1 Identification of substance:

- Product details:
  - Trade name: Frankotex DF
  - Application of the substance / the preparation: Drycleaning

- Manufacturer/Supplier:
  SEITZ GmbH
  Gutenbergstrasse 3
  65830 Kriftel/ Germany
  seitz@seitz24.com
  www.seitz24.com

- Information department:
  CHEM-TEL Inc.
  1305 North Florida Ave
  Tampa Florida 33602

- Emergency information: 1-800-255-3924

2 Hazards identification

- Hazard description:
  Irritant liquid
  Irritant

- WHMIS classification
  B3 - Combustible liquid
  D2B - Toxic material causing other toxic effects

- Information pertaining to particular dangers for man and environment
  R 38 Irritating to skin.
  R 41 Risk of serious damage to eyes.

- 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 = 2
  Reactivity = 0

- HMIS ratings (scale 0-4)
  HEALTH Health = *2
  FIRE Fire = 2
  REACTIVITY Reactivity = 0

3 Composition/Data on components:

- Chemical characterization
  Description: Mixture of the substances listed below with non-hazardous ingredients.

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>68551-17-7</td>
<td>isoalkanes</td>
<td>20 - 50%</td>
</tr>
<tr>
<td>577-11-7</td>
<td>dioctyl sodium sulfosuccinate</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>34590-94-8</td>
<td>dipropylene glycol monomethyl ether</td>
<td>&lt; 10%</td>
</tr>
</tbody>
</table>

(Contd. on page 2)
4 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**
  - Immediately rinse with 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**
  - Rinse out mouth and then drink plenty of water.
  - Do not induce vomiting; immediately call for medical help.

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:
    - Carbon monoxide and carbon dioxide (CO, CO2)
    - Sulphur oxides (SOX)
  - In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:**
  - Do not inhale explosion gases or combustion gases.
  - Wear self-contained respiratory protective device.
- **Additional information**
  - Cool endangered receptacles with water spray.
  - 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
  - Do not breathe gases / vapors.
  - Avoid contact with eyes and skin.
  - Keep away from ignition sources
- **Measures for environmental protection:**
  - Do not allow product to reach sewage system or any water course.
- **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:**
  - Keep away from heat and direct sunlight.
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Trade name: Frankotex DF

Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.

- **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:**
    - Store in cool, dry conditions in well sealed receptacles.
    - Store receptacle in a well ventilated area.
    - Protect from frost.
    - Time of storage: max. 24 month

---

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:**

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL (USA)</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
<th>EL (Canada)</th>
<th>EV (Canada)</th>
</tr>
</thead>
<tbody>
<tr>
<td>34590-94-8 dipropylene glycol monomethyl ether</td>
<td>600 mg/m³, 100 ppm</td>
<td>Short-term value: 900 mg/m³, 150 ppm</td>
<td>Long-term value: 600 mg/m³, 100 ppm</td>
<td>Short-term value: 150 ppm</td>
<td>Long-term value: 910 mg/m³, 150 ppm</td>
</tr>
<tr>
<td></td>
<td>Skin</td>
<td></td>
<td>Skin</td>
<td></td>
<td>Skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Short-term value: 909 mg/m³, 150 ppm</td>
<td>Long-term value: 606 mg/m³, 100 ppm</td>
<td></td>
<td>Long-term value: 605 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **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.
    - 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 eat, drink, smoke or sniff while working.
    - Do not inhale gases / vapors / aerosols.
  - **Breathing equipment:**
    - Not necessary if room is well-ventilated.
    - Use suitable respiratory protective device in case of insufficient ventilation.
  - **Protection of hands:**
    - Protective gloves.
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Material of gloves**
    - Nitrile rubber, NBR
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles.

Body protection: Protective work clothing.

9 Physical and chemical properties:

- **General Information**
  - Form: Fluid
  - Color: Light yellow
  - Odor: Product specific

- **Change in condition**
  - Melting point/Melting range: not applicable
  - Boiling point/Boiling range: undetermined

- **Flash point:** > 62°C (> 144°F) (ASTM D93 c.c.)

