1 Identification

- **Product identifier**
  - **Trade name:** Clip Top
  - **Article number:** 2217

- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.

- **Application of the substance / the preparation**
  Concentrated dry cleaning detergent with comfort-retexturing and intensive antistatic properties. Prevents the formation of deposits in cleaning machines. Application in per and hydrocarbon solvents.

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - **Manufacturer:** Chemische Fabrik Kreussler & Co. GmbH
      - Postfach 120454
      - D-65082 Wiesbaden
    - **Supplier:** Kreussler Inc., 6103 Johns Road Suit 7, Tampa, FL 33634,
      - Phone 813-884-1499, Fax 813-884-1599,
      - Internet: www.kreussler.com, e-mail: office-tampa@kreussler.com
  - **Information department:**
    - Abteilung TQM
    - Herr Vogel
    - +49 (0) 611 9271-175
    - Kurt.Vogel@kreussler.com
  - **Emergency telephone number:** +49 (0) 611 9271-0

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    - **Irritant**
    - Irritating to skin. Risk of serious damage to eyes.
  - **Information concerning particular hazards for human 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.
  - **Classification system:**
    - The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**
  - **Labelling according to EU guidelines:**
    - The product has been classified and marked in accordance with directives on hazardous materials.
  - **Code letter and hazard designation of product:**
    - Xi Irritant

- **Risk phrases:**
  - Irritating to skin.
  - Risk of serious damage to eyes.

- **Safety phrases:**
  - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - Wear suitable gloves and eye/face protection.

(Contd. on page 2)
Trade name: Clip Top

- Classification system:
  - NFPA ratings (scale 0 - 4)
    ![NFPA Ratings](image)
    Health = 2
    Fire = 1
    Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  ![HMIS Ratings](image)
  Health = 2
  Fire = 1
  Reactivity = 0

- Other hazards
  The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

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

### 3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>perfumes</td>
<td>≤1%</td>
</tr>
<tr>
<td>Xi R36/38-43; N R50/53</td>
<td></td>
</tr>
<tr>
<td>106232-83-1 Alcoholics C13-C15 branched and linear, ethoxylated</td>
<td>5.0-15%</td>
</tr>
<tr>
<td>Xn R22; Xi R41</td>
<td></td>
</tr>
<tr>
<td>112-34-5 2-(2-butoxyethoxy)ethanol</td>
<td>5.0-15%</td>
</tr>
<tr>
<td>Xi R36</td>
<td></td>
</tr>
<tr>
<td>106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated</td>
<td>5.0-15%</td>
</tr>
<tr>
<td>Xi R41; N R50</td>
<td></td>
</tr>
<tr>
<td>9004-82-4 Fettalkoholethersulfat</td>
<td>5.0-15%</td>
</tr>
<tr>
<td>Xi R38-41</td>
<td></td>
</tr>
<tr>
<td>68425-47-8 Soyafattyacid-diethanolamide</td>
<td>1.0-5.0%</td>
</tr>
<tr>
<td>Xi R38-41</td>
<td></td>
</tr>
<tr>
<td>577-11-7 Sulfosuccinat-sodiumsalt</td>
<td>1.0-5.0%</td>
</tr>
<tr>
<td>Xi R38-41</td>
<td></td>
</tr>
<tr>
<td>61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides</td>
<td>1.0-5.0%</td>
</tr>
<tr>
<td>C R34; Xn R22; N R50</td>
<td></td>
</tr>
<tr>
<td>27083-27-8 Poly (1-hexamethylenebiguanide) hydrochloride</td>
<td>≤1%</td>
</tr>
<tr>
<td>Xn R22; Xi R37/38-41-43; N R50/53</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed risk 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:
    Rinse with warm 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: If symptoms persist consult doctor.
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.
- **Special hazards arising from the substance or mixture**
  Product itself does not burn.
- **Advice for firefighters**
  **Protective equipment:** Use normal protective clothing.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
  Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
  No dangerous substances are released.
  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** No special measures required.
  - **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:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** None.
  - **Specific end use(s)** No further relevant information available.

