SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- **Product Name:** Greiner Bio-One Saliva Collection System
- **Manufacturer/Supplier:**
  
  **AUSTRIA**
  Greiner Bio-One GmbH
  Bad Haller Strasse 32
  4550 Kremsmünster
  Austria
  Tel: (+43) 7583 6791-0
  Fax: (+43) 7583 6791-1114
  Email: office@at.gbo.com

  **USA**
  Greiner Bio-One North America Inc.
  4238 Capital Drive
  Monroe, NC 28110
  USA
  Tel: (+1) 888 286 3883
  Fax: (+1) 800 726 0052
  Email: info@us.gbo.com

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

- **Description:**
  Set of 3 components:
  - Tube 1: PET Tube with Saliva Extraction Solution
  - Beaker 2: PP Beaker - Saliva Collection Beaker
  - Tube 3: PET Tube – Saliva Transfer Tube

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Quantity of substances:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Ammonium sulfate</td>
<td>7783-20-2</td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Tartrazin</td>
<td>1934-21-0</td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Monosodium citrate</td>
<td>18996-35-5</td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Trisodium citrate dihydrate</td>
<td>6132-04-3</td>
<td>&lt; 1 %</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

1. **Tube 1 and Beaker 2**
   These products are classified as an “article” under the OSHA Hazard Communication Standard and does not require the SECTIONS 3 to 15 of the MSDS acc. to ISO 11014

   The OSHA Hazard Communication Standard defines an article as a manufactured item:
   - Which is formed to a specific shape or design during manufacture;
   - Which has end use function(s) dependent in whole or in part upon its shape or design during end use;
   - Which does not release, or otherwise result in exposure to a hazardous chemical, under normal conditions of use.

2. **Tube 3 – Saliva Transfer Tube**
   SECTIONS 3 to 15 of this MSDS refer to these tube only!

   - **Hazard description:**
     - Very toxic
     - Hazardous to the environment

   - **Special danger warning for men and environment:**
     - Very toxic if swallowed
     - Develops very toxic gas in contact with acid
     - Very toxic for water organism, may have longer-term harmful impact on water
SECTION 4: FIRST AID MEASURES

- **General**: Remove contaminated clothing immediately. Victim should not be provoked to vomiting unless it is done by a medical expert.
- **Skin**: Wash with copious amounts of water immediately. Get medical attention.
- **Eyes**: Flush eyes with copious amounts of water for at least 10 minutes. Get medical attention.
- **Inhalation**: Remove to fresh air and get medical attention.
- **Ingestion**: Get medical attention immediately. Victim should drink copious amounts of water to dilute.

SECTION 5: FIRE-FIGHTING MEASURES

- **Suitable extinguishing media**: Use extinguishing media appropriate for metal fire.
- **Unsuitable extinguishing media**: Water
- **Specific hazards**: Nitro gas may be emitted under fire conditions
- **Protective equipment**: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full-face piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal precautions**: Avoid overexposure. Wear suitable protective clothing.
- **Environmental precautions**: Do not allow to enter ground water, waterways or waste water.
- **Methods for cleaning up**: Carefully remove mechanically.

SECTION 7: HANDLING AND STORAGE

- **Handling**: 
  **Advice for safe handling**: Appropriate handling according to laboratory directives for chemicals. 
  **Information about protection against explosions and fires**: Avoid contact with incompatible material, minimize dust generation and accumulation. Material must be handled with adequate ventilation.
- **Storage**: 
  **Requirements to be met by storerooms and receptacles**: Keep container closed when not in use. 
  Store in a cool, dry, well-ventilated area. 
  Store away from incompatible substances. 
  Store away from acids. 
  Store away from foods. 
  **Information about storage in one common storage facility**: Keep container closed when not in use. 
  Store in a cool, dry, well-ventilated area.
SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- Additional information about design of technical systems: as per section 7.
- Components with critical values to be monitored depending on the working place:
  26628-22-8 Natrium azide
  
<table>
<thead>
<tr>
<th>MAK</th>
<th>MAK (TRGS 900)</th>
<th>DFG</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2 mg/m³</td>
<td>0.2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Additional remarks: The data are based on valid lists at the time of edition.