- **Auto igniting:**
  - Product is not self-igniting.

- **Danger of explosion:**
  - Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Density at 20°C (68°F):** ~ 0.910 g/cm³ (ISO 2811)

- **Solubility in / Miscibility with Water:** Fully miscible

- **pH-value (100 g/l) at 20°C (68°F):** ~ 7.3

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used according to specifications.

- **Dangerous reactions**
  - Reacts with strong oxidizing agents.

- **Dangerous products of decomposition:** None if used as directed.

11 Toxicological information

- **Acute toxicity:**

  - **LD/LC50 values that are relevant for classification:**

    | Chemical Description | LD₅₀ / LC₅₀ |
    |-----------------------|-------------|
    | 68551-17-7 isoalkanes  |             |
    | Oral                  | 34600 mg/kg (rat) |
    | Dermal                | 15400 mg/kg (rabbit) |
    | 577-11-7 dioctyl sodium sulfosuccinate |             |
    | Oral                  | > 2000 mg/kg (rat) |
    | 34590-94-8 dipropylene glycol monomethyl ether |             |
    | Oral                  | 5130 mg/kg (rat) |
    | Dermal                | > 19000 mg/kg (rabbit) |
    | 69011-36-5 isotridecanol, oxethyalted |             |
    | Oral                  | > 2000 mg/kg (rat) |
Trade name: Frankotex DF

- 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
  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:
  Do not allow product to reach ground water, water course or sewage system.
  Our products are ultimately biodegradable according to criteria as laid down in Regulation (EC) No. 648/2004 on detergents. The test methods of ultimate biodegradability (mineralisation) are: Norm EN ISO 14593, OECD 301 B, OECD 301 C, OECD D and OECD 301 F

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.

14 Transport information

- DOT regulations:
  - Hazard class: -

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

- Maritime transport IMDG:
  - IMDG Class: -

- Air transport ICAO-TI and IATA-DGR:
  - ICAO/IATA Class: -

- Transport/Additional information: Not dangerous according to the above specifications.

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:
  Irritant

(Contd. on page 6)
Trade name: Frankotex DF

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

- **Safety phrases:**
  2 Keep out of the reach of children.
  20 When using do not eat or drink.
  24/25 Avoid contact with skin and eyes.
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
  37/39 Wear suitable gloves and eye/face protection.
  45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
  46 If swallowed, seek medical advice immediately and show this container or label.

- **National regulations**

- **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 buyers 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

- **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.

- **SARA Section 355 (extremely hazardous substances)**
  None of the ingredients is listed.

- **SARA Section 313 (specific toxic chemical listings)**
  None of the ingredients is listed.

- **Toxic Substances Control Act (TSCA):**
  All ingredients are listed.

- **California proposition 65:**

  - **Prop 65 - Chemicals known to cause cancer**
    None of the ingredients is listed.

  - **Prop 65 - Chemicals known to cause developmental toxicity**
    None of the ingredients is listed.
<table>
<thead>
<tr>
<th>· Prop 65 - Chemicals known to cause reproductive toxicity for females</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· Prop 65 - Chemicals known to cause reproductive toxicity for males</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· Canadian regulations</td>
</tr>
<tr>
<td>· WHMIS information:</td>
</tr>
<tr>
<td>The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:</td>
</tr>
<tr>
<td>B3 - Combustible liquid</td>
</tr>
<tr>
<td>D2B - Toxic material causing other toxic effects</td>
</tr>
<tr>
<td>· CPR statement:</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>· Canadian Ingredient Disclosure List</td>
</tr>
<tr>
<td>· Limit 0,1%</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· Limit 1%</td>
</tr>
<tr>
<td>577-11-7 dioctyl sodium sulfosuccinate</td>
</tr>
<tr>
<td>34590-94-8 dipropylene glycol monomethyl ether</td>
</tr>
<tr>
<td>· Canadian Domestic Substances List (DSL)</td>
</tr>
<tr>
<td>All ingredients are listed.</td>
</tr>
</tbody>
</table>

**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:** Dr. Ralf Döring
- * Data compared to the previous version altered.*