | EL (Canada) | Long-term value: 10* 3** mg/m³  
| | | *mist; **mist, respirable |
| | EV (Canada) | Long-term value: 10 mg/m³ |
| 34590-94-8 dipropylen glycol monomethylether | PEL (USA) | Long-term value: 600 mg/m³, 100 ppm  
| | | Skin |
| | REL (USA) | Short-term value: 900 mg/m³, 150 ppm  
| | | Long-term value: 600 mg/m³, 100 ppm  
| | | Skin |
| | TLV (USA) | Short-term value: 909 mg/m³, 150 ppm  
| | | Long-term value: 606 mg/m³, 100 ppm  
| | | Skin |
| | EL (Canada) | Short-term value: 150 ppm  
| | | Long-term value: 100 ppm  
| | | Skin |
| | EV (Canada) | Short-term value: 910 mg/m³, 150 ppm  
| | | Long-term value: 605 mg/m³, 100 ppm |

- 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:

  Ensure good ventilation/exhaustion at the workplace.  
  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 therefore to be checked prior to the application.
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Color: Light yellow
    - Odor: Product specific
    - Odour threshold: No further relevant information available.
  - pH-value at 20 °C (68 °F): ~ 2.2
  - Change in condition
    - Melting point/Melting range: undetermined
    - Boiling point/Boiling range: undetermined
  - Flash point: Not applicable
  - 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 does not present an explosion hazard.
  - 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): ~ 1.07 g/cm³ (ISO 2811)
  - Relative density: No further relevant information available.
  - Vapour 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: No further relevant information available.
  - Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
  Stable under normal ambient conditions.
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance Description</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50 (7h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5</td>
<td>1,2,3-propanetriol</td>
<td>12600 mg/kg (rat)</td>
<td>&gt; 18700 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>34590-94-8</td>
<td>dipropylenglycol monomethylether</td>
<td>&gt; 5000 mg/kg (rat)</td>
<td>9500 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>68411-30-3</td>
<td>benzenesulfonic acid, C10-13-alkyl derivs., sodium salts</td>
<td>200 - 2000 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>31800-88-1</td>
<td>poly(oxy-1,2-ethanediyl), α-phosphono-ω-(octyloxy)-</td>
<td>&gt; 5000 mg/kg (rat)</td>
<td>&gt; 5000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>68551-17-7</td>
<td>alkanes, C10-13-iso-</td>
<td>&gt; 5 mg/l (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: Irritant effect.
  - on the eye: Strong irritant with the danger of severe eye injury.
  - Sensitization: No sensitizing effects known.
  - 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
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: 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 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
  - DOT, ADR, ADN, IMDG, IATA: Void
- UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA: Void
  - Class: Void
- Packing group
  - DOT, ADR, IMDG, IATA: Void
- Environmental hazards:
  - Not applicable.
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
- Transport/Additional information:
  - Not dangerous according to the above specifications.
- UN "Model Regulation": -

15 Regulatory information

- Canadian substance lists
  - Canadian domestic substance list (DSL):
    - All ingredients are listed.
  - Canadian ingredient disclosure list (limit 0.1%):
    - None of the ingredients is listed.
Trade name: Cavesol

- **Canadian ingredient disclosure list (limit 1%)**:
  - 34590-94-8 dipropylene glycol monomethylether
  - 68411-30-3 benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

- **Sara**
  - **Section 355 (extremely hazardous substances)**: None of the ingredients 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.

- **Cancerogenity categories**
  - **EPA (Environmental Protection Agency)**: 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.

- **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**: 08/06/2014 / 1
- **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
<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Identification System (USA)</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System (Canada)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/Irritation, Hazard Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Hazard Category 1</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.