- Personal protective equipment:

  General protective and hygienic measures: Keep away from foods, beverages and animal feed. Remove contaminated clothes immediately. Wash thoroughly after handling and before reuse. Avoid contact with eyes and skin.

  Breathing equipment: None required, where adequate ventilation conditions exist. For conditions where dust is apparent and engineering controls are not feasible, a NIOSH/MSHA approved respirator is recommended. If concentration exceeds capacity of respirator, a self-contained breathing apparatus is recommended.

  Hand protection: Wear appropriate protective gloves to prevent skin exposure.

  Eye protection: Use chemical safety goggles

  Body protection: Wear appropriate protective clothing to prevent skin exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- General information

<table>
<thead>
<tr>
<th>Component</th>
<th>Form:</th>
<th>Color:</th>
<th>Odor:</th>
<th>Change in condition</th>
<th>Flammability (solid, gaseous)</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>solid</td>
<td>white</td>
<td>odorless</td>
<td>Melting point: 275 °C</td>
<td>Boiling point: 300 °C</td>
<td>Not inflammable</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

- Thermal decomposition / conditions to avoid: Thermic stress
- Materials to avoid: Oxidizing agents, acids, heavy metals, metal salts, bromine, copper, dichloromethane, carbon disulfide, sulfuric acid, water.
- Dangerous reactions: Not established
- Hazardous decomposition products: Not established

SECTION 11: TOXICOLOGICAL INFORMATION

- Acute toxicity
  - oral (LD 50 rat 27 mg/kg)
  - dermal (LD50 rabbit 20 mg/kg)

- Primary irritant effect:
  - Eye: Lightly irritating to the eyes.
  - Skin: Lightly irritating to the skin. Hazard of skin resorption.
  - Inhalation: Irritation of mucous membrane, cough, respiratory depression.
  - Sensitization: Not established

- Additional toxicological information:
  - Ingestion: After swallowing, irritating to the mouth, throat, esophagus, gastrointestinal tract. Systemic effects may cause CNS failures, cardiovascular collapse, blood pressure decline, cough, respiratory depression, spasm, headache, vertigo, nausea, vomiting, collapse, absence.
SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicological effects:
  - Aquatic toxicity:
  - Fish toxicity:
    - LC 50: 0.7 mg/1/96h Lepomis macrochirus
  - Remark: Very toxic to aquatic life in high concentrations, may cause long-term damage to water. Do not allow to enter ground water, waterways or waste water.

SECTION 13: DISPOSAL CONSIDERATION

- Product:
  - Recommendation
    - Disposal should be done in accordance with all federal, state and local environmental regulations.
    - Disposal must be made according to the regulations found in 40 CFR 261.

- Packaging:
  - Recommendation
    - Disposal should be done in accordance with all federal, state and local environmental regulations.
    - Disposal must be made according to the regulations found in 40 CFR 261.

SECTION 14: TRANSPORT INFORMATION

- DOT regulations: Not regulated
- Land transport ADR/RID: Not regulated
- Maritime transport IMDG: Not regulated
- Air transport ICAO-TI and IATA-DGR: Not regulated

SECTION 15: REGULATORY INFORMATION

- EC guidelines: 91/155/EED, 93/112, 88/379/EC
- National regulations: Chemical (Hazard Information and Packaging) Regulations: ChemG (Austria)
- Water hazard class: N/A
- Note: Please note that there may be additional legal provisions to be observed. We recommend that you keep yourself informed about all applicable international, national and local regulations.

SECTION 16: OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, neither Greiner Bio-One nor any of its subcontractors or suppliers assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.