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:**
    - 112-34-5 2-(2-butoxyethoxy)ethanol (5.0-15%)
      - TLV Long-term value: 67.5 mg/m³, 10* ppm
        - "Inhalable fraction and vapor"
  - **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.
    Do not eat, drink, smoke or sniff while working.
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
Trade name: Clip Top

Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

- Breathing equipment: Not required.
- Protection of hands:
  
  ![Protective gloves]

  - Material of gloves
    PVC or PE gloves
    Recommended thickness of the material: ≥ 0.4 mm
  - Not suitable are gloves made of the following materials:
    Leather gloves
    Strong gloves

- 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: Yellow
  - Odor: Characteristic
- pH-value at 20 °C (68 °F): 7.8
- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- Flash point: > 100 °C (> 212 °F) (ASTMD93(PMCC))
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure: Not determined.
- Density at 20 °C (68 °F): 0.97 g/cm³ (8.095 lbs/gal)
- Solubility in / Miscibility with Water: Fully miscible.
- Viscosity:
  - Dynamic at 20 °C (68 °F): 91 mPas
- Solvent content:
  - Organic solvents: 0.6 %
- Other information: No further relevant information available.
10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated
      Oral LD-50 >2000 mg/kg (rat)
    112-34-5 2-(2-butoxyethoxy)ethanol
      Oral LD-50 3384 mg/kg (rat)
      Dermal LD-50 2700 mg/kg (bunny)
    106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated
      Oral LD-50 >2000 mg/kg (rat)
      EC-10 16 h  > 10000 mg/L (Pseudomonas putida)
    9004-82-4 Fettalkoholethersulfat
      Oral LD-50 >10000 mg/kg (rat)
      Dermal LD-50 >2000 mg/kg (rat)
    68425-47-8 Soyafattyacid-diethanolamide
      Oral LD-50 19700 mg/kg (rat)
    577-11-7 Sulfosuccinat-sodiumsalt
      Oral LD-50 1900 mg/kg (rat)
    61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
      Oral LD-50 300 - 2000 mg/kg (rat) (OECD-Prüfrichtlinie 401)
    27083-27-8 Poly (1-hexamethylenebiguanide) hydrochloride
      Oral LD-50 >2000 mg/kg (rat)
      perfume
      Oral LD-50 5443.77 mg/kg (rat) (Calculation method)
      Dermal LD-50 9920.84 mg/kg (rat) (Calculation method)
      Inhalative LC-50/4 h 12769 mg/m³ (rat) (Calculation method)
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Strong irritant with the danger of severe eye injury.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    67-63-0 propan-2-ol
      3
    111-42-2 2,2'-iminodiethanol
      3

(Contd. of page 6)
12 Ecological information

Toxicity

Aquatic toxicity:

<table>
<thead>
<tr>
<th>Compound</th>
<th>EC-10</th>
<th>EC-50</th>
<th>LC-50</th>
<th>NOEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated</td>
<td>&gt;1000 mg/L (Belebtschlamm)</td>
<td>1-10 mg/l (Daphnia magna)</td>
<td>1-10 mg/l (Scenedesmus subspicatus)</td>
<td>&gt;100 mg/l (Desmodesmus subspicatus)</td>
</tr>
<tr>
<td>112-34-5 2-(2-butoxyethoxy)ethanol</td>
<td>EC-10 (17 h) 1170 mg/l (Pseudomonas putida)</td>
<td>EC-50 24h 2850 mg/l (Daphnia magna)</td>
<td>LC-50 96h 1300 mg/l (Lepomis macrochirus)</td>
<td>NOEC (96h) &gt;100 mg/l (Desmodesmus subspicatus)</td>
</tr>
<tr>
<td>106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated</td>
<td>EC-50 48h 0.1 - 1 mg/l (aquatische Invertebraten)</td>
<td>EC-50 72h 0.1-1 mg/l (Scenedesmus subspicatus)</td>
<td>LC-50 96h 1-10 mg/l (Brachydanio rerio)</td>
<td></td>
</tr>
<tr>
<td>68425-47-8 Soyafattyacid-diethanolamide</td>
<td>EC-50 &gt; 100 mg/l (Pseudomonas putida)</td>
<td>LC-50 &gt;1 -10 mg/l (Pseudomonas putida)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61789-77-3 Quaternary ammonium compounds, didocoalkyldimethyl, chlorides</td>
<td>EC-50 3 h &gt; 10 - 100 mg/l (Belebtschlamm)</td>
<td>EC-50 72h &gt; 0.1 - 1 mg/l (Pseudokirchneriella subspicata) (OECD-Prüfrichtlinie 201)</td>
<td>LC-50 48 h &gt;0.1-1 mg/L (Acartia Tonsa)</td>
<td>LC-50 96h &gt; 0.1 - 1 mg/l (Brachydanio rerio) (OECD-Prüfrichtlinie 203)</td>
</tr>
<tr>
<td>27083-27-8 Poly (1-hexamethylenebiguanide) hydrochloride</td>
<td>EC-50 48h 0.09 mg/l (Daphnia magna) (OECD-Prüfrichtlinie 202)</td>
<td>ErC-50 72h 0.0191 mg/l (Pseudokirchneriella subspicata) (OECD-Prüfrichtlinie 202)</td>
<td>LC-50 96h 0.026 mg/l (Oncorhynchus mykiss)</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
No further relevant information available.

