1 Identification

- **Product identifier**
  - Trade name: Ottalin Finish
- **Article number:** 2226
- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the mixture**
  Finishing agent with handle enhancing and antistatic properties for cotton and polycotton blends.

- **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 Heiko Schmidt
    - +49 (0) 611 9271-144
    - Heiko.Schmidt@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** Not applicable.
  - **Information concerning particular hazards for human and environment:**
    The product does not have 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:**
    Observe the general safety regulations when handling chemicals.
    The product is not subject to identification regulations according to directives on hazardous materials.
  - **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    
    ![NFPA Ratings]
    
    Health = 0
    Fire = 1
    Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    
    ![HMIS Ratings]
    
    Health = 0
    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.
Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2014 Reviewed on 05/16/2014

Trade name: Ottalin Finish

· vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

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

· Dangerous components:
  perfumes Xi R38-43; N R51/53 ≤0.1%

· 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.
· After swallowing: If symptoms persist consult doctor.
· Information for doctor:
· Most important symptoms and effects, both acute and delayed
  No further relevant information available.
· 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.
· Special hazards arising from the substance or mixture
  In case of fire, the following can be released:
  Carbon monoxide (CO)
  Product itself does not burn.
· Advice for firefighters
· Protective equipment: Use normal protective clothing.
· 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.
· 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).
· 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.

(Contd. on page 3)
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:
    - 9005-25-8 Starch (15-30%)
      - PEL Long-term value: 15* 5** mg/m³
        *total dust **respirable fraction
      - REL Long-term value: 10* 5** mg/m³
        *total dust **respirable fraction
      - TLV Long-term value: 10 mg/m³
- 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.
      Avoid contact with the eyes and skin.
      Do not eat, drink, smoke or sniff while working.
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing.
      Wash hands before breaks and at the end of work.
    - 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
Trade name: Ottalin Finish

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>pH-value at 20 °C (68 °F)</td>
<td>7</td>
</tr>
<tr>
<td>Change in condition</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>Flash point</td>
<td>&gt; 100 °C (&gt; 212 °F) (ASTMD93(PMCC))</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F)</td>
<td>1.13 g/cm³ (9.43 lbs/gal)</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Fully miscible</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic at 20 °C (68 °F)</td>
<td>18 s (DIN 53211/4)</td>
</tr>
<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.1 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

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:
    - Primary irritant effect:
      - on the skin: No irritant effect.
      - on the eye: No irritating effect.
      - Sensitization: No sensitizing effects known.
    - Additional toxicological information:
      - The product is not subject to classification according to internally approved calculation methods for preparations:
        - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
  - 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.
12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Other information: The product is easily 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 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.
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    The product may not be released into the environment without control.

- 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.

- 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, ADN, IMDG, IATA: Void
  - ADR: Void

- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA: Void
    - Class: -
    - Label: -
    - ADN/R Class: Void

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

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Not applicable.

- Danger code (Kemler):
  - -

(Contd. on page 6)
· EMS Number: -

· 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

· 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):
  9005-25-8 Starch
  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
  7732-18-5 water, distilled, conductivity or of similar purity

· 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)
  9005-25-8 Starch A4

· 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.

· Canadien Substances Listings:

· Canadien Domestic Substances List (DSL):
  9005-25-8 Starch
  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
  7732-18-5 water, distilled, conductivity or of similar purity

· Canadien Ingredient disclosure list (limit 0.1%)
  9005-25-8 Starch
  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
Trade name: Ottalin Finish

7732-18-5 water, distilled, conductivity or of similar purity

- **Canadien Ingredient disclosure list (limit 1%)**
  None of the ingredients is listed.

- **Product related hazard informations:**
  Observe the general safety regulations when handling chemicals.
  The product is not subject to identification regulations according to directives on hazardous materials.
- **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 Heiko Schmidt
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- **Contact:** Herr Heiko Schmidt
- **Date of preparation / last revision** 05/16/2014 / 13
- **Data compared to the previous version altered.**