1 Identification of substance:

- **Product details:**
  - **Trade name:** SOAP TITRATION KIT – GLASSPIPETTE
  - **Manufacturer/Supplier:** SEITZ GmbH
  - **Information department:**
    - CHEM-TEL Inc.
    - 10770 North 46th Street STE. B100
    - Tampa Florida 33617
  - **Emergency information:** 1-800-255-3924

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Indicator for testing anionic detergent concentration (aqueous solution)

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Component</th>
<th>Content (w/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-66-3</td>
<td>chloroform</td>
<td>20 - 50%</td>
</tr>
<tr>
<td>7664-93-9</td>
<td>sulfuric acid</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Hazard description:** Harmful liquid
  - **Information pertaining to particular dangers for man and environment:**
    - Harmful if swallowed.
    - Irritating to skin.
    - Possible risks of irreversible effects.
  - **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 = 2**
    - **Fire = 0**
    - **Reactivity = 0**

4 First aid measures

- **General information**
  - Immediately remove any clothing soaked by the product.
  - Remove casualties from exposure.
  - Keep unprotected persons away.
- **After inhalation**
  - Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **In case of unconciousness:** Place patient stably in side position for transportation.
- **After skin contact**
  - Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
  - Rinse opened eye for several minutes under running water. Then consult a doctor.

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Material Safety Data Sheet
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- After swallowing
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; immediately call for medical help.
- Information for doctor
  In case of ingestion and subsequent vomiting aspiration by the lungs might result and lead to chemical pneumonitis or suffocation.
- The following symptoms may occur:
  Breathing difficulty
  Headache
  Stupor

5 Fire fighting measures

- Suitable extinguishing agents
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards caused by the material, its products of combustion or resulting gases:
  In case of fire, the following can be released:
  Hydrogen chloride (HCl)
  Chlorine (Cl2)
  Phosgene gas
- Protective equipment: 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

- Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
  Avoid inhalation of gases / fumes.
  Avoid contact with eyes and skin.
- Measures for environmental protection:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
- Measures for cleaning/collecting:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose of the collected material according to regulations.

7 Handling and storage

- Handling
  - Information for safe handling:
    Ensure good ventilation/exhaust at the workplace.
    Avoid contact with eyes and skin.
  - Information about protection against explosions and fires: No special measures required.
- 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:
    Keep receptacle tightly sealed.
    Protect from heat and direct sunlight.
    Store receptacle in a well ventilated area.
    Time of storage: max. 12 month

(Contd. on page 3)
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:
  - 67-66-3 chloroform
    - ACGIH TLV: 49 mg/m³, 10 ppm
    - NIOSH REL: Short-term value: 9.78 mg/m³, 2 ppm
    - OSHA PEL: Short-term value: 240 mg/m³, C 50 ppm

- Additional information: The lists that were valid during the creation were used as basis.

- 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:
    - Not necessary if room is well-ventilated
  - Use suitable respiratory protective device in case of insufficient ventilation.
  - Filter A

- Protection of hands: Protective gloves.
- Eye protection: Safety glasses
- Body protection: Protective work clothing.

9 Physical and chemical properties:

- Form: Fluid
- Color: Colorless
- Odor: Characteristic

- Change in condition
  - Melting point/Melting range: undetermined
  - Boiling point/Boiling range: undetermined

- Flash point: Not applicable
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Density: Not determined
- Solubility in / Miscibility with Water: Not miscible or difficult to mix
- pH-value: Not applicable

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
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- **Dangerous reactions**
  - Reacts with alkali and metals
  - Reacts with oxidizing agents
- **Dangerous products of decomposition:**
  - Hydrogen chloride (HCl)
  - Chlorine
  - Phosgene

*  **11 Toxicological information**

  **Acute toxicity:**

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>67-66-3 chloroform</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>908 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative LC50/1h</td>
<td>75 mg/l (rat)</td>
</tr>
<tr>
<td>7664-93-9 sulfuric acid</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>2140 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
  - Harmful
  - 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.

