1 Identification

- Product identifier
  - Trade name: Hydrob FC
  - Article number: 2173
- Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
- Application of the substance / the mixture
  Water and oil proofing agent for waterproofing and stain-protective finishing of textiles. Application in water.

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).
- 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
- GHS label elements: Void
- Hazard pictograms
  - Void
- Signal word
  - Void
- Hazard statements
  - Void
- Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  - 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.
3 Composition/information on ingredients

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

### Dangerous components:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9 citric acid</td>
<td>1.0-5.0%</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.
- 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: No further relevant information available.
  - Advice for firefighters
  - Protective equipment: Use normal protective clothing.
  - Additional information
    - Dispose of fire debris and contaminated firefighting 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:
    - Dilute with plenty of water.
    - 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.
Trade name: Hydrob FC

- 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: Protect from frost.
    - 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:
    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.
  - 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.
      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

      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.

      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: Whitish
    - Odor: Characteristic
  - pH-value at 20 °C (68 °F): 2.1
Trade name: Hydrob FC

(Contd. of page 3)

<table>
<thead>
<tr>
<th>· Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>· Flash point:</td>
</tr>
<tr>
<td>· Auto igniting:</td>
</tr>
<tr>
<td>· Danger of explosion:</td>
</tr>
<tr>
<td>· Vapor pressure:</td>
</tr>
<tr>
<td>· Density at 20 °C (68 °F):</td>
</tr>
<tr>
<td>· Solubility in / Miscibility with Water:</td>
</tr>
<tr>
<td>· Viscosity:</td>
</tr>
<tr>
<td>Dynamic at 20 °C (68 °F):</td>
</tr>
<tr>
<td>Kinematic:</td>
</tr>
<tr>
<td>· Solvent content:</td>
</tr>
<tr>
<td>Organic solvents:</td>
</tr>
<tr>
<td>· Other information</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:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9 citric acid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral</th>
<th>LC-50</th>
<th>11700 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD-50</td>
<td>5400 mg/kg (mouse) (OECD-Prüfrichtlinie 401)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD-50</td>
</tr>
<tr>
<td>LD-50 Intraperitoneal</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

· 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.

(Contd. on page 5)
12 Ecological information

- Toxicity
- Aquatic toxicity:

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50 (mg/L)</th>
<th>Test Organism</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9 citric acid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| LC-50 16 h                 | > 10000 mg/L    | (Pseudomonas putida)       |
| LC-50 168 h                | 425 mg/L        | (Scenedesmus quadricauda) |
| LC-50 24 h                 | 1535 mg/L       | (Daphnia magna)           |
| LC-50 48 h                 | 440 mg/L        | (Leuciscus idus) (OECD-Prüfrichtlinie 203) |

- 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 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 product 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, ADR, ADN, IMDG, IATA: Void
**Transport hazard class(es)**
- DOT, ADR, IMDG, IATA

**Class**
- Void

**Label**
- -

**ADN/R Class**
- Void

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

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

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

**EMS Number**
- -

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

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**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):**
    - 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.

  - **Canadien Substances Listings:**

    - **Canadien Domestic Substances List (DSL):**
      - All ingredients are listed.

    - **Canadien Ingredient disclosure list (limit 0.1%):**
      - All ingredients are listed.
Trade name: Hydrob FC

- **Canadian Ingredient disclosure list (limit 1%)**
  - 77-92-9 citric acid

- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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 SDS:**
  - Departent TQM
  - Herr Heiko Schmidt
  - +49 (0) 611/9271-144

- **Contact:** Herr Heiko Schmidt

- **Date of preparation / last revision** 04/21/2015 / 17

- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - 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
  - 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)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - * Data compared to the previous version altered.