1 Identification of the substance/mixture and of the company/undertaking

- **Product Identifier**
- **Product Name:** Mannitol Salt Agar
- **Catalog Number:** 211407

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** BD Diagnostic Systems
    7 Loveton Circle
    Sparks, MD 21152
    Telephone.: (410) 771-0100 or (800) 638–8663
  - **Information Department:** Technical Service
  - **Emergency telephone number:** In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/information on ingredients

- **Chemical characterization:** Mixture
- **Description:** Mixture consisting of the following components.

<table>
<thead>
<tr>
<th>Dangerous Components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7647-14-5 sodium chloride</td>
<td>67.17%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - Xi; Irritant
  - R36/37/38: Irritating to eyes, respiratory system and skin.

- **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:**
    The product has been classified and marked in accordance with regulations on hazardous materials.
  - **Code letter and hazard designation of product:**
    Xi Irritant

- **Risk phrases:**
  36/37/38 Irritating to eyes, respiratory system and skin.

(Contd. on page 2)
4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
  Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** If symptoms persist consult doctor.
- **Information for doctor** Show this product label or this MSDS.

5 Firefighting measures

- **Suitable extinguishing agents**
  CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment**: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions**: Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up**: No special measures required.
- **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
7 Handling and storage

· Handling
  · Precautions for safe handling: No special measures required.
  · Information about protection against explosions and fires: No special measures required.

· Storage
  · Requirements to be met by storerooms and receptacles: No special requirements.
  · Information about storage in one common storage facility: Store away from oxidizing agents.
  · Further information about storage conditions: None.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see Section 7.
· 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.

· Personal Protective Equipment
  · General protective and hygienic measures
    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.
  · Breathing equipment:
    In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
  · Protection of hands:
    Chemical resistant gloves (i.e. nitrile, or equivalent).
  · Eye protection: Safety glasses
  · Body protection: Protective work clothing (lab coat).

9 Physical and chemical properties

· General Information
  · Appearance:
    Form: Solid
    Color: Red
### Material Safety Data Sheet

**Product Name: Mannitol Salt Agar**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not self igniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

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

### 11 Toxicological information

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

### 12 Ecological information

- **Acquatic toxicity:** No further relevant information available.
- **Ecotoxicological effects:**
  - **Other information:**
    - The ecological effects have not been thoroughly investigated, but currently none have been identified.
  - **Additional ecological information:**
  - **General notes:** Generally not hazardous for water.

(Contd. of page 3)
13 Disposal considerations

- Waste treatment methods
  - Recommendation: Smaller quantities can be disposed of with solid waste. Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements. This product is not considered a RCRA hazardous waste.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to state and federal regulations.
  - Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- DOT regulations:
  - Hazard class: -

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

- Maritime transport IMDG:
  - IMDG Class: -
  - Marine pollutant: No

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

15 Regulatory information

- 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.

- TSCA (Toxic Substances Control Act)
<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>7647-14-5</td>
<td>sodium chloride</td>
</tr>
<tr>
<td>9002-18-0</td>
<td>agar</td>
</tr>
<tr>
<td>69-65-8</td>
<td>mannitol</td>
</tr>
<tr>
<td>8013-01-2</td>
<td>yeast extract</td>
</tr>
<tr>
<td>10043-52-4</td>
<td>calcium chloride</td>
</tr>
<tr>
<td>7487-88-9</td>
<td>magnesium sulfate</td>
</tr>
<tr>
<td>113-24-6</td>
<td>sodium pyruvate</td>
</tr>
<tr>
<td>497-19-8</td>
<td>sodium carbonate</td>
</tr>
</tbody>
</table>
**Product Name: Mannitol Salt Agar**

<table>
<thead>
<tr>
<th>143-74-8 phenol red</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>California Proposition 65 - Chemicals known to cause cancer</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>California Proposition 65 - Chemicals known to cause reproductive toxicity for females:</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>California Proposition 65 - Chemicals known to cause reproductive toxicity for males:</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>California Proposition 65 - Chemicals known to cause developmental toxicity:</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>Carcinogenic categories</strong></td>
</tr>
<tr>
<td><strong>NTP (National Toxicology Program)</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>TLV (Threshold Limit Value established by ACGIH)</strong></td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>Product related hazard information:</strong></td>
</tr>
<tr>
<td>The product has been classified and marked in accordance with regulations on hazardous materials.</td>
</tr>
<tr>
<td><strong>Hazard symbols:</strong></td>
</tr>
<tr>
<td>Xi Irritant</td>
</tr>
<tr>
<td><strong>Risk phrases:</strong></td>
</tr>
<tr>
<td>36/37/38 Irritating to eyes, respiratory system and skin.</td>
</tr>
<tr>
<td><strong>Safety phrases:</strong></td>
</tr>
<tr>
<td>2 Keep out of the reach of children.</td>
</tr>
<tr>
<td>7 Keep container tightly closed.</td>
</tr>
<tr>
<td>26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</td>
</tr>
<tr>
<td>36 Wear suitable protective clothing.</td>
</tr>
</tbody>
</table>

**16 Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities 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 can not guarantee that these are the only hazards that exist.
Product Name: Mannitol Salt Agar

- **Department issuing MSDS:**
  Environmental, Health & Safety
  Created by Michael J. Spinazzola
- **Contact:** Technical Service Representative