* **12 Ecological information:**

  **General notes:**
  - Water danger class 3 (Self-assessment): extremely hazardous for water.
  - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
  - Danger to drinking water if even extremely small quantities leak into the ground.

* **13 Waste Disposal Method**

  **Product and uncleaned packagings:**

  **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.
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14 Transport information

- DOT regulations:

- Hazard class: 6.1
- Identification number: UN2810
- Packing group: III
- Proper shipping name (technical name): Toxic liquid, organic, n.o.s., chloroform

- Land transport ADR/RID (cross-border):

- ADR/RID class: 6.1 Toxic substances
- Item: 25c
- UN-Number: 2810
- Description of goods: Toxic liquid, organic, n.o.s., chloroform

- Maritime transport IMDG:

- IMDG Class: 6.1
- UN Number: 2810
- Packaging group: III
- Proper shipping name: Toxic liquid, organic, n.o.s., chloroform

- Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: 6.1
- UN/ID Number: 2810
- Packaging group: III
- Proper shipping name: Toxic liquid, organic, n.o.s., chloroform

15 Regulatory information (Not meant to be all-inclusive/selected regulations represented)

- Product related hazard informations:
The product has been marked in accordance with national laws. Observe the general safety regulations when handling chemicals

- Hazard symbols: Harmful

- Hazard-determining components of labelling: chloroform

- Risk phrases:
Harmful if swallowed.
Irritating to skin.
Possible risks of irreversible effects.

(Contd. on page 6)
Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

- Safety phrases:
  Keep out of the reach of children.
  When using do not eat or drink.
  Do not breathe fumes / aerosol

  Avoid contact with skin and eyes.
  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
  Wear suitable protective clothing, gloves and eye/face protection.

  In case of insufficient ventilation, wear suitable respiratory equipment.
  In case of accident or if you feel unwell, seek medical advice immediately.
  If swallowed, seek medical advice immediately and show this container or label.

- National regulations

- Water hazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.

- Other regulations, limitations and prohibitive regulations
  The product has been designed for professional use only.

- 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 buyer’s responsibility to ensure that their 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.

- U.S. Regulations

- SARA 313 Information:
  This product contains the following substances are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

  - CAS-No.: Chemical name:
    | 67-66-3 | chloroform |
    | 7664-93-9 | sulfuric acid |

- SARA Hazard Category:
  This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
  - A immediate health hazard
  - A delayed health hazard

- Toxic Substances Control Act (TSCA): All ingredients are listed on the TSCA inventory.

- California proposition 65:
  The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.

  This product contains / does not contain chemical(s) known to the State of California to cause cancer and/or to cause reproductive toxicity.

- Chemicals known to cause cancer:
  | 67-66-3 | chloroform |

- Chemicals known to cause reproductive toxicity:
  void

- State right-to-know
  The following product component(s) are cited on certain State lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

  - CAS-No.: Chemical name: LIST:
    | 67-66-3 | chloroform | NJ/NY/PA-ES |
    | 7664-93-9 | sulfuric acid | NJ/NY/PA-E |

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Trade name: SOAP TITRATION KIT - GLASSPIPETTE

- OSHA hazard communication standard:
  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- Comprehensive Environmental Response Compensation and Liability Act (CERCLA, or Superfund):
  This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

  CAS-No.: Chemical name:
  67-66-3 chloroform
  7664-93-9 sulfuric acid

- Canadian regulations:

  WHMIS information:
  The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:
  D1B - Poisonous substance defined or known by TDG regulations
  D2A - Possible, probable or known human carcinogen according to classifications by IARC or ACGIH.
  D2B - Eye and/or skin irritant
  Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

- CPR statement:
  This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

- Hazardous products act information:
  This product contains the following ingredient(s) which are Controlled Products and/or on the Ingredients Disclosure List (Canadian HP A section 13 and 14):

  CAS-No.: Components:
  67-66-3 chloroform
  7664-93-9 sulfuric acid

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.

- Contact: R. Döring