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 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 (24-hour Service)

2 Hazard(s) identification

· Classification of the substance or mixture

  GHS05 Corrosion
  Eye Dam. 1 H318 Causes serious eye damage.

  GHS07
  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

· 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)-

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS

Trade name: Cavesol

- **Hazard statements**
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
- **Precautionary statements**
  P280 Wear protective gloves / eye protection.
  P302+P352 If on skin: Wash with plenty of water.
  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/doctor.
  P332+P313 If skin irritation occurs: Get medical advice/attention.

### 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: 56-81-5</td>
<td>glycerol</td>
<td>&lt; 25%</td>
</tr>
<tr>
<td>CAS: 34590-94-8</td>
<td>dipropylene glycol monomethylether</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>CAS: 68411-30-3</td>
<td>benzenesulfonic acid, C10-13-alkyl derivs., sodium salts</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>CAS: 31800-88-1</td>
<td>poly(oxy-1,2-ethanediyl), α-phosphono-ω-(octyloxy)-</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td>CAS: 68551-17-7</td>
<td>alkanes, C10-13-iso-</td>
<td>&lt; 2%</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**
  Skin irritation
  Eye damage
- **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
  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).
  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.
  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.
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 constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>CAS: 56-81-5 glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td>mist; *total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV TLV withdrawn-insufficient data human occup. exp.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 34590-94-8 dipropylene glycol monomethylether</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL Long-term value: 600 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>REL Short-term value: 900 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>Long-term value: 600 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>TLV Short-term value: 909 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>Long-term value: 606 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>Skin</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:
      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.

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
    - Form: Fluid
    - Color: Light yellow
    - Odor: Product specific
    - Odor 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.
- Vapor density: No further relevant information available.
- Evaporation rate: No further relevant information available.
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** None if used as directed.
- **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></th>
<th>Oral</th>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATE (Acute Toxicity Estimate)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>&gt; 13,307 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>&gt; 13,307 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- **CAS: 56-81-5 glycerol**
  - Oral LD50: 12,600 mg/kg (rat)
  - Dermal LD50: > 18,700 mg/kg (rabbit)

- **CAS: 34590-94-8 dipropylene glycol monomethylether**
  - Oral LD50: > 5,000 mg/kg (rat)
  - Dermal LD50: 9,500 mg/kg (rabbit)
  - Inhalative LC50 (7h): 3.35 mg/l (rat)

- **CAS: 68411-30-3 benzenesulfonic acid, C10-13-alkyl derivs., sodium salts**
  - Oral LD50: > 2,000 mg/kg (rat) (OECD 401)
  - Dermal LD50: > 2,000 mg/kg (rat) (OECD 402)

- **CAS: 68551-17-7 alkanes, C10-13-iso-**
  - Oral LD50: > 5,000 mg/kg (rat)
  - Dermal LD50: > 5,000 mg/kg (rabbit)
Trade name: Cavesol

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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.
    - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
      - Germ cell mutagenicity Based on available data, the classification criteria are not met.
      - Carcinogenicity Based on available data, the classification criteria are not met.
      - Reproductive toxicity Based on available data, the classification criteria are not met.
  - Specific target organ toxicity – single exposure
    Based on available data, the classification criteria are not met.
  - Specific target organ toxicity – repeated exposure
    Based on available data, the classification criteria are not met.
  - Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
  - Aquatic toxicity:
    CAS: 34590-94-8 dipropylene glycol monomethylether
    EC50 > 969 mg/l (Aquatic plants, algae) (96 h; Scenedesmus capricornutum)
    1,919 mg/l (Aquatic invertebrates) (48 h; Daphnia)
    LC50 > 10,000 mg/l (Fish) (96 h; Pimephales promelas)
  - 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(comply) 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.
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
  - 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
- 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":
  - Void

15 Regulatory information

- 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.
46.0.3 · 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.

· New Jersey Right-to-Know List:
  CAS: 56-81-5 glycerol
  CAS: 34590-94-8 dipropylene glycol monomethylether

· New Jersey Special Hazardous Substance List:
  None of the ingredients is listed.

· Pennsylvania Right-to-Know List:
  CAS: 56-81-5 glycerol
  CAS: 34590-94-8 dipropylene glycol monomethylether

· 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 buyers 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 04/17/2018 / 3

· 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)
Trade name: Cavesol

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.