1 Identification of substance

- **Product details**
  - **Trade name:** Trebon Plus
  - **Article number:** 2195

- **Application of the substance / the preparation**
  Superconcentrated heavy-duty detergent for white and coloured textiles for application in hard and soft water at 30-60-90°C (86-140-194 °F). Phosphate-free and NTA free.

- **Manufacturer/Supplier:**
  Chemische Fabrik Kreussler & Co. GmbH
  Postfach 120454
  D-65082 Wiesbaden

- **Information department:**
  Abteilung TQM
  Herr Vogel
  +49 (0) 611 9271-175
  Stefan.Kopp@kreussler.com

- **Emergency information:**
  +49 (0) 611 9271-0

2 Composition/Data on components

- **Chemical characterization**
  - **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**
  - **perfumes**
    - Xi, N; R 43-51/53
    - ≤1 %
  - **13870-28-5 disodium disilicate**
    - Xi; R 41
    - 15-30%
  - **10486-00-7 Sodium perborate**
    - Xi; R 36
    - 15-30%
  - **497-19-8 sodium carbonate**
    - Xi; R 36
    - 15-30%
  - **15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)**
    - Xn, Xi, O; R 8-22-36/38
    - 5.0-15%
  - **157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated**
    - Xn, Xi, O; R 22-41-50
    - 1.0-5.0%
  - **157627-86-6 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated**
    - Xi, N; R 41-50
    - 1.0-5.0%
  - **68411-30-3 Benzolsulfonsäure, C 10-13-Alkylderivate,Natriumsalze**
    - Xn, Xi; R 22-36/38
    - 1.0-5.0%

- **Ingredients according to detergent regulation EC 648/2004**
  - **Oxygen-based bleach**
    - ≥ 30%
  - **non-ionic surfactants**
    - 5 - 15%
  - **Polycarboxylates, Phosphonates, perfumes, Optical brighteners, enzymes**
    - < 5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**
  - Xi Irritant

- **Information pertaining to particular dangers for man and environment:**
  The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  - R 36/38 Irritating to eyes and skin.

(Contd. on page 2)
Trade name: Trebon Plus

- 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 = 0  Reactivity = 0

  The substance possesses oxidizing properties.

- HMIS-ratings (scale 0 - 4)

  HEALTH  FIRE  REACTIVITY

  Health = 1  Fire = 0  Reactivity = 0

4 First aid measures

- After skin contact: Rinse with warm water.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Immediately call a doctor.

5 Fire fighting measures

- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions: Not required.
- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collection: Dispose contaminated material as waste according to item 13.

7 Handling and storage

- Handling:
- Information for safe handling: Prevent formation of dust.
  Thorough dedusting.
- Information about protection against explosions and fires: Protect from heat.

- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

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:
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:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Eye protection:** Not required.

**9 Physical and chemical properties**

**General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>Powder</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>White</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>850 g/l</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Soluble.</td>
</tr>
<tr>
<td><strong>pH-value (10 g/l) at 20°C (68°F):</strong></td>
<td>10-11</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

**11 Toxicological information**

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
  - Acute oral toxicity: >2000mg/kg (Rats)
  - calculated from data of constituent parts.
- **Primary irritant effect:**
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
Trade name: Trebon Plus

12 Ecological information
- Information about elimination (persistence and degradability):
- Other information: The product is biodegradable.
- General notes: The product may not be released into the environment without control.

13 Disposal considerations
- Product:
  - Recommendation: Dispose of in accordance with local, state, and federal Regulations.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information
- DOT regulations:
  - Hazard class: -
  - Packing group: -
  - Label
- Land transport ADR/RID (cross-border):
  - ADR/RID class: -
  - Danger code (Kemler): -
  - UN-Number: -
  - Packaging group: -
- Maritime transport IMDG:
  - IMDG Class: -
  - UN Number: -
  - Label -
  - Packaging group: -
  - EMS Number: -
  - Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:
  - ICAO/IATA Class: -
  - UN/ID Number: -
  - Label -
  - Packaging group: -

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):
  13870-28-5 disodium disilicate
  497-19-8 sodium carbonate

(Contd. on page 5)
Trade name: Trebon Plus

| 15630-89-4 | disodium carbonate, compound with hydrogenperoxide (2:3) |
| 10543-57-4 | N,N'-ethylenebis[N-acetylacetamide] |
| 3794-83-0 | tetraborate (1-hydroxyethylidene)bisphosphonate |
| 27344-41-8 | Disodium 4,4'-bis(2-sulfostyryl)biphenyl |
| 9014-01-1 | Subtilisin |

- **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.
  - **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.

- **Product related hazard informations:**
  The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**
  - Xi Irritant

- **Risk phrases:**
  36/38 Irritating to eyes and skin.

- **Safety phrases:**
  24/25 Avoid contact with skin and eyes.

**16 Other information**

The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.

The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.
Trade name: Trebon Plus

(Contd. of page 5)

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:**
  Abteilung TQM
  Herr Vogel
  +49 (0) 611/9271-175
- **Contact:** Herr Vogel
- *Data compared to the previous version altered.*