### 1 Identification of substance:

- **Product name:** Bile Esculin Agar  
- **Catalog number:** 221838  
- **Manufacturer/Supplier:**  
  BD Diagnostic Systems  
  7 Loveton Circle  
  Sparks, MD 21152  
  Tel: (410) 771-0100 or (800) 638-8663  
- **Information department:** Technical Services  
- **Emergency information:**  
  In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

### 2 Composition/Data on components:

- **Chemical characterization**
  - **Description:** Mixture consisting of the following components.
  - **Dangerous components:**
    - Bile salts No. 3: 31.57%

### 3 Hazards identification

- **Hazard description:**
  - Xi Irritant

- **Information pertaining to particular dangers for man and environment**
  - R 36/37/38 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.

- **NFPA ratings (scale 0-4)**
  - Health = 2  
  - Fire = 0  
  - Reactivity = 0

### 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.
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- **Information for doctor** Show this product label or this MSDS.

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**5 Fire fighting 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.

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**6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collection:** Ensure adequate ventilation.

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**7 Handling and storage**

- **Handling**
  - **Information for safe handling:** Prevent formation of dust.
  - **Information about protection against explosions and fires:** No special measures required.

- **Storage**
  - **Requirements to be met by storerooms and receptacles:** < 30 C
  - **Information about storage in one common storage facility:**
    Do not store together with oxidizing and acidic materials.

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**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:**
  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.
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- **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

- **Form:** Solid
- **Color:** Light beige, Light green
- **Odor:** Characteristic

- **Change in condition**
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: Not determined

- **Flash point:** Not applicable
- **Auto igniting:** Product is not self igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapor pressure:** Not applicable
- **Density:** Not determined

- **Solubility in / Miscibility with Water:** Insoluble
- **pH-value:** Not applicable

- **Solvent content:**
  - Organic solvents: 0.0 %
- **Solids content:** 100.0 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used according to specifications.
- **Materials to be avoided:** Incompatible material: strong oxidizers.
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:** Carbon monoxide (CO) and carbon dioxide (CO2)
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.
- Subacute to chronic toxicity: Target organs: respiratory tract, eyes, kidneys, and skin.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  - Irritant
  - Exposure may cause allergic reaction in individuals sensitive to proteolytic enzymes.

12 Ecological information:

- Ecotoxicological effects:
- Other information:
  The ecological effects have not been thoroughly investigated, but currently none have been identified.
- General notes: Not known to be hazardous to water.

13 Disposal considerations

- Product:
- Recommendation
  Smaller quantities can be disposed of with solid waste.
  This product is not considered a RCRA hazardous waste.
  Dispose of material in accordance with federal (40 CFR 261), state and local requirements.
- 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 Regulations

- **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)**
  9002-18-0 agar
  8013-01-2 yeast extract
  68-04-2 Sodium citrate
  1185-57-5 ferric ammonium citrate
  56-86-0 glutamic acid

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

- **California Proposition 65 - Chemicals known to cause reproductive toxicity**
  None of the ingredients is listed.

- **Carcinogenicity categories**
  - **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.

- **Product related hazard information:**
  The product has been classified and marked in accordance with regulations on hazardous materials.

- **Hazard symbols:**
  Xi Irritant

- **Hazard-determining components of labeling:**
  bile salts No. 3

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

- **Safety phrases:**
  7 Keep container tightly closed.
  22 Do not breathe dust.
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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36 Wear suitable protective clothing.

16 Other information:

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- **Department issuing MSDS:** Safety and Environment Department
- **Contact:** Technical Service Representative