Other information: The product is biodegradable.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:
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. The product may not be released into the environment without control. Do not allow product to reach ground water, water course or sewage system.

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:** Dispose of in accordance with local, state, and federal Regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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
- **Packing group**
  - DOT, ADR, IMDG, IATA: Void

- **Environmental hazards:**
  - **Marine pollutant:** No

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):** None of the ingredient is listed.
    - **Section 313 (Specific toxic chemical listings):**
      67-63-0 propan-2-ol
      111-42-2 2,2'-iminodiethanol
- **TSCA (Toxic Substances Control Act):**
  64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic
  106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated
  112-34-5 2-(2-butoxyethoxy)ethanol
  106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated
  9004-82-4 Fettalkoholethersulfat
  68425-47-8 Soyafattyacid-diethanolamide
  577-11-7 Sulsfosuccinat-sodiumsalt
  61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
  67-63-0 propan-2-ol
  56-81-5 glycerol
  27083-27-8 Poly (1-hexamethyleneguainide) hydrochloride
### Proposition 65
- **Chemicals known to cause cancer:**
  - 111-42-2 2,2’-iminodiethanol

- **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)**
  - 67-63-0 propan-2-ol A4
  - 111-42-2 2,2’-iminodiethanol A3

- **MAK (German Maximum Workplace Concentration)**
  - 111-42-2 2,2’-iminodiethanol 3B

- **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.

### Canadien Substances Listings:
- **Canadien Domestic Substances List (DSL):**
  - 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic
  - 106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated
  - 112-34-5 2-(2-butoxyethoxy)ethanol
  - 106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated
  - 9004-82-4 Fettalkoholethersulfat
  - 68425-47-8 Soya fatty acid diethanolamide
  - 577-11-7 Sulfosuccinat-sodiumsalt
  - 61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
  - 67-63-0 propan-2-ol
  - 56-81-5 glycerol
  - 27083-27-8 Poly (1-hexamethylenebiguanide) hydrochloride
  - 111-42-2 2,2’-iminodiethanol
  - 2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
  - 2634-33-5 1,2-benzisothiazol-3(2H)-one
  - 2682-20-4 2-methyl-2H-isothiazol-3-one

- **Canadien Ingredient disclosure list (limit 0.1%):**
  - 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic
  - 106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated
  - 112-34-5 2-(2-butoxyethoxy)ethanol
  - 106232-83-1 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated
  - 9004-82-4 Fettalkoholethersulfat
Trade name: Clip Top

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>68425-47-8</td>
<td>Soyafattyacid-diethanolamide</td>
</tr>
<tr>
<td>577-11-7</td>
<td>Sulfosuccinat-sodiumsalt</td>
</tr>
<tr>
<td>61789-77-3</td>
<td>Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides</td>
</tr>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
</tr>
<tr>
<td>56-81-5</td>
<td>glycerol</td>
</tr>
<tr>
<td>27083-27-8</td>
<td>Poly (1-hexamethylenebiguanide) hydrochloride</td>
</tr>
<tr>
<td>111-42-2</td>
<td>2,2'-iminodiethanol</td>
</tr>
<tr>
<td>2372-82-9</td>
<td>N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine</td>
</tr>
<tr>
<td>2834-33-5</td>
<td>1,2-benzisothiazol-3(2H)-one</td>
</tr>
<tr>
<td>2682-20-4</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
<tr>
<td>112-34-5</td>
<td>2-(2-butoxyethoxy)ethanol</td>
</tr>
<tr>
<td>577-11-7</td>
<td>Sulfosuccinat-sodiumsalt</td>
</tr>
</tbody>
</table>

- Canadian ingredient disclosure list (limit 1%)
  - 112-34-5 2-(2-butoxyethoxy)ethanol
  - 577-11-7 Sulfosuccinat-sodiumsalt

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

- Hazard symbols:
  - Xi Irritant

- Risk phrases:
  - Irritating to skin.
  - Risk of serious damage to eyes.

- Safety phrases:
  - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - Wear suitable gloves and eye/face protection.

- National regulations:

- Technical instructions (air):

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NK</td>
<td>5.0-15</td>
</tr>
</tbody>
</table>

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 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.

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.

Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

- Department issuing MSDS:
  - Abteilung TQM
  - Herr Vogel
  - +49 (0) 611/9271-175

- Contact: Herr Vogel

* Data compared to the previous